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Town Hall, Upper Street, London, N1 2UD

AGENDA FOR THE EXECUTIVE

Members of the Executive are summoned to attend a meeting to be held in Committee Room 4, Town Hall, Upper Street, N1 2UD - Islington Town Hall on **19 April 2018 at 7.00 pm.**

Lesley Seary
Chief Executive

Enquiries to	:	Philippa Green
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Despatched	:	11 April 2018

Membership	**Portfolio**
Councillor Richard Watts	Leader of the Council
Councillor Janet Burgess MBE	Executive Member Health and Social Care
Councillor Joe Caluori	Executive Member Children, Young People and Families
Councillor Kaya Comer-Schwartz	Executive Member for Community Development
Councillor Andy Hull	Executive Member Finance, Performance and Community Safety
Councillor Asima Shaikh	Executive Member for Economic Development
Councillor Diarmaid Ward	Executive Member for Housing and Development
Councillor Claudia Webbe	Executive Member for Environment and Transport

Quorum is 4 Councillors

Please note
It is likely that part of this meeting may need to be held in private as some agenda items may involve the disclosure of exempt or confidential information within the terms of Schedule 12A of the Local Government Act 1972. Members of the press and public may need to be excluded for that part of the meeting if necessary.

Details of any representations received about why the meeting should be open to the public - none

Declarations of interest:

If a member of the Executive has a **Disclosable Pecuniary Interest*** in an item of business and it is not yet on the council's register, the Councillor **must** declare both the existence and details of it at the start of the meeting or when it becomes apparent. Councillors may also **choose** to declare a Disclosable Pecuniary Interest that is already in the register in the interests of openness and transparency. In both the above cases, the Councillor **must** leave the room without participating in discussion of the item.

If a member of the Executive has a **personal** interest in an item of business they **must** declare both the existence and details of it at the start of the meeting or when it becomes apparent but may remain in the room, participate in the discussion and/or vote on the item if they have a dispensation from the Chief Executive.

*(a) **Employment, etc -** Any employment, office, trade, profession or vocation carried on for profit or gain.
(b) Sponsorship - Any payment or other financial benefit in respect expenses in carrying out duties as a member, or of election; including from a trade union.
(c) Contracts - Any current contract for goods, services or works, between the Councillors or their partner (or a body in which one has a beneficial interest) and the council.
(d) Land - Any beneficial interest in land which is within the council's area.
(e) Licences- Any licence to occupy land in the council's area for a month or longer.
(f) Corporate tenancies - Any tenancy between the council and a body in which the Councillor or their partner have a beneficial interest.
(g) Securities - Any beneficial interest in securities of a body which has a place of business or land in the council's area, if the total nominal value of the securities exceeds £25,000 or one hundredth of the total issued share capital of that body or of any one class of its issued share capital.

NOTE: Public questions may be asked on condition that the Chair agrees and that the questions relate to items on the agenda. No prior notice is required. Questions will be taken with the relevant item.

Requests for deputations must be made in writing at least two clear days before the meeting and are subject to the Leader's agreement. The matter on which the deputation wants to address the Executive must be on the agenda for that meeting.

The next meeting of the Executive will be on 14 June 2018

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London Borough of Islington

Executive - 22 March 2018

Minutes of the meeting of the Executive held at Committee Room 4, Town Hall, Upper Street, N1 2UD - Islington Town Hall on 22 March 2018 at 7.00 pm.

Present:	**Councillors:**	Watts, Burgess, Caluori, Comer-Schwartz, Hull, Shaikh, Ward and Webbe
Also Present:	**Councillors:**	O'Sullivan and Russell

Councillor Richard Watts in the Chair

494 **APOLOGIES FOR ABSENCE**
None.

495 **DECLARATIONS OF INTEREST**
None.

496 **MINUTES OF PREVIOUS MEETING**
That the Minutes of the meeting on 1 February 2018 be confirmed as a correct record and the Chair be authorised to sign them.

497 **FINANCIAL POSITION AS AT 31 JANUARY 2018**

RESOLVED:

2.1 That the forecast revenue outturn for the General Fund (Table 1 of the report) of a gross overspend of £5.7m, including corporate items (paragraph 3.1 of the report), be noted.

2.2 That any remaining overspend at year-end, after ongoing management actions, will be covered by drawing down from corporate contingency budgets in the first instance (paragraph 3.2 of the report) be noted.

2.3 That the breakdown of the forecast General Fund outturn by individual variance at Appendix 1 of the report and by service area at Appendix 2 of the report, be noted.

2.4 That the HRA forecast is in a break-even position (Section 5, Table 1 of the report) be noted.

2.5 That the latest capital position with forecast capital expenditure of £99.9m in 2017-18 (Section 6, Table 2, and Appendix 3 of the report) be noted.

Reason for decision – to allow members to monitor the budget.
Other options considered – none other than as specified in the report.
Conflicts of interest/dispensations granted – none.

498 FIRE SAFETY SCRUTINY - RECOMMENDATIONS OF THE HOUSING SCRUTINY COMMITTEE

Councillor O'Sullivan, Chair of the Housing Scrutiny Committee, presented the report, highlighting a number of the committee's recommendations including the development of evacuation plans for vulnerable residents, reviewing the feasibility of retrofitting sprinkler systems and a system for residents to report fire safety concerns in an open and transparent way.

Councillor Ward thanked Councillor O'Sullivan and all the members of the committee for their work and advised that the Council will look very closely at all the recommendations. Councillor Ward noted that the fourth recommendation, to provide a dedicated email address for residents to report fire safety concerns was now in place and working very effectively. Councillor Ward called on the Secretary of State to assist all local authorities with the costs of all new fire safety requirements, including retrofitting sprinkler systems.

Councillor Russell requested that the Executive consider an additional recommendation to regularly update fire risk assessments. Councillor Ward agreed this would be considered alongside the committee's recommendations.

Councillor Watts noted the Executive's thanks to the Housing Scrutiny Committee for all their work on the review.

RESOLVED:

2.1 That the report of the Housing Scrutiny Committee be received.

2.2 That the Executive Member's response be reported to a future meeting of the Executive, including having due regard to any relevant implications of the Housing Scrutiny Committee's recommendations.

2.3 That the Executive Member's response will also include a response to the additional request that fire risk assessments be regularly updated.

Reason for decision – to allow receive the scrutiny committee's recommendations.
Other options considered – none other than as specified in the report.
Conflicts of interest/dispensations granted – none.

499 POST-16 EDUCATION, EMPLOYMENT AND TRAINING - EXECUTIVE MEMBERS RESPONSE TO THE RECOMMENDATIONS FROM THE CHILDREN'S SERVICES SCRUTINY COMMITTEE

Councillor Shaikh advised that the integration of the Progress and iWork teams, proposed in the Children's Services Scrutiny Committee's first recommendation was already underway and thanked the committee for a valuable and helpful review.

Councillor Watts noted the Executive's thanks to the scrutiny committee for all their work.

RESOLVED:

2.1 That the findings of the Post-16 Education, Employment and Training Scrutiny Review be welcomed.

2.2 That the responses to the recommendations of the Children's Services Scrutiny Committee as set out in section 4 of the report, be agreed.

2.3 That officers will report back on progress to the Children's Services Scrutiny Committee in July 2018, be noted.

Reason for decision – to allow the Executive to respond to the scrutiny committee's recommendations.
Other options considered – none other than as specified in the report.
Conflicts of interest/dispensations granted – none.

500 HIGHBURY CORNER ROUNDABOUT

Councillor Webbe advised that the Council has worked with Transport for London and the Mayor of London to develop the best possible scheme for Highbury Corner, based on the results of the public consultation. The proposed scheme includes removal of the gyratory, improved cycling and pedestrian facilities and a newly accessible greenspace by connecting to the arboretum on the roundabout. The access to the arboretum is also designed to protect the more delicate trees. The work will follow on from the completion of the ongoing bridge works to reduce disruption. Councillor Webbe answered a number of questions from members of the public and Councillor Russell and confirmed that the Council will monitor the work to minimise the disruption to residents and businesses and will keep in regular contact with local residents. The Council will also monitor traffic on the surrounding roads once the scheme is in operation and will review if any mitigating measures are required.

Councillor Watts added that the Council would also like to see the station front significantly improved and has raised this with Transport for London.

RESOLVED:

2.1 That the outcome of the joint public consultation carried out by the Council and TfL in 2016 and the current proposals for Highbury Corner Roundabout, including changes as a result of feedback from that consultation, be noted.

2.2 That the road layout changes including local motor vehicular traffic road closures and banned turns be noted.

2.3 That an Environmental Impact Assessment (EIA) screening opinion request will be forthcoming from TfL for consideration by the Council in its capacity as local planning authority (LPA) as part of adopting an EIA screening opinion be noted.

2.4 That the Executive agree, in principle, to formally support the Highbury Corner Roundabout transformation, as described in this report and shown in Appendices 1-3 of the report.

2.5 That the Corporate Director of Environment and Regeneration, in consultation with the Executive Member for Environment and Transport, be authorised to make a decision on the Council's final position on the Highbury Corner Roundabout transformation once an EIA screening opinion has been adopted, be agreed.

2.6 That, subject to recommendation 2.5 above, the Corporate Director of Environment and Regeneration, in consultation with the Executive Member for

Environment and Transport, be authorised to agree the details of the design with TfL, in particular related to the new public space area, be agreed.

Reason for decision – to remove the gyratory and create a new public space at Highbury Corner and increase the safety of cyclists and pedestrians.
Other options considered – none other than as specified in the report.
Conflicts of interest/dispensations granted – none.

501 CONTRACT AWARD FOR FRAMEWORK AGREEMENT FOR FIRE SAFETY WORK TO HOUSING STREET PROPERTIES

Councillor Ward advised that the work is required to achieve 30 minute's fire protection in the Council's street properties (and some older-style mansion blocks).

RESOLVED:

2.1 That the award of contracts for the framework agreement for fire safety work to housing street properties to: ENGIE Regeneration Ltd (LOT 1 – north of the borough) and The Breyer Group (LOT 2 – south of the borough) be agreed.

Reason for decision – to improve the safety of residents.
Other options considered – none other than as specified in the report.
Conflicts of interest/dispensations granted – none.

502 CONTRACT AWARD FOR FRAMEWORK AGREEMENT FOR FIRE SAFETY WORK TO HOUSING STREET PROPERTIES - EXEMPT APPENDICES

That the information in the exempt appendix to agenda item E8 be noted (see Minute 501 for details).

MEETING CLOSED AT 7.35 pm

CHAIR

ISLINGTON

Resources Department
Newington Barrow Way, N7

Report of: Executive Member for Finance, Performance and Community Safety

Meeting of:	Date	Ward(s)
Executive	19 April 2018	All

FINANCIAL MONITORING 2017-18 MONTH 11

1. SYNOPSIS

1.1 This report presents the forecast outturn position for 2017-18 as at 28th February 2018. Overall, there is a forecast gross General Fund overspend of £4.6m. Action is required to continue to bring this overspend down; otherwise the Council's contingency budgets will be low going into 2018-19.

1.2 The Housing Revenue Account (HRA) is forecast to break-even over the year.

1.3 It is forecast that £96.6m of capital expenditure will be delivered in 2017-18.

2. RECOMMENDATIONS

2.1. To note the forecast revenue outturn for the General Fund (**Table 1**) of a gross overspend of £4.6m, including corporate items. (**Paragraph 3.1**)

2.2. To note that any remaining overspend at year-end, after ongoing management actions, will be covered by drawing down from corporate contingency budgets in the first instance. (**Paragraph 3.2**)

2.3. To note the breakdown of the forecast General Fund outturn by individual variance at **Appendix 1** and by service area at **Appendix 2**.

2.4. To note that the HRA forecast is a break-even position. (**Section 5, Table 1**)

2.5. To note the latest capital position with forecast capital expenditure of £96.6m in 2017-18. (**Section 6, Table 2,** and **Appendix 3**)

2.6. To delegate authority to the Corporate Director of Resources for approving any movements to/from reserves and the financing of the capital programme at the financial year end. (**Section 7**)

3. REVENUE POSITION: SUMMARY

3.1. A summary position of the General Fund and HRA is shown in **Table 1**, a breakdown by individual General Fund variance in **Appendix 1** and a breakdown by General Fund and HRA service area in **Appendix 2**.

Table 1: 2017-18 General Fund and HRA Month 11 Forecast

	Forecast Over/(Under) Spend (£000)
GENERAL FUND	
Resources	(1,754)
Chief Executive's Department	(486)
Core Children's Services (Excluding Schools)	5,110
Environment and Regeneration	344
Housing and Adult Social Services	(23)
Public Health	0
DIRECTORATE TOTAL	**3,191**
Corporate Items	1,377
GROSS OVER/(UNDER) SPEND	**4,568**
HOUSING REVENUE ACCOUNT	
NET (SURPLUS)/DEFICIT	**0**

3.2. Any overspend at year-end, after ongoing management actions, will be covered by drawing down from corporate contingency budgets in the first instance. Prior year contingency reserve and current year corporate contingency budget total £6.7m.

4. GENERAL FUND

Resources Department (-£1.754m)

4.1. The Resources Department is forecasting, after management actions, an underspend of (-£1.754m) over the financial year with the key variances detailed in **Appendix 1**.

Chief Executive's Department (-£0.486m)

4.2. The Chief Executive's Department is forecasting an underspend of (-£0.486m) over the financial year with the key variances detailed in **Appendix 1**.

Children's Services - General Fund (+£5.110m), Schools (-£0.313m, -0.2%)

4.3. The Children's Services Department is forecasting a (+£5.110m) General Fund overspend, the largest of any council service but not inconsistent with other similar councils. The key variances behind the General Fund net overspend are set out in **Appendix 1**.

4.4. Management actions being undertaken are as follows:

4.4.1. Vacancy management across the service;

4.4.2. Review of high cost packages, resource allocation scoring framework and budget allocations for young people with personal budgets in the disabled children's service;

4.4.3. Review of housing benefit collection arrangements with providers of accommodation for care leavers to maximise income;

4.4.4. Review of dispersal arrangements for unaccompanied asylum seeking children;

4.4.5. Review of high cost packages for children looked after, underlying cost drivers and trends in complex residential placements including CSE and secure accommodation and value for money arrangements for 16/17s in supported accommodation;

4.4.6. Review of trading and business income options across pupil and school support services;

4.4.7. Review of semi-independent provision for over-16s; and

4.4.8. Review of SEN transport.

4.5. The schools' dedicated schools grant position is a forecast underspend of (-£0.313m or -0.2%). This position includes £0.3m of prior year balances being managed on behalf of the Schools Forum.

Environment and Regeneration (+£0.344m)

4.6. The Environment and Regeneration Department is forecasting a (+£0.344m) overspend. The key variances behind this net overspend are set out in **Appendix 1**.

4.7. The management actions being taken to control these pressures are:

4.7.1. Regular monitoring of spend and income trends across the department to enable effective decisions to be taken.

4.7.2. Extensive work being undertaken within Street Environmental Services to control and monitor staff related spend in particular overtime levels, agency staff and sickness absence.

4.7.3. Vacancy and recruitment management across the department and control over non-essential expenditure.

4.7.4. On-going work to drive through service changes to deliver the delayed savings.

Housing and Adult Social Services (-£0.023m)

4.8. Adult Social Services is forecasting a (-£0.023m) underspend. The key variances within this are set out in **Appendix 1**.

4.9. The management actions being taken to control the net overspend are:

4.9.1. Review of savings plans;

4.9.2. Finance training for all budget holders;

4.9.3. Review of all agency staff and establishments in order to reduce staffing pressure; and

4.9.4. Review of all current care packages to ensure projections have been made accurately.

4.10. The Housing General Fund is forecasting a break-even position for the financial year.

Public Health (Break-Even)

4.11. Public Health is funded via a ring-fenced grant of £26.6m for 2017-18. There is a forecast net break-even position for the financial year.

Corporate Items (+£1.377m)

4.12. The forecast for corporate items, before any call on corporate contingency budgets, is a net overspend of (+£1.377m), as set out in **Appendix 1**.

5. HOUSING REVENUE ACCOUNT

5.1. The net total forecast variance for the Housing Revenue Account is projected to be a break-even position over the financial year.

6. CAPITAL PROGRAMME

6.1. It is forecast that £96.6m of capital investment will be delivered in 2017-18. This is set out by directorate in **Table 2** below and detailed in **Appendix 3**.

Table 2: 2017-18 Capital Programme Month 11 Forecast

Directorate	2017-18 Capital Budget (£m)	2017-18 Capital Forecast (£m)	Forecast Re-profiling (to) Future Years (£m)
Children's Services	7.0	5.5	(1.5)
Environment and Regeneration	26.4	25.5	(0.9)
Housing and Adult Social Services	90.6	65.6	(25.0)
Total	**124.0**	**96.6**	**(27.4)**

Forecast Re-profiling

6.2. Under the Council's financial regulations, the re-profiling of capital budgets between financial years over £1m on an individual capital scheme is a function of the Executive.

6.3. It is forecast that there will be re-profiling of the Housing capital programme totalling £24.3m from 2017-18 to future years. This comprises:

6.3.1. Housing major works and improvements programme (£5.5m), caused by delays in contract starts on site arising primarily as a result of recruitment pressures, staff resources being diverted to fire safety related assessments/works post Grenfell and protracted contract price negotiations.

6.3.2. New homes programme (£18.8m) based on latest scheme projections, which estimate total expenditure of £37.7m in 2017-18 compared to the original estimate of £56.5m before the start of the financial year.

6.3.3. As there is no meeting of the Executive between the 2017-18 outturn position being available and the 31st May deadline for submitting the draft 2017-18 Statement of Accounts to the auditor, for approving capital financing and any movements to/from reserves at the financial year end. This will be reported to the Executive retrospectively in June 2018.

7. STATEMENT OF ACCOUNTS 2017-18

7.1. The Council has a comprehensive timetable for the preparation of its 2017-18 Statement of Accounts, which must be submitted to the external auditor by 31st May 2018 (one month earlier than previous years). As there is no meeting of the Executive between the 2017-18 outturn position being available and the deadline for submitting the draft 2017-18 Statement of Accounts to the auditor, the Executive is asked to delegate authority to the Corporate Director of Resources for approving any movements to/from reserves and the financing of the 2017-18 capital programme at the financial year end. This will be reported to the Executive retrospectively in June 2018.

8. IMPLICATIONS

Financial Implications

8.1. These are included in the main body of the report.

Legal Implications

8.2. The law requires that the Council must plan to balance its spending plans against resources to avoid a deficit occurring in any year. Members need to be reasonably satisfied that expenditure is being contained within budget and that the savings for the financial year will be achieved, to ensure that income and expenditure balance.

Environmental Implications

8.3. This report does not have any direct environmental implications.

Resident Impact Assessment

8.4. The Council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The Council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The Council must have due regard to the need to tackle prejudice and promote understanding.

8.5. A resident impact assessment (RIA) was carried out for the 2017-18 Budget Report approved by Full Council. This report notes the financial performance to date but does not have direct policy implications, so a separate RIA is not required for this report.

Appendices:
Appendix 1 – General Fund Revenue Monitoring by Individual Variance
Appendix 2 – Revenue Monitoring by Service Area
Appendix 3 - Capital Monitoring

Background papers: None

Signed by

Executive Member for Finance, Performance and Community Safety — Date: 9 April 2018

Responsible Officer:
Mike Curtis
Corporate Director Resources

Report Authors:
Martin Houston, Strategic Financial Advisor
Tony Watts, Head of Financial Planning

Legal Implications Author:
Peter Fehler, Acting Director of Law and Governance

Appendix 1: General Fund Revenue Monitoring 2017-18 Month 11 by Individual Variance

Directorate / Service Area	Description of Over/(Under) Spend	Category	Over-spend	Under-spend	Net Over/(Under) Spend
			£000	£000	£000
RESOURCES					
Shared Digital	Estimated underspend across the service.	Underspend		(200)	(200)
Corporate Real Estate	Commercial Property - Shortfall against the commercial property income target due to savings materialising over a longer time frame (including refurbishment work in commercial let).	Savings Unachievable in 2017-18	1,025		1,025
Corporate Real Estate	Vacancy savings and admin budget savings.	Underspend		(193)	(193)
Parking Finance	Staffing and running costs underspends.	Underspend		(22)	(22)
Corporate Real Estate	Business rates savings as a result of moving Council properties to commercial lettings.	Underspend		(252)	(252)
Financial Management	Detailed budget review savings.	Underspend		(350)	(350)
Financial Management	Vacancies and additional income from cash recovery project.	Underspend		(165)	(165)
Financial Management	Staffing and underspend in running costs.	Underspend		(72)	(72)
Financial Operations	Underspend in staffing budgets.	Underspend		(125)	(125)
Financial Operations	Higher than anticipated recovery of court costs.	Underspend		(50)	(50)
Financial Operations	Accounts payable, debtors review and processing staffing underspends.	Underspend		(199)	(199)
Facilities Management	Staffing underspend in Contact Islington.	Underspend		(33)	(33)
Facilities Management	Expenditure on buildings being held to a minimum with no contingency for urgent repair requirements.	Underspend		(943)	(943)
Facilities Management	Budgets carried forward from 2016-17 no longer required.	Underspend		(213)	(213)
Assembly Hall	Additional Assembly Hall income above the budgeted target.	Unbudgeted Income		(60)	(60)
Legal and Governance	Registrars.	Current Year New Pressure	87		87
Legal and Governance	Legal Services underspend on staff costs and increased income.	Underspend		(111)	(111)
Human Resources	Staffing and Comensura contract pressures.	Current Year New Pressure	132		132
Internal Audit	Staff vacancies.	Underspend		(10)	(10)
Total Resources			**1,244**	**(2,998)**	**(1,754)**
CHIEF EXECUTIVE'S DEPARTMENT					
Chief Executive	Underspend as a result of early delivery of 2018-19 saving.	Underspend		(148)	(148)
Communications and Change	Underspend within Communications due to vacant posts, staff being seconded to other teams and not being covered and one-off income.	Underspend		(149)	(149)
Communications and Change	Underspend in running costs within Print Services.	Underspend		(59)	(59)
Strategy and Change	Underspend in running costs within Strategy and Change division.	Underspend		(130)	(130)
Total Chief Executive's Department			**0**	**(486)**	**(486)**
CHILDREN'S SERVICES					
Cardfields	Additional boiler replacement costs and shortfall in income.	Prior Year Ongoing Pressure	86		86
Children in Need	Increase in court fees due to increased demand in children in need service.	Current Year New Pressure	250		250
Children in Need	Agency cover to support significant levels of staff turnover in children in need service and backdated allowances adjustment for the Emergency Duty Team.	Prior Year Ongoing Pressure	200		200
Children in Need	Due to the high use of private sector accommodation, the costs of providing temporary accommodation (TA) are high. Private sector rents are rising continuously in London, and a buoyant market means landlords have ample choice of who they let their properties to; demand far exceeds supply. Additionally, the council is restricted by DWP regulations as to the levels of rents it can charge for TA, which, barring a few exceptions, are lower than the amounts paid to the landlords/agents for the use of the properties.	Prior Year Ongoing Pressure	100		100
Children Looked After	Increase in the number and complexity of cases for under 18 cohort of Children Looked After (mainly regulated residential placements).	Prior Year Ongoing Pressure	2,430		2,430
Children Looked After	Significant increase in the number of care leavers to whom the Council is required to offer a service. Includes rising 18s (Southwark judgement).	Prior Year Ongoing Pressure	500		500
Children Looked After	Increase in high cost residential placements related to increase in high risk/highly vulnerable young people becoming looked after.	Prior Year Ongoing Pressure	387		387
Disabled Children's Service	Increased demand for high level personal budgets to deliver community based packages in disabled children's service. Increase in costs following judicial review of packages of support.	Prior Year Ongoing Pressure	341		341
Early Years	Over 5's childcare subsidy overspend following the decision to continue existing provision for current year following loss in DSG funding from the implementation of a national funding formula for early years and the expiry of new homes bonus funding.	Current Year New Pressure	388		388
Early Years	Loss of DSG funding for under 3's childcare subsidy in nursery schools following implementation of a national funding formula for early years (£510k) offset by reallocations of budgets from elsewhere.	Current Year New Pressure	365		365
Early Years	Estimated impact of loss of DSG funding for early years priority referral places for under 3s from the implementation of a national funding formula for early years.	Current Year New Pressure	135		135
Early Years	Loss of DSG funding (£511k) for family support workers following implementation of a national funding formula for early years offset by staffing restructure and staff vacancies.	Current Year New Pressure	125		125
Fostering	Increase in accommodation / placements supported by in-house carers.	Prior Year Ongoing Pressure	300		300
Pupil and School Support Services	Unachieved traded income across Learning and Schools division.	Prior Year Ongoing Pressure	100		100
Pupil and School Support Services	Loss of de-delegated funding following in-year academy conversions.	Current Year New Pressure	10		10
Pupil Services	Increase in demand for personal transport budgets.	Prior Year Ongoing Pressure	52		52
Schools Capital and Asset Management	The Council's contribution to Holloway Pool cleaning costs.	Prior Year Ongoing Pressure	60		60
Special Educational Needs Transport	Increasing numbers of pupils and complexity of need.	Prior Year Ongoing Pressure	528		528
Service Support	Unfunded director post, but funding identified for 2018-19 onwards.	Current Year New Pressure	134		134
Service Support	Re-phasing of savings from restructure of business support unit (£260k delivered in 2017-18).	Savings Unachievable in 2017-18	40		40
Youth Offending Service	Youth Justice Board grant does not cover continuing increase in remand pressures. Increased overspend as a result of an increase in secure remands.	Prior Year Ongoing Pressure	575		575

Appendix 1: General Fund Revenue Monitoring 2017-18 Month 11 by Individual Variance

Directorate / Service Area	Description of Over/(Under) Spend	Category	Over-spend	Under-spend	Net Over/(Under) Spend
			£000	£000	£000
Early Years	Staff vacancies in early years following the implementation of Bright Start Islington.	Current Year New Pressure		(300)	(300)
Early Years	Staffing underspends in early years support services.	Underspend		(106)	(106)
Early Years	Staff vacancies and additional income from the provision of childcare in children's centres.	Underspend		(77)	(77)
Employment	Remove one-off balance of childcare subsidy budget not required. This leaves an ongoing core funded budget of £85k which is sufficient to meet demand.	Underspend		(136)	(136)
Employment	Forecast underspend against the employment service from additional earned income.	Unbudgeted Income		(30)	(30)
Governor Services	Staff vacancies.	Underspend		(40)	(40)
Health Commissioning	Underspend in health commissioning.	Underspend		(50)	(50)
ICT, Information and Performance	Additional schools traded income.	Unbudgeted Income		(34)	(34)
Post 16	Staffing underspend.	Underspend		(35)	(35)
Pupil and School Support Services	Unbudgeted income from previously agreed schools contribution to Local Government Pension Scheme.	Unbudgeted Income		(400)	(400)
Pupil Services	Additional income and staff vacancies in the Education Psychology Service.	Underspend		(70)	(70)
Schools Capital and Asset Management	Capitalisation of schools capital team costs.	Unbudgeted Income		(100)	(100)
Schools Finance	Staff vacancies.	Underspend		(15)	(15)
Schools Human Resources and Payroll	Review of traded income and confirmation of contribution from iCo (£20k) means that this service is now forecast to deliver a small underspend.	Underspend		(4)	(4)
Unaccompanied Asylum Seeker Children	Recent legislation allows young people to 'stay put' in their Children Looked After placements. Grants given towards asylum young people (post 18) are significantly lower than 'staying put' costs. Previous overspend offset by new 'Building Capacity' grant allocation from the Home Office.	Underspend		(99)	(99)
Youth Commissioning	Freeze on current procurement cycle to support directorate financial pressures.	Underspend		(500)	(500)
Total Children's Services			**7,106**	**(1,996)**	**5,110**
ENVIRONMENT AND REGENERATION					
Public Realm	Delayed delivery of prior year savings in Street Environmental Services.	Savings Unachievable in 2017-18	258		258
Public Realm	Delayed delivery of new savings in Street Environmental Services.	Savings Unachievable in 2017-18	956		956
Public Realm	Additional operating costs in Street Environmental Services.	Prior Year Ongoing Pressure	1,342		1,342
Public Realm	Additional agency costs.	Current Year New Pressure	600		600
Public Realm	Unrealisable income target from Arqiva Street Lighting WIFI concession.	Prior Year Ongoing Pressure	170		170
Public Realm	Income target in Energy Services.	Prior Year Ongoing Pressure	100		100
Public Realm	Trampoline Park delays as a result of General Election in June 2017.	Current Year New Pressure	200		200
Public Realm	Decisions around parks seasonal events delayed.	Savings Unachievable in 2017-18	200		200
Directorate	Transfer of excess business rates budget to other departments	Current Year New Pressure	170		170
Directorate	Annual subscription charge for Box.	Current Year New Pressure	69		69
Public Realm	Purchase of phones for front line operatives.	Current Year New Pressure	50		50
Public Realm	Additional income in parking.	Unbudgeted Income		(424)	(424)
Public Realm	Contract saving in parking.	Underspend		(600)	(600)
Public Realm	One-off payment from advertising contract.	Unbudgeted Income		(306)	(306)
Public Realm	Underspend on depots budgets.	Underspend		(373)	(373)
Public Realm	Additional sports income.	Unbudgeted Income		(256)	(256)
Public Realm	Reduced maintenance costs within Greenspace and Leisure.	Underspend		(114)	(114)
Public Realm	Capital spend previously assumed to be financed by revenue.	Underspend		(826)	(826)
Public Realm	One-off payment from TfL relating to bridge works in Holloway Road.	Unbudgeted Income		(250)	(250)
Public Protection	Holding vacancies across the division and additional income.	Underspend		(314)	(314)
Directorate	Additional iCo income.	Unbudgeted Income		(100)	(100)
Public Realm	Additional builders licence income.	Unbudgeted Income		(25)	(25)
Public Realm	One-off funding for two tree officers	Underspend		(70)	(70)
Public Realm	Additional income within Greenspace and Leisure.	Underspend		(63)	(63)
Planning and Development	Additional income forecast as a result of a 20% increase in fees from January 2018.	Underspend		(50)	(50)
Total Environment and Regeneration			**4,115**	**(3,771)**	**344**

Appendix 1: General Fund Revenue Monitoring 2017-18 Month 11 by Individual Variance

Directorate / Service Area	Description of Over/(Under) Spend	Category	Over-spend	Under-spend	Net Over/(Under) Spend
			£000	£000	£000
HOUSING AND ADULT SOCIAL SERVICES					
Temporary Accommodation and Housing Needs	Overspend on direct and indirect costs of Temporary Accommodation. The direct costs relate to the challenges and relatively unknown impact resulting from the replacement of the Temporary Accommodation management fee payment system with the DCLG Flexible Homelessness Grant. The indirect costs largely relate to legal costs.	Current Year New Pressure	322		322
Housing Administration and Strategy and Development	Underspend owing to vacancies being held to manage the Temporary Accommodation overspend.	Underspend		(322)	(322)
Total Housing General Fund			**322**	**(322)**	**0**
Adult Social Care	Underspend in Adult Social Care division.	Underspend		(150)	(150)
Integrated Community Services	Non delivery of savings in Integrated Community Services.	Savings Unachievable in 2017-18	1,251		1,251
Integrated Community Services	Underspend across Integrated Community Services.	Underspend		(143)	(143)
Integrated Community Services	Placement pressure in Integrated Community Services.	Current Year New Pressure	588		588
Integrated Community Services	Underspend in In-House Older People Services.	Underspend		(19)	(19)
Integrated Community Services	Overspend in In-House Physical Disability Services.	Current Year New Pressure	24		24
Strategy and Commissioning	Non delivery of savings in Strategy and Commissioning.	Savings Unachievable in 2017-18	925		925
Strategy and Commissioning	Transformation commissioning pressure.	Current Year New Pressure	22		22
Strategy and Commissioning	Placement pressure in Mental Health Services.	Current Year New Pressure	418		418
Strategy and Commissioning	Overspend in block contracts, primarily rising through under collection of income in Care UK homes.	Current Year New Pressure	98		98
Strategy and Commissioning	Integrated Community Equipment Service (ICES) overspend of £274k, of which £137k is attributable to the Whittington Hospital.	Prior Year ongoing pressure	137		137
Strategy and Commissioning	Overspend in Mental Health Commissioning pooled budget.	Current Year New Pressure	46		46
Strategy and Commissioning	Underspend across Strategy and Commissioning.	Current Year New Pressure		(222)	(222)
Strategy and Commissioning	Underspend on Carers pooled budget.	Underspend		(82)	(82)
Learning Disability Services	Non delivery of savings in Learning Disability Services.	Savings Unachievable in 2017-18	1,473		1,473
Learning Disability Services	Overspend in In-House Learning Disability Services.	Savings Unachievable in 2017-18	307		307
Learning Disability Services	Additional pressures in Learning Disability Services due to London Living Wage, Sleep-in judgements and additional capacity in Shared Lives and Community Access.	Prior Year ongoing pressure	493		493
Learning Disability Services	Staffing Pressure in Learning Disability Services	Current Year New Pressure	164		164
Learning Disability Services	Placement Pressure in Learning Disability Services	Current Year New Pressure	547		547
Adult Social Care	Additional social care funding announced in Budget 2017 (One-off).	Unbudgeted Income		(3,000)	(3,000)
Adult Social Care	Release of S117, bad debt provision and direct payments surpluses (One-off).	Underspend		(1,800)	(1,800)
Adult Social Care	Adult social care funding stream realignment.	Management Action		(1,100)	(1,100)
Total Adult Social Services			**6,493**	**(6,516)**	**(23)**
Total Housing and Adult Social Services			**6,815**	**(6,838)**	**(23)**
PUBLIC HEALTH					
Break-even forecast					0
Total Public Health			**0**	**0**	**0**
DIRECTORATE TOTAL			**19,280**	**(16,089)**	**3,191**
CORPORATE ITEMS					
No Recourse to Public Funds	Uncontrollable pressure due to the Council's statutory duty to provide assistance to all destitute clients who are Non-European Union nationals and can demonstrate need under Section 21 of the National Assistance Act, 1948. This is commonly referred to as No Recourse to Public Funds (NRPF).	Prior Year Ongoing Pressure	800		800
Cross-cutting Savings	Unachievable savings in 2017-18: - Further channel shift across both Contact Islington and other council services (£435k) - Income generating activities across the council, including increasing Income from existing services, maximising Income from assets and developing new services (£720k)	Savings Unachievable in 2017-18	1,155		1,155
Apprenticeship Levy	Estimated General Fund impact of Apprenticeship Levy.	Current Year New Pressure	600		600
Levies	Underspend on the corporate levies budget compared to the estimate before the start of the financial year.	Underspend		(250)	(250)
Grant Income	Net unbudgeted grant income (net of other corporate pressures), for example to compensate for the impact of Government policy on our retained business rates income in 2017-18 and to reimburse previously top-sliced New Homes Bonus funding.	Unbudgeted Income		(928)	(928)
Total Corporate Items			**2,555**	**(1,178)**	**1,377**
GROSS TOTAL			**21,835**	**(17,267)**	**4,568**

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Appendix 2 - Revenue Monitoring 2017-18 by Service Area Month 11

GENERAL FUND				
Directorate / Division	Current Budget	Forecast Outturn	Forecast Over/(Under) Spend Month 11	Forecast Over/(Under) Spend Month 10
	£000	£000	£000	£000
RESOURCES				
Corporate Director of Resources	2,790	2,831	41	0
Digital Services and Transformation	13,102	12,902	(200)	0
Financial Management	12,226	12,156	(70)	(188)
Financial Operations	19,165	17,541	(1,624)	(1,568)
Internal Audit	506	496	(10)	0
Legal and Governance	2,193	2,170	(23)	0
Human Resources	1,789	1,921	132	144
Total Finance and Resources	**51,771**	**50,017**	**(1,754)**	**(1,612)**
CHIEF EXECUTIVE'S DEPARTMENT				
Chief Executive	245	97	(148)	(148)
Communications and Change	838	630	(208)	(205)
Strategy and Change	1,005	875	(130)	(108)
Total Chief Executive's Department	**2,088**	**1,602**	**(486)**	**(461)**
CHILDREN'S SERVICES				
Learning and Schools	10,469	10,774	305	263
Partnership and Service Support	15,603	15,862	259	259
Safeguarding and Family Support	42,746	47,155	4,409	4,409
Employment, Skills and Culture	5,966	5,765	(201)	(215)
Youth and Communities	6,003	6,078	75	75
Health Commissioning	942	892	(50)	(50)
Less Projected Ring-Fenced Schools Related Underspend	0	313	313	369
Total Children's Services	**81,729**	**86,839**	**5,110**	**5,110**
ENVIRONMENT AND REGENERATION				
Directorate	461	700	239	239
Planning and Development	1,630	1,581	(49)	(49)
Public Protection	5,327	5,012	(315)	(364)
Public Realm	14,186	14,655	469	516
Total Environment and Regeneration	**21,604**	**21,948**	**344**	**342**
HOUSING AND ADULT SOCIAL SERVICES (HASS)				
Temporary Accommodation (Homelessness Direct)	2,106	2,010	(96)	(96)
Housing Needs (Homelessness Indirect)	1,465	1,882	417	417
Housing Benefit	880	880	0	0
Housing Strategy and Development	177	143	(34)	(34)
Housing Administration	1,243	956	(287)	(287)
Voluntary and Community Services (VCS)	3,402	3,402	0	0
Total Housing General Fund	**9,273**	**9,273**	**0**	**0**
Adult Social Care	538	(5,508)	(6,046)	(5,166)
Integrated Community Services	15,742	17,443	1,701	1,772
Learning Disabilities	22,903	25,879	2,976	2,984
Strategy and Commissioning	28,987	30,333	1,346	1,346
Total Adult Social Services	**68,170**	**68,147**	**(23)**	**936**
Total Housing and Adult Social Services	**77,443**	**77,420**	**(23)**	**936**
PUBLIC HEALTH				
Children 0-5 Public Health	3,952	3,843	(109)	(80)
Children and Young People	1,434	1,452	18	35
NHS Health Checks	394	376	(18)	(18)
Obesity and Physical Activity	700	701	1	(17)
Other Public Health	(21,506)	(21,404)	102	112
Sexual Health	6,746	6,132	(614)	(14)
Smoking and Tobacco	413	392	(21)	(21)
Substance Misuse	8,456	8,497	41	3
Less Projected Ring-Fenced Public Health Grant Underspend	0	600	600	0
Total Public Health	**589**	**589**	**0**	**0**
DIRECTORATE TOTAL	**235,224**	**238,415**	**3,191**	**4,315**

Appendix 2 - Revenue Monitoring 2017-18 by Service Area Month 11

Directorate / Division	Current Budget	Forecast Outturn	Forecast Over/(Under) Spend Month 11	Forecast Over/(Under) Spend Month 10
	£000	£000	£000	£000
CORPORATE ITEMS				
Corporate and Democratic Core / Non Distributed Costs	0	0	0	0
Other Corporate Items	(3,633)	(2,806)	827	830
Corporate Financing Account	(24,728)	(24,728)	0	0
Levies	21,926	21,676	(250)	(253)
Transfer to/(from) Reserves	(10,766)	(10,766)	0	0
Specific Grants	(13,178)	(13,178)	0	0
Core Government Funding / Council Tax	(208,481)	(208,481)	0	0
No Recourse to Public Funds	408	1,208	800	800
Appropriations and Technical Accounting Entries	1,228	1,228	0	0
Contingency	2,000	2,000	0	0
Total Corporate Items	**(235,224)**	**(233,847)**	**1,377**	**1,377**
GROSS TOTAL	**0**	**4,568**	**4,568**	**5,692**

Appendix 2 - Revenue Monitoring 2017-18 by Service Area Month 11

HOUSING REVENUE ACCOUNT(HRA)				
Service Area	Current Budget	Forecast Outturn	Forecast Over/(Under) Spend Month 11	Forecast Over/(Under) Spend Month 10
	£000	£000	£000	£000
Dwelling Rents	(163,715)	(164,215)	(500)	(500)
Non Dwelling Rents	(1,335)	(1,635)	(300)	(300)
Heating Charges	(2,150)	(2,150)	0	0
Leaseholders Charges	(11,400)	(12,000)	(600)	(600)
Other Charges for Services and Facilities	(4,603)	(4,853)	(250)	(250)
PFI Credits	(22,854)	(22,854)	0	0
Interest Receivable	(500)	(500)	0	0
Contribution from General Fund	(816)	(816)	0	0
Gross Income	**(207,373)**	**(209,023)**	**(1,650)**	**(1,650)**
Repairs and Maintenance	32,044	30,544	(1,500)	(1,000)
General Management	49,460	51,060	1,600	600
PFI Payments	40,404	40,404	0	100
Special Services	18,268	17,868	(400)	(400)
Rents, Rates, Taxes and Other Charges	589	589	0	0
Capital Financing Costs	16,749	16,749	0	0
Depreciation	30,847	32,847	2,000	2,000
Bad Debt Provisions	750	750	0	0
Contingency	2,000	1,500	(500)	0
Transfer to HRA Reserves	16,262	16,712	450	350
Gross Expenditure	**207,373**	**209,023**	**1,650**	**1,650**
Net (Surplus)/Deficit	**0**	**0**	**0**	**0**

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Appendix 3: Capital Monitoring 2017-18 Month 11

	2017-18 Budget Monitoring						
	Original Budget	Budget Changes During the Year	Revised Budget	Forecast Outturn	Forecast Re-profiling (to)/from Future Years	Expenditure to Date	% Budget Spent to Date
	£m	£m	£m	£m	£m	£m	£m
CHILDREN'S SERVICES							
Moreland Primary School	0.0	0.4	0.4	0.4	(0.0)	0.1	35%
Dowery Street/Primary PRU	2.0	(0.6)	1.4	1.4	0.0	1.0	67%
School Condition Works	1.0	(1.0)	0.0	0.0	0.0	0.0	0%
Tufnell Park	4.4	(2.9)	1.5	1.0	(0.5)	0.5	34%
Highbury Grove School Expansion	1.7	(1.5)	0.2	0.1	(0.1)	0.1	51%
Central Foundation School Expansion	2.7	(2.7)	0.0	0.0	0.0	0.0	0%
Arts and Media School	0.1	(0.1)	0.0	0.0	0.0	0.0	0%
Newington Green Refurbishment	0.5	(0.5)	0.0	0.0	0.0	0.0	0%
City Of London Academy	2.0	(2.0)	0.0	0.0	0.0	0.0	0%
New River College	0.5	(0.2)	0.3	0.1	(0.2)	0.0	0%
Primary Capital Scheme	0.2	0.0	0.2	0.2	(0.0)	0.2	70%
Windows Schemes	0.0	0.0	0.0	0.0	0.0	0.0	7%
Electrical & Mechanical	0.0	1.0	1.0	1.0	0.0	0.9	90%
Libraries	0.0	0.2	0.2	0.1	(0.1)	0.1	64%
Early Years Capital	1.3	(0.2)	1.1	0.6	(0.5)	0.5	46%
Other	0.0	0.4	0.4	0.3	(0.1)	0.0	6%
Total Children's Services	**16.4**	**(9.4)**	**7.0**	**5.5**	**(1.5)**	**3.5**	**50%**
ENVIRONMENT AND REGENERATION							
Other Environment and Regeneration	0.0	0.0	0.0	0.0	(0.0)	0.0	0%
Planning and Development	2.0	0.6	2.6	2.6	(0.0)	2.5	95%
Cemeteries	1.0	0.4	1.4	1.1	(0.3)	1.1	79%
Combined Heat and Power	2.1	1.2	3.3	3.3	(0.0)	1.9	56%
Energy Saving Council Buildings	0.3	0.2	0.5	0.4	(0.1)	0.2	39%
Vehicles	4.0	0.3	4.3	4.4	0.1	4.1	96%
Greenspace	1.2	1.0	2.2	1.8	(0.4)	1.3	59%
Highways	3.4	0.6	4.0	4.0	0.0	1.3	31%
Leisure	2.3	0.7	3.1	3.4	0.3	0.1	3%
Other Energy Efficiency	2.2	(2.2)	0.0	0.0	0.0	0.0	0%
Recycling Improvements	0.8	(0.2)	0.5	0.4	(0.1)	0.4	73%
Special Projects	0.2	0.4	0.6	0.6	(0.0)	0.4	71%
Traffic and Engineering	3.2	0.5	3.7	3.4	(0.4)	2.3	63%
Total Environment and Regeneration	**22.7**	**3.7**	**26.4**	**25.5**	**(0.9)**	**15.6**	**59%**
HOUSING AND ADULT SOCIAL SERVICES							
HOUSING							
Major Works and Improvements	33.5	0.0	33.5	28.0	(5.5)	18.4	55%
New Build	56.4	0.0	56.4	37.6	(18.8)	28.1	50%
Total Housing	**89.9**	**0.0**	**89.9**	**65.6**	**(24.3)**	**46.6**	**52%**
ADULT SOCIAL SERVICES							
Care Services	0.0	0.7	0.7	0.0	(0.7)	0.0	0%
Total Adult Social Services	**0.0**	**0.7**	**0.7**	**0.0**	**(0.7)**	**0.0**	**0%**
Total Housing and Adult Social Services	**89.9**	**0.7**	**90.6**	**65.6**	**(25.0)**	**46.6**	**51%**
TOTAL CAPITAL PROGRAMME	**129.0**	**(5.0)**	**124.0**	**96.6**	**(27.4)**	**65.7**	**53%**

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ISLINGTON

Resources Department
Town Hall, Upper Street
London N1 2UD

Report of: **Chair of Health and Care Scrutiny Committee**

Meeting of	**Date**	**Ward(s)**
Executive	19 April 2018	All

Delete as appropriate		Non-exempt

Subject: Health Impact of Poor Air Quality Scrutiny Review – Findings of the Health and Care Scrutiny Committee

1. Synopsis

1.1 This report requests that the Executive receive the recommendations of the Health and Care Scrutiny Committee following the completion of its review of Health Impact of Poor Air Quality. A response to the recommendations set out in the report will be considered at a future meeting of the Executive.

2. Recommendations

2.1 That the report of the Health and Care Scrutiny Committee be received.

2.2 That the Executive Member's response be reported to a future meeting of the Executive, including having due regard to any relevant implications of the Health and Care Scrutiny Committee's recommendations.

3. Background

3.1 In July 2017 the Health and Care Scrutiny Committee commenced a review into the Health Impacts of Poor Air Quality in Islington and to understand the scale and nature of the negative health impacts of poor air quality in Islington, the effectiveness of current arrangements and measures for tackling poor air quality and its adverse effects on health

3.2 The Committee took evidence from a number of different witnesses and our recommendations seek to improve the health of Islington residents by reducing poor air quality.

4. Implications

4.1 Financial Implications

The proposals in the report need to be costed before a response is made by the Executive.

4.2 Legal Implications

Relevant legal implications will be considered as part of the response to the review.

4.3 Environmental Implications

There are no environmental implications at this stage. Any environmental implications will be identified as part of the Executive Member response.

4.4 Resident Impact Assessment

The council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The council must have due regard to the need to tackle prejudice and promote understanding.

The Committee has had regard to any equalities implications and resident impacts identified by witnesses during the course of the review. Details of any such implications are set out in the appended report. A Resident Impact Assessment has not been completed as the Executive is only asked to receive the report at this stage. The impact on residents will need to be fully considered as part of the Executive Member response to the review, at which point a Resident Impact Assessment will be completed if required.

5. Conclusion and reasons for recommendations

5.1 The Committee has made a number of recommendations, following the taking of evidence, which if adopted, will lead to improvements in the health of Islington residents, particularly those suffering from respiratory conditions

Appendices:

- Health Impact of Poor Air Quality – Report of the Health and Care Scrutiny Committee

Background papers:

- None.

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ISLINGTON

REPORT OF THE HEALTH AND CARE SCRUTINY COMMITTEE

HEALTH IMPACTS OF POOR AIR QUALITY SCRUTINY REVIEW

London Borough of Islington
March 2018

CHAIR'S FOREWORD

We all know, or we think we know, that pollution and air quality is a problem in health, particularly for inner city dwellers, such as the population of Islington. However, it is sometimes quite complicated to identify the various sources of pollution, and also, to establish some causal relationships between the known pollutants and the health impacts which are held to result from the pollution.

Damage to air quality caused by pollution can emanate anywhere from someone burning wood in their fireplace at home in Islington, through local car journeys, (including dropping off at school) through lorry transport passing through the borough, to pollution clouds from industrial processes in other European countries being blown across Europe, and ending up in the UK. Obviously, the strategies to deal with these differing sources of pollution will vary depending on the source. This scrutiny report focuses on local initiatives that can be actioned locally, with additional recommendations to lobby Central Government on issues such as updating the Clean Air Act, which is woefully out of date.

There are various statistics available that inform the discussion about pollution and air quality: For example, TfL have identified that 95% of NOx pollutants originate from diesel vehicles, which is a pretty clear direction to tackle this particular issue, especially when, by their own admission, buses contribute 52% of this figure. But then again, whilst there is a very high level of COPD sufferers in Islington, 90% of these cases are due to smoking, which is a very different social issue.

As Chair of the Committee, I think it is appropriate that the recommendations in this report respond pro-rata to the origin of the pollutants, and also the ability of the Council to directly influence the effect of pollutants on residents in the Borough.

I am also conscious that the Environment and Regeneration Committee reported on Air Quality in 2003. We have been mindful of the recommendations made at the time, but also believe that the willingness of society to attempt to deal with the issues has moved on somewhat since then, and whilst a number of recommendations have been met, our report reinforces some of those that have yet to be met, and I think we are at a point where the climate of opinion has changed to the point where we can start to talk much more specifically about issues as the contributing factors to pollution around schools, and the importance of this issue to young children. We are aware that some of the recommendations may not be universally popular.

During the course of the Scrutiny we received a very interesting diversity of witness evidence, and all the witnesses we heard were passionate about the need to improve air quality. To my mind, one of the most pertinent remarks we heard during the course of the scrutiny came from the witness from' Client Earth,' who are a legally based charity campaigning for environmental improvements, who suggested the view that proposals for environmental improvements' should not hide behind political and economic considerations.' This is in my view a very useful test to be applied when deciding if a suggested measure should be adopted.

COUNCILLOR MARTIN KLUTE - CHAIR

Health Implications of poor Air Quality Scrutiny Review

Evidence

The review ran from September 2017 until March 2018 and evidence was received from a variety of sources:

1. Presentations from witnesses – Ian Mudway – Kings College, Sam Longman – TfL, Andrea Lee – Client Earth

2. Presentations from council officers – Ian Sandford – Public Health, Paul Clift, Andrew Ford – Environment and Regeneration, Martin Cooijmans – Environment and Regeneration, Phil Wrigley – Islington CCG

3. Documentary evidence – Air Quality Review 2013, Progress report on Air Quality Review Recommendations May 2014

Aim of the Review

To understand the scale and nature of the negative health and wellbeing impacts of poor air quality in Islington, and the effectiveness of current arrangements and measures for tackling poor air quality and its adverse effects on health

Objectives of the Review

- **To understand the relationship between poor air quality and health and wellbeing in general, and specifically the impact of poor air quality on Islington residents' health and wellbeing**
- **To understand the direct benefits of improving air quality in Islington, including the wider health co-benefits of actions being taken to address it, including increased physical activity, reduced obesity, and reduced social isolation**
- **To make recommendations for increasing the impact of local measures to improve health in relation to air quality and make local resources more effective**

The detailed Scrutiny Initiation Document (SID) is set out at Appendix A to the report

RECOMMENDATIONS:

That the Executive be recommended to -

1. **Car transport:** Roll out electric charging points as speedily as possible across the borough. Continue with the policy of increased parking charges for diesel vehicles. Implement a staged introduction of higher charges for higher polluting vehicles.

2. **Schools:**
    a. **Parking near schools:** Implement a 'zero tolerance' approach to parking near schools for parents dropping off and picking up children from school, including abolishing the '10 minutes grace' informal rule currently applied, with the only exception being disabled/blue badge holders.
    b. **Close roads near schools:** At the beginning and end of the school day, as is currently being piloted in Hackney and Camden.
    c. **Educate parents:** Support schools to educate parents on the health benefits of walking and cycling to school.
    d. **Air quality monitoring:** Monitor air quality outside all schools (including PM2.5), and use results to leverage Local Safety Scheme funding from TFL, and to support applications for physical environmental improvements.

3. **Through traffic:** Council to investigate a borough-wide neighbourhood cellular zoning policy to both reduce rat-running and overall traffic volumes.

4. **Idling vehicles**: Put up signs in zones where idling is a common problem asking people to switch off their engines. Investigate using Public Space Protection orders to give the Council greater powers to sanction engine idling, and also for the Council to enforce current legislation on engine idling more robustly. (See also recommendation 7 below).

5. **Communications strategy:**
    a. The Council to develop a communications strategy to inform and engage residents on the implications of poor air quality.
    b. Promote the use of mobile phone apps eg 'Air text' to advise residents of poor air quality days, and to assist those with respiratory problems.
    c. Promote the health benefits of active travel, walking, cycling, and the use of public transport.
    d. Educate residents about dangers of wood burning, open fires, and the impacts on air quality.
    e. Promote the issue of 'less vehicles as well as less polluting vehicles'.

6. **Officer Forum:** Given that the work on air quality is often fragmented across different Council departments, establish an officer forum in order to more effectively coordinate the work on air quality and the establishment and implementation of new strategies, with Forum proposals being approved by the executive.

7. **Lobby the Government:** Work with other London Boroughs and campaigning organisations to lobby Government to introduce a new Clean Air Act, to include car tax penalties for diesel engines, a scrappage scheme to support people to dispose of diesel vehicles, to make engine idling an immediate offence, and to standardise legislation to include Canals and Waterways.

8. **Mayor of London's Clean Air Strategy:** Support the Mayor's strategy in order to improve air quality and to reduce traffic, and to urge the Mayor to support additional funding for schemes to improve air quality in Islington.

9. **Whittington NHS Trust:** Islington CCG and NHS Trusts should ensure that energy efficiency is considered and implemented, wherever possible, in all future proposals and strategies for the Whittington NHS Trust, and as already identified in their current Estates Strategy.

10. **Health and Wellbeing Board policies:** HWB to incorporate air quality considerations into its future policies, given the impact of poor air quality on health and the costs of the provision of services to deal with combating respiratory diseases

MAIN FINDINGS

1) The Committee considered an initial presentation at its meeting on 14 September 2017, from officers in Public Health and Environment and Regeneration, in relation to the scrutiny review

2) The Committee were informed that air pollution is a gas or a solid, dispersed through ordinary air, that is released in a big enough quantity to harm the health of people or animals. Air Pollution can also kill plants or stop them growing, damage or disrupt some aspect of the environment, or cause some other kind of nuisance. It is the quantity of or concentration of the chemicals in the air that makes the difference between harmless and polluted air

3) The Committee were also informed that particulates are sooty deposits in the air that blacken buildings and cause breathing difficulties. In London, and most particulates come from traffic fumes, brake and tyre wear and increasingly wood burning. Most worrying is the fine PM 2.5 and ultrafine PM1 particulate matter, as these can enter deep into the lungs and into the bloodstream. Particulates of different sizes are referred to by the letters PM followed by a number, so PM10 means particles of less than 10 microns.

4) The south of the borough is the most polluted, and 60% of the borough is over EU limits. Every Islington school is near an area of high pollution

5) Another major source of pollutants are nitrogen oxides, NOx, and both nitrogen dioxide (NO2), and nitrogen oxide (NO) are gas pollutants, made as a result of burning, when nitrogen and oxygen react together. Islington's NOx emissions are by type – major roads 43%, minor roads 6%, domestic gas 13%, commercial gas 17%, NRMM 2%, industry 1%, and other 18%.

6) At ground level, ozone – O3, is also a toxic pollutant that can damage health. It forms when sunlight strikes a cocktail of other pollution and is a key ingredient of smog

7) The Committee also received the previous report carried out by the Environment and Regeneration Scrutiny Committee into Air Quality in 2013/14, and the Committee noted that the Council has been active in work to improve air quality in the borough. Further measures are challenging to deliver, as many sources of pollution are from outside Islington, or from traffic passing through

8) Poor air quality impacts from early life and before birth. High levels of PM2.5 are associated with low birth weight, and children are particularly at risk, due to immaturity of their respiratory organ systems. Infants have a high metabolic rate, so they breathe a greater volume of air per minute than an adult, relative to their size, and infants are also within greater proximity to air pollution source, such as vehicle exhausts

9) Research into early exposure to air pollution highlights the effects on lung function and respiratory infections, asthma exacerbation, cognitive development, and the development of the brain and co-ordination. There is some evidence that air pollution plays a part in causing asthma, but more definitive research is needed to establish this link

10) The Committee were informed that PM2.5 is attributable to mortality equivalent to 88 deaths in Islington, and NO2 to 164 deaths in Islington. There is an estimated overlap of 30% of the effects on PM2.5 and NO2, underlying the need to reduce both

11) The Committee noted that often deaths are attributed to heart or respiratory disease, however, air pollution exacerbates heart and lung conditions, which hasten death. The above deaths represent an average of 8.9 months lost attributable to PM2.5, and 4.8 months attributable to NO2 across all deaths, although these will be greater for people who die of heart or lung disease

12) Short term effects of poor air quality include increased deaths and hospital admissions in London. as a result of PM2.5 emissions. This results in 818 deaths being brought forward, there are 2072 respiratory hospital admissions, and also 769 cardiovascular hospital admissions. As a result of NO2, 461 deaths are brought forward, and there are 419 respiratory hospital admissions. There are no estimates available on a local Borough level

13) The Committee are of the view, that given the evidence that the absorption of small, particulate matter, especially PM2.5, is extremely harmful to residents, especially young children, whose lungs are still developing, consideration should be given to measuring these emissions, and any appropriate action that should be taken. Measurement around schools is particularly important

14) Other impacts on health and wellbeing include time off school or work due to illness, the economic impact of long term health conditions, including loss of earnings, and increased costs of keeping the home warmer for longer. It also acts as a deterrent to people engaging in physical and/or social activities, particularly amongst people with existing conditions, and poor air quality also impacts negatively on self-reported wellbeing

15) Whilst the entire population is exposed to air pollution, the health impacts of this exposure are experienced much more commonly in vulnerable people, particularly those people with pre-existing heart and respiratory conditions

16) It is interesting to note that in a study, the most deprived 20% of areas in London, had 8.6% more PM10, compared to the least deprived 20%, and 8.1% more than NOx in 2001, the most recent high resolution air quality data available to the study authors

17) Areas of London with more than 20% of non-white residents had 6.6% more PM10, compared with areas with less than 20% non-white residents and 8.1% more NO2 in the 2001 study

18) Local programmes to improve air quality include, a combination of policies agreed at a national level, such as vehicle and fuel taxes, policies to promote uptake of cleaner technologies. There are also city wide policies such as congestion charging and low emission zones, in addition to investment in public transport. At borough level, local travel infrastructure parking policy has been influencing trends to date, and will continue to do so. The impact of such policies is a cumulative one in the improvement of air quality

19) The improvement of air quality can include measures, such as the promotion of active travel and public transport, higher parking charges for the most polluting vehicles, energy efficiency schemes to help reduce NOx from boilers, electric charging points along Regents Canal, idling action, and low and zero emission networks

20) The Committee were informed that the Healthy Streets initiative is the Mayor's framework of 10 indicators for healthy streets, including local borough streets. The approach aims to encourage everyone to walk, cycle and use public transport, reduce road danger and tackle air quality and noise, reduce car dependency, improve the environment, and deliver an accessible and inclusive transport system

21) Local programmes to mitigate poor air quality also include AIRTEXT, which forecasts high pollution, in order to enable subscribers to take action to avoid exposure or reduce the impact of exposure, In addition, there are GP and hospital services available for early diagnosis, and better management of Chronic Obstructive Pulmonary Disease (COPD), and the Whittington Health also has an asthma kite mark scheme in schools, which supports better management of the condition. Air Quality learning in schools, forms part of KS2 learning, and there are also planning policies in place to limit air pollution from developments

22) The Committee noted that there are barriers and challenges to further improvements in air pollution. These include air pollution sources outside the Council's control, such as transboundary, international, national, and regional sources through traffic, and diesel sources, such as freight, buses and taxis. Air Quality is a cross cutting issue, which impacts on multiple and diverse policy issues across the Council. There is a need to improve and target public awareness and change attitudes, and in addition, more funding and resources need to be provided, in order to develop new initiatives and apply enforcement effectively

23) The Committee at its meeting on 12 October 2017, received evidence from Ian Mudway of Kings College, in relation to the health implications of poor air quality

24) The Committee were informed that, in addition to air pollution caused by diesel emissions, car pollutants also included things like brake and tyre wear, resuspension of road dust, particulate matter, oxides of nitrogen, carbon monoxide, ultrafine particles, black carbon soot. metal and such other pollutants

25) There is now a significant evidence base, in order to identify the effects on health of pollution, and that it affects the quality of life, and increases the vulnerability of members of the population to illness and premature death

26) Pollution can cause inflammation, impaired lung function, injury/remodelling, (part of the healing process), impaired microbial defences, blood viscosity, and promotes atherosclerosis, impaired vascular function, ischaemia and arrhythmias

27) The recent results of a pollution survey have shown that air pollution PM2.5, results in 29000 premature deaths each year, across the UK, 4300 of these in Greater London, with significant associated costs. The effects of air pollution of young children, whose lungs are developing, and are smaller to be able to cope with the effects of pollution, can cause problems later in life with illness and premature death

28) There is evidence that improving air quality delivers measurable health benefits, and that health benefits would increase if people avoided busy roads, and the pollution that they contain. Drivers needed to be made aware that when sitting in traffic jams in their cars, they are inhaling a combination of toxic pollutants

29) The Committee also heard evidence that wood burning stoves are also a contributor to air pollution and we felt that residents should be educated about the dangers of wood burning stoves in terms of air quality, and that they should be encouraged to use DEFRA approved wood burning stoves

30) The Committee also noted that there needed to be a behaviour shift, and that people needed to be encouraged to walk and to cycle more. There were many unnecessary journeys made by car, and that journeys of under 1km by car should be discouraged. Some Local Authorities restrict town car parking spaces, and this encourages people to take public transport, walk or cycle

31) The Committee were also informed, that because the effects of pollution were more detrimental to young people, and whilst schools could not change where they were located, they could be encouraged to take additional measures, such as the installation of air filters, which would improve air quality, and also to take other appropriate measures

32) The Committee noted evidence that it was felt that people should be encouraged to change behaviour, however this is often not always particularly effective, especially in the short term, and that often it was more effective to impose regulation. However, the Committee were pleased to note that air quality has slowly started to improve in London, as a result of measures taken over a number of years to reduce pollution

33) Reference was also made to the air quality on the London Underground and that discussion were taking place with TfL, as to a possible investigation into the air quality on the London Underground

34) The Committee at its meeting on 14 December 2017 considered evidence from TfL, in relation to measures that were being taken/proposed by the Mayor of London

35) The Mayor's London's strategy sets out a strategy for London Transport until 2041, and consultation has already taken place, with the final strategy to be published in early 2018

36) There are 3 key themes, Healthy Streets and Healthy People, A good Public Transport experience, and New Homes and New Jobs

37) By 2041 the aim if for 80% of Londoners trips to be on foot, by cycle or by using London Transport

38) The London Plan consultation opened in November 2017, and closes in March 2018. This considers the relationship between land use, planning and transport and is critical to sustainability and improving air quality. The principles of good growth include good access to public transport, high density mixed use developments, people choosing to walk or cycle, car free and car light places, which is inclusive of accessible design, carbon free travel and efficient freight

39) Air Pollution is one of the most significant challenges facing London, affecting the health of all Londoners. There are locations in every London Borough that exceed the limits for N02. The health impacts associated with air pollution fall disproportionately on the most vulnerable communities, affecting the poorest and those from ethnic minorities more acutely

40) The Mayor's clean action plan includes – emission surcharge (T charge), in Central London from October 2017, introducing the ultra- low emission zone sooner and expanding it, cleaner buses, national diesel scrappage scheme, and encouraging the uptake of ultra- low emission vehicles

41) The T charge was launched in October 2017, with the same boundary and times as the congestion charge, and has similar exemptions to the congestion charge. There is a £10 surcharge on top of the congestion charge, and the charge will apply to all Euro 4 vehicles, (broadly equivalent to vehicles from 2005 and older), and is an important stepping stone towards the ultra- low emission zone

42) There has been a 30 per cent fall in the number of non- compliant vehicles in the congestion charging zone since the announcement, and there are around 1000 fewer vehicles per day, with around 2000 vehicles per day paying the charge.

43) The impact of the proposals will be that in 2020 there will be a 21% reduction in road transport NOx emissions in inner London, and 19% in outer London, London wide a total of 19%

44) By 2021, the combined impact of the proposals will mean there would be a 31% reduction in road transport emissions in inner London, 28% in outer London and 28% London wide. By 2025, the combined impact of the proposals is forecast to be a 24% reduction in road transport NOx in inner London, 21% in outer London and 21% London wide. All reductions are compared to baseline i.e. Central London Ultra Low Emission Zone (ULEZ) only

45) The changes in concentrations by 2021 will result generally in a 5-10% reduction in concentration levels at roadside, but up to 20% in some locations and a 64% reduction in road km exceeding NO2 limit values

46) The impact on population exposure will mean over 100,000 fewer people living in areas exceeding NO2 limits London wide in 2021, a 77% reduction London wide, 96% in outer London, and 71% fewer schools in areas exceeding legal limits in 2021. Other measures to be introduced include single decker buses in central London, having to meet minimum Euro V1 standard in 2019, and be all electric or hydrogen in 2020. Double decker buses in Central London will also need to be Euro V1 hybrids by 2019, and there will be 12 Low Emission bus zones implemented, tacking the worst pollution hotspots by concentrating cleaner buses on the dirtiest streets

47) Only hybrid or zero emission double deck buses will be procured from 2018, and the Euro V refit programme will be expanded from over 800 to 4000 buses, to achieve a Euro V1 standard fleet by 2020

48) The Committee noted that TfL are using licensing measures to reduce emissions from the taxi and private hire fleets, and to increase the number of vehicles operating with zero emissions. Both fleets will be entirely Zero Emission Capable (ZEC) by 2033

49) The Low Emission Zone delivery plan, a go ultra-low city scheme, local environment networks, neighbourhoods of the future, Lo City, car clubs, zero emission capable taxis, increasing rail capacity and improving quality, and more walking and cycling will all contribute to reducing air pollution

50) Bold action will however be required to achieve 100% zero emission road transport, and for the whole of the London fleet to be zero emission at tailpipe by 2050. Ultra Low Emission Vehicles (ULEV's), need to represent 100% of vehicle sales by 2040 at the latest

51) The ULEZ starts in April 2019, expanding into Inner London, and increases the charges in relation to emission standards. The discounts and exemptions are very limited and in line with the Low Emission Zone, and blue badge holders do not get a 100% discount, unlike the T-charge. There is a 'sunset period', a time limited exemption for residents, and also for the disabled and disabled passenger tax class vehicles

52) A London wide zero emission zone by 2050, would likely be required to drive full conversion and a slower transition of heavy vehicles, as zero emission solutions are developed, and this may require a significant intervention to achieve full transition. This will mean an expansion up to the North and South Circular roads

53) The Committee were informed that the next steps were the statutory consultation on the proposal to expand the ULEZ. The Mayoral decision will take place in Spring 2018, and then further work on developing what comes after the ULEZ, e.g. zero emission zones will be considered

54) The Committee supported the Mayor's Clean Air strategy in order to improve air quality and to reduce traffic, and urges the Mayor to support additional funding for schemes to improve air quality in Islington

55) The Committee also received evidence in relation to the work taking place in Islington, in order to improve air quality. It was stated that the Council faced challenges, including a reduction in TfL's funding, and it was also noted that the LIP funding, which is allocated to the borough. did not favour Islington, as it is a small borough, and has less roads than other boroughs. However, the Council were endeavouring to raise the issue of funding with TfL

56) The Committee were of the view however, that further measures are needed to reduce air pollution, and the Council need to work with other London Boroughs, TfL and the GLA to improve air quality. There is also a need to improve how different Council departments and different teams work together to improve air quality and make necessary recommendations to the Council. It would be beneficial, as the work on air quality is currently fragmented across departments, for an officer Forum to be established to more fully develop and co-ordinate the work on air quality, and for the establishment of new strategies

57) The Committee noted that Islington's core strategy is to reduce health inequalities, encourage active travel, and have car free developments and this strategy is currently under review. In addition, the Street Book supplementary planning document is shaping the public realm, in order to promote active travel

58) Islington's transport strategy is to reduce negative transport related health impacts, particularly noise, NOx and particulate emissions. In addition, the Council are attempting to reduce the number of road casualties, reduce the proportion of trips by car and encourage active travel, by creating a walking and cycling friendly environment. The Committee noted that the transport strategy is currently under review

59) The Committee also noted that the Council's response to the Mayor's Transport strategy is to support the objective to have a zero carbon London by 2050, to request an interim target of diesel free London by 2025, faster transition to cleaner taxis, and the electrification of all rail lines in London

60) The Committee heard evidence that higher charges for polluting diesel vehicles has been introduced by the borough, however they feel that there should be further 'staged' increases for higher polluting diesel vehicles, in order to improve air quality

61) In addition, the Council support the Mayor's Transport strategy objective to have a Vision Zero to eliminate road traffic casualties by 2031, to request a London wide 20mph speed limit as standard, and highlight the need for resources to achieve this

62) The Council also support the reduction of travel volumes, by encouraging the Healthy Streets approach, and considering a cellular system. In terms of delivery, the Council to date have delivered air quality improvements, by instituting emissions based parking charges for residents, emission based pay and display parking charges, and by installing electric charging points. In addition, there is a 20mph speed limit on all borough roads, cycle training and driver training for fleet and HGV

63) The Committee were pleased to note that there has been a reduction in traffic growth, despite the population of the borough increasing, due to the Council's car free policy, car clubs, school travel plans and other initiatives

64) The Council has also delivered, or are in the process of delivering, a number of initiatives, including on air quality with the Zero Emissions Network (ZEN) and Low Emissions Neighbourhood (LEN), the Archway and City Fringe scheme, sensitive streets, and electric vehicle charging points. With regard to safer streets, the Council has improved cycle infrastructure, gyratory removals, cycle training, road safety education programmes/school travel plans, traffic management/road safety programmes (LIP), and Healthy Streets. There is also a quiet way between Farringdon Road and Finsbury Park, 12 play streets and cycle parking and secure bike hangers

65) The next steps for the Council will be to institute what is likely to be a new transport strategy for Islington, following on from the final Mayor's Transport strategy, which will include zero carbon/air quality targets, vision zero accident reduction, and a healthy streets approach, active travel and further reductions in traffic volumes. In addition, in relation to air quality, there will be a further electric vehicle charging points 'roll out', car clubs electrification, and increased take up, and reduction of emissions from Islington Council's vehicle fleet

66) The Committee are of the view that the 'roll out' of electric charging point should continue as speedily as possible, and also the policy of increased parking charges for diesel vehicles and that there should be a staged introduction of higher charges for the higher polluting vehicles

67) Major schemes are taking place at the moment to improve air quality and the environment in the borough and these include Clerkenwell Green, Old Street roundabout, Highbury Corner, Kings Cross gyratory, Finsbury Park/Nags Head, Holloway Road, and a cycle network including Old Street and Clerkenwell Road

68) The Committee were informed that physical exercise, even in areas with poor air quality is beneficial, and that being in a car, results in high pollution rates for drivers and passengers, especially where there is heavy traffic congestion. The Committee were of the view that a communication strategy should be put in place to better inform residents of the implications of poor air quality. The new strategy should include information on the dangers of air pollution, whilst sitting in heavy traffic, and promote the benefits of walking and cycling and the use of public transport

69) In addition, it should include details of applications such as AIRTEXT, LONDON AIR AND CITY TEXT, in order that residents with respiratory conditions can get information on when there are poor air quality days, and also to inform drivers that they should restrict their use/desist from driving on poor air quality days

70) The Committee were concerned at the lack of parking enforcement around schools, especially during 'school runs', that contribute to poor air quality, with engines often left idling, and that the Council did not have at present sufficient powers to prevent drivers from leaving their engines idling. The Committee felt that there should be a policy of zero tolerance, rather than the present policy of a 10 minute 'dropping off' period for parents of children, except for disabled/ blue badge holders

71) However, the Committee were informed that in April 2009, the Council took a decision, under the Road Traffic Regulations 2002, to enforce statutory engine idling offences in all areas of the borough. To date though, there have been no fixed penalty notices issued for idling. Since July 2014, Islington has carried out targeted enforcement action to tackle engine idling hotspots in the borough, however the existing legislation makes it very difficult to issue a fixed penalty notice for statutory idling. There are currently over 30 officers currently authorised to enforce statutory engine idling offences. However, of these there are 15 compliance officers, who attend reports of idling, and deal with idling hot spots around the borough, as part of their day to day duties

72) The law requires authorised officers to give the opportunity to drivers of idling vehicles to turn off their engines before serving a Fixed Penalty Notice. There have been no Fixed Penalty Notices issued to date in the borough, as typically drivers have turned off their engines when requested to, or have driven away. In addition, no persistent offenders have been identified

73) The Council does not receive many idling vehicle complaints, but where they are received the Council does respond. As stated earlier, authorised officers work both day and night, and can respond to a variety of environmental issues, including idling engines. The Council also undertake targeted campaigns and proactive enforcement during events (such as Arsenal home matches, or at known hotspots, including bus stands and taxi ranks, or known minicab locations), as part of awareness raising campaigns, such as anti-idling outside schools

74) Islington is working with 14 other boroughs, as part of a co-ordinated anti-idling campaign, funded by the Mayor of London and the boroughs. A combination of community volunteers and Council staff take part in idling engine days, asking drivers to switch off, explain the reasons why, and get a commitment from the driver not to leave their engine running when parked in the future. Businesses and other relevant groups are being asked to support the campaign, and areas targeted are selected by the Council e.g. outside schools, construction sites, bus stops etc.

75) The Committee were of the view however, that the current policy around schools is hampered by the general provisions in the Traffic Management Orders, and that this states ‘that a vehicle may be allowed to wait if the vehicle is waiting for a period not exceeding two minutes, or such longer period as a civil enforcement officer may approve this, to enable a person to board or alight from the vehicle, or load thereon or unload therefrom their personal luggage’

76) The Committee noted that previous experience suggests that Adjudicators have in the past found in favour of drivers on appeal, where they give credence to the idea that drivers have the right to leave vehicles unattended, for a ‘reasonable’ period of time, to escort children to and from school

77) The Committee are of the view however, that this issue needs to be addressed, and that there should be zero tolerance of parents being allowed to drop off/ pick up children from school, and also on idling and that representations, where necessary, should be made to the Government in this regard. Stronger enforcement should also take place by the Council, where this is currently allowable. These measures should be included in a new Clean Air Act, and in addition the provision of Public Space Protection Orders should be investigated, as well as a scrappage scheme to support people to dispose of diesel vehicles

78) . There should also be measures introduced to close roads around schools at appropriate times, and education programme for parents and the abandonment of the current 10 minutes waiting time policy that the Council currently operates. In addition, there should be measurement of air quality around school premises

79) The Committee feel strongly that, as long term exposure to poor air quality, from activities such as idling vehicles, shortens the life of everyone who lives, works and studies in Islington, and action to tackle the source of air pollution is key. Vehicles parked with their engine idling are an unnecessary source of local air pollution. Whilst various methods are employed in Islington, in order to get drivers to switch engines off, there is a real need for long-term change in behaviour, so it does not happen in the first place. The Council has been successful in reducing the idling of vehicles in Islington, through enforcement teams and public information campaigns. However, the Committee reiterate their view that the Government should be requested to introduce more effective legislation in this regard

80) The Committee are also of the view that with regard to ‘through traffic’, an investigation should take place as to a borough wide zoning/cellular policy to reduce traffic volumes by reducing ‘rat runs’

81) The Committee heard evidence from Client Earth, a campaigning organisation for the improvement of Air Quality, and who had initiated successful legal judgements to enforce the Government to meet Air Quality standards. It was noted that at present, the Government were bound by European Commission legal requirements on clean air, however Brexit may mean a relaxation of regulation by the Government, and this would need to be monitored. Client Earth expressed the view that this was the reason that they felt that a Clean Air Act should be introduced, in order to ensure satisfactory legal measures were in place, and to deal with the improvement of air quality

82) Client Earth supported the Mayor of London’s clean air strategy, and reiterated that Client Earth were of the view that a new Clean Air Act should be introduced to effectively

deal with the problems caused by poor air quality. Client Earth stated that they were in discussions with the Mayor on this

83) Client Earth expressed the view that the Government often delegated responsibility for ensuring air quality measures were undertaken to Local Authorities, who often did not have the relevant powers or funding to be able to implement the measures that they wished to. Whilst the Mayor and London Boroughs could implement measures, there needed to be action from central Government action as well, if air pollution is to be tackled effectively

84) Client Earth stated the diesel emissions were the biggest contributor of pollution in London, and that this is now more of a problem, given the encouragement by Government to purchase diesel vehicles in the past

85) It was felt that people needed to be encouraged to take public transport, and to walk or cycle to reduce emissions, and it was stated that there is a particular problem with particulates and the levels were above the limits recommended by the World Health Organisation. Client Earth stated that they would like to see ULEV'S extended across all London. In addition, they supported road charging, in order to address the issue of the large number of vehicles using London's road network

86) The Committee also received evidence in relation to measures taking place in Islington schools, in order to assist in improving air quality

87) The Committee were informed that currently 4 Islington Primary schools have cleaner air quality in their curriculum, and are also studying citizen science. Air Quality monitoring is taking place in 4 schools, and pupils use hand held monitors to measure this and map pollution around their schools. Once these results have been analysed, the Committee were of the view that any measures that need to be taken should be taken, and the possibility of sourcing from the TfL local safety schemes budget should also be looked at

88) In addition, the Committee were informed that the Cleaner Air for Finsbury Park and Manor House project involves joint working with Hackney and Haringey, and includes 3 Islington schools with air quality lessons, workshops and citizen science. The 'Save the Walk There', is a production of a 5 and 10 minutes walking map, and there is also involvement in the production of a film on air quality

89) Car Free Day 2016 took place in 3 schools with lung function tests, air quality games, a pedal powered cinema showing a short film on sustainable travel, and a get to know your bike session

90) Current projects include a School TV Screen Project, running from March 2017- March 2018 in 10 schools, workshops with children producing low pollution walking routes, air quality monitoring outside schools, a TV screen located in the playground, drop off/pick up point, information on air quality etc.

91) There is also an anti-idling campaign spreading the message of air pollution, particularly the impacts of keeping a car engine running, and Idling Action London, is an initiative of 15 boroughs. In addition, there is an air quality audit, as part of the Mayor of London's Air Quality Audit Programme, to look at schools in polluted areas, to see how they can reduce pollution, and pupil exposure to it. Prior Weston launched the project with the Mayor, and the air quality audit has now been completed with the results due in March.

Further work proposed includes air quality monitoring outside every school, a road closure pilot outside schools, and implementation of audit recommendations, where possible. Monitoring outside schools will include diffusion tubes, currently at 11 schools, and the diffusion tubes measure nitrogen dioxide NO2, one of the main pollutants of concern, and these are to be kept in place for a month, before the tubes are changed, and the results analysed. There are also more advanced sensors in some locations, to measure particulate matter

92) The Committee were informed that with regard to road closures outside schools, there is a pilot scheme closing roads, during drop off and pick up times, and the next steps are to consult and engage with users, installation, monitoring of impact and adaptations and expansion of the scheme

93) The Committee are of the view that the policy of measuring air quality outside schools should continue and that the results should be used to leverage any possible funding from TfL to reduce the effects of air pollution, which could include physical improvements to schools in order to improve air quality, particularly PM2.5 particulates

94) The Committee also received evidence from Islington CCG, in respect of services available, and issues related to poor air quality. Evidence on prevalence and local health service usage, in relation to respiratory conditions, and in relation to COPD for 2016/17, shows that the reported prevalence of COPD is better than the UK average, and there are lower levels of asthma mortality. However, it should be noted that admissions for COPD and asthma are increasing

95) There are no respiratory services directly commissioned to target the effect of air pollution, however there are Locally Commissioned services (LCS) in primary care, for the early diagnosis for COPD/Disease management

96) In addition, there are locally commissioned vaccination and immunisation programme, e.g. flu jabs for all patients over 65, and at risk younger patients, community respiratory service etc. There is also an acute exacerbated service and home oxygen service

97) In relation to asthma, there is an asthma nurse, working together with local primary and secondary schools, to provide guidance and training on asthma and to support schools to achieve a 'national standard kite mark, increasing awareness, understanding triggers, and reducing stigma. There are also self - management programmes, with pulmonary rehabilitation, long term exercise programmes, and other programmes, together with an integrated Improving Access to Psychological Therapies (IAPT) service for COPD and diabetes

98) There are respiratory interventions and services planned, which include Asthma LCS Primary care, which is upskilling primary care staff, particularly around paediatric asthma, extended consultations, and written care plans with potential for 50% reduction in hospital admissions

99) The Committee noted that whilst air pollution does not directly cause COPD or asthma, it does have a significant impact on the experience of living with respiratory disease. The reported evidence of clinician's state that winter is no longer the main source of increased activity in secondary care, and that summer attendances in secondary care have increased

100) The key messages of poor air quality are the impact on patients and services, the poor quality of life, and the ability to self-manage and the disempowering effect of exacerbations. These can lead to need for support from services and also support from the voluntary sector

101) The Committee also considered evidence that wood burning stoves and open fires also contribution to air pollution and that residents should be informed of the dangers of wood burning stoves and open fires, and the impact that these can have on air quality

102) The Committee also considered evidence in relation to the future Whittington Estates strategy that had a focus on improved energy efficiency, and the Committee were of the view that in future, Islington CCG and NHS Trusts, should ensure that energy efficiency is considered, when looking at future strategies and policies

103) The Committee are also of the view that the Health and Wellbeing Board should incorporate air quality considerations into its future policies, given the impact of poor air quality on health, and the costs of provision of services to deal with combating respiratory diseases

CONCLUSION

The Committee have taken evidence from a wide variety of sources during the review, and we wish to thank all those outside organisations, partners and Council officers who gave evidence.

The effects of poor air quality, has implications for all of our residents and particularly for the young, whose lungs are still developing and the elderly and those suffering from respiratory diseases.

The Committee have made a series of recommendations, that we feel, both in the short and the long term, in combination with the proposals of TfL, will make Islington and the rest of London a cleaner and healthier place to live and work.

The Government also has a role to play in ensuring Local Authorities have the necessary legislation in place to ensure effective enforcement to improve air quality and we have also made recommendations in this regard

MEMBERSHIP OF THE HEALTH AND CARE SCRUTINY COMMITTEE – 2017/18

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Clare Jeapes
Satnam Gill
Angela Picknell

Janna Witt/Philip Watson – Islington Healthwatch

Acknowledgements: The Committee would like to thank all the witnesses who gave evidence to the review.

Officer Support:
Peter Moore – Democratic Services
Lead officer/s- Julie Billett/Ian Sandford – Public Health and Paul Clift – Environment and Regeneration

APPENDIX A

SCRUTINY INITIATION DOCUMENT

How the review will be conducted:

Scope: The review will look at the issue of poor air quality and its impact on health and wellbeing

Types of evidence to be assessed:

- National and local data on
    a. Scale and location of poor air quality in Islington, including information on the different pollutants, severity etc., as well as the limitations of what is known.
    b. Health and wellbeing impacts of poor air quality, including understanding evidence of causation and association.
    c. Overview of local programmes and interventions to improve air quality in Islington, and information on their impact and effectiveness.
    d. Overview of the health co-benefits of improving air quality, including increased physical activity, reduced prevalence of obesity, reduced social isolation, school absences etc.
    e. Progress on the recommendations of the Air Quality Review scrutiny carried out by the Environment and Regeneration Scrutiny Committee in 2013

- Witness evidence from a range of relevant individuals and organisations

    a. LBI
        i. Public Health (health impacts, effective interventions, JSNA/HWB)
        ii. Clinical Commissioning Managers (interventions, policy initiatives, targeted groups)
        iii. Environmental Health (trends, apportionment, air quality projects, policy)
        iv. Transport Planning (local implementation plan, traffic schemes e.g. Archway, modal shift)
        v. Education (absenteeism due to poor air quality – HeadTeachers; school awareness campaigns incl. school gate engine idling – LBI School Travel Plan Officer/Public Protection
        vi. airTEXT
    b. External partners - from
        i. King's College London (Ian Mudway/Frank Kelly – also from COMEAP)
        ii. Imperial College London (Audrey de Nazelle – modal shift & health)
        iii. Representatives from Local GP consortia or Health/MedicalCentres
        iv. Transport for London (Public Health – Lucy Saunders)
        v. Whittington Health (CV & respiratory health overview, ie, Asthma kite mark in schools)
        vi. Breathe Easy Groups
        vii. Business engagement (ZEN; CRP)
        viii. Campaigning organisations – Simon Birkett (Campaign for Clean Air in London); Doctors against Diesel; ClientEarth; Friends of the Earth (Jenny Bates/Quentin Given); Greenpeace (school campaign); Better Archway Forum; Barbecue Action Group

c. Residents –from
    i. Residents – open call for those interested to attend and give evidence
    ii. Residents identified via members' casework
    iii. Islington HealthWatch

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Agenda Item 6

ISLINGTON

Resources Department
Town Hall, Upper Street
London N1 2UD

Report of: **Chair of Housing Scrutiny Committee**

Meeting of	**Date**	**Ward(s)**
Executive	19 April 2018	All

Delete as appropriate		Non-exempt

Subject: **The Effectiveness of Housing Service Communications – Findings of the Housing Scrutiny Committee**

1. Synopsis

1.1 This report requests that the Executive receive the recommendations of the Housing Scrutiny Committee following the completion of its review of The Effectiveness of Housing Service Communications. A response to the recommendations set out in the report will be considered at a future meeting of the Executive.

2. Recommendations

2.1 That the report of the Housing Scrutiny Committee be received.

2.2 That the Executive Member's response be reported to a future meeting of the Executive, including having due regard to any relevant implications of the Housing Scrutiny Committee's recommendations.

3. Background

3.1 The review commenced in September 2017. The overall aim of the review was to review the effectiveness of Housing Service communications. The objectives of the review included a review of verbal, online and written communications channels; an assessment of if internal processes and staff training are sufficient; a review of how Housing Services respond to and learn from feedback and complaints; and an evaluation of the take-up of new electronic communication methods. Evidence was received from officers at committee meetings, and focus groups were held with residents and front-line staff. The review concluded in March 2018.

4. Implications

4.1 Financial Implications

The proposals in the report need to be costed before a response is made by the Executive.

4.2 Legal Implications

Relevant legal implications will be considered as part of the response to the review.

4.3 Environmental Implications

There are no environmental implications at this stage. Any environmental implications will be identified as part of the Executive Member response.

4.4 Resident Impact Assessment

The council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The council must have due regard to the need to tackle prejudice and promote understanding.

The Committee has had regard to any equalities implications and resident impacts identified by witnesses during the course of the review. Details of any such implications are set out in the appended report. A Resident Impact Assessment has not been completed as the Executive is only asked to receive the report at this stage. The impact on residents will need to be fully considered as part of the Executive Member response to the review, at which point a Resident Impact Assessment will be completed if required.

5. Conclusion and reasons for recommendations

5.1 The Housing Scrutiny Committee has made 19 recommendations in response to the evidence received. These relate to the quality of communications, communicating the right information to residents, supporting staff and joined up working, and other aspects of housing service communications. It is hoped that these recommendations will assist housing services in providing good services on a tight budget.

5.2 The Committee would like to thank the officers who provided evidence to the review. The officers interviewed said that they were motivated to provide a good service to residents and were frustrated when things did not go well. Although the review partially focused on service failures and complaints, the Committee also suggested that services should promote the positive work they are doing on behalf of residents; when the council provides a good service this should be recognised and communicated. The Committee would also like to thank the residents who contributed to the review by providing relevant casework and their views on housing services. The Executive is asked to endorse the Committee's recommendations.

Appendices:

- The Effectiveness of Housing Service Communications – Report of the Housing Scrutiny Committee

Background papers:

- None.

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E-mail: jonathan.moore@islington.gov.uk

The Effectiveness of Housing Service Communications

REPORT OF THE HOUSING SCRUTINY COMMITTEE

London Borough of Islington
March 2018

EXECUTIVE SUMMARY

The Effectiveness of Housing Service Communications

Aim:

To review the effectiveness of Housing Service communications

Evidence:

The Committee commenced the review in September 2017. Evidence was received from the following sources:

Evidence from council officers:

- Lynn Stratton, Deputy Head of Communication and Change
- Lorenzo Heanue, Group Leader – Productivity and Compliance
- Matt West, Head of Repairs and Maintenance
- Jo Murphy, Service Director – Homes and Communities
- Christine Short, Head of Capital Programming

Evidence from Partner organisations:

- Tom Irvine, Interim Managing Director, Partners for Improvement in Islington

Focus Groups:

- Focus group with local residents
- Focus group with council staff

Documentary Evidence:

- Report: Background information on Housing Communications
- Infographic: Overview of communications channels and audiences for housing
- Table of main housing communications channels
- Website usage statistics
- Findings of the Service Review Group: Learning from and responding to complaints
- Islington Council Brand Handbook
- Report: Online Housing Services (repairs reporting system)

Main Findings:

The Committee welcomed the communications guidance produced by the corporate Communications team, as well as the range of training courses available. However, the Committee noted that housing service communications did not always meet the council's agreed standards.

The Committee considered complaints management processes. The majority of housing complaints were related to repairs and issues not being resolved to the satisfaction of residents. The Committee considers that more robust quality monitoring processes are required to achieve consistently good quality and joined up communication with residents across housing services. It is suggested that greater management involvement in reviewing communications, complaint responses and customer journeys would be beneficial.

The Committee suggests that a regularly updated 'Frequently Asked Questions' section on the council's website would be beneficial to officers, residents, and councillors; this would help to resolve the most common enquiries and assist with directing queries to relevant services.

Residents identified that they would like to receive feedback on the issues they reported, such as estate environmental issues and communal repairs. Residents also expressed frustration with a lack of progress on delayed and complex repairs. It was acknowledged that some processes are lengthy and involve several different teams, however legitimate delays and processes may appear as inaction to residents if they are not provided with regular updates.

Residents suggested that they should be allocated a named case officer when raising repairs, complaints, nuisances, and other matters. It was commented that residents preferred to speak to the same officer and build a relationship with them, rather than deal with a different officer each time.

The Committee considered the importance of joined up working, and supporting staff to communicate with residents effectively. The Committee was impressed with the service ambassador scheme, noting that it had the potential to significantly develop communication between services and improve joined up working at an operational level. The Committee would support the scheme expanding to other areas of the housing service and key partner services such as Adult Social Care.

The Committee was impressed with the online repairs reporting system, and would support further promotion of the system given its effectiveness and potential for financial savings. The Committee also considered that there is scope for further improvements. The Committee would support the development of further online housing services, however, it is also acknowledged that some housing services are not appropriate to migrate entirely online.

The Committee welcomes the transformation work in the Homes and Communities service. The redesigned service will have a stronger emphasis on early intervention, empowerment, resilience and prevention. The Committee would welcome an update after the service redesign is fully implemented.

Conclusions:

The Committee has made 19 recommendations in response to the evidence received. These relate to the quality of communications, communicating the right information to residents, supporting staff and joined up working, and other aspects of housing service communications. It is hoped that these recommendations will assist housing services in providing good services on a tight budget.

The Committee recognises the importance of Housing Communications and may wish to continue to review communications-related matters in future.

The Committee would like to thank the officers who provided evidence to the review. The officers interviewed said that they were motivated to provide a good service to residents and were frustrated when things did not go well. Although the review has partially focused on service failures and complaints, the Committee also suggests that services should promote the positive work they are doing on behalf of residents; when the council provides a good service this should be recognised and communicated. The Committee would also like to thank the residents who contributed to the review by providing relevant casework and their views on housing services. The Executive is asked to endorse the Committee's recommendations.

Recommendations:

Quality of Communications

1. The council should agree a Code of Communications among the council's Housing services, Partners for Improvement in Islington, and contractors. This should set out agreed principles for effective communication, and should seek to ensure consistent quality in communication with residents. The Code should cover issues such as responsiveness, accessibility, tone of voice, joined up working and record keeping. Tenant Management Organisations and Housing Associations should be encouraged to adopt a similar code, if they have not done so already.

2. Processes for Housing management to review the quality of staff communications, complaint responses and customer journeys should be enhanced. Communications and complaints should be reviewed on a regular basis, with clear procedures for how quality will be monitored, how these can be escalated for management review, and how this will inform officer training and development and internal processes.

3. All front-facing housing staff should have an objective in their appraisal related to providing high quality customer services and communication. Progress against this objective should be regularly reviewed in one-to-one meetings with management.

Communicating the right information to residents

4. Digital notice boards on estates should be developed further to include more localised content. It is suggested that residents' associations and other groups be consulted on the information these notice boards should display.

5. A 'Frequently Asked Questions' section should be added to the Housing section of the council's website. This would help to signpost residents and officers to relevant information and answer the most common queries. It is thought that this would free-up staff time for other issues.

6. Housing services should seek to provide better feedback to residents on issues they report, including estate environmental issues and communal repairs. This could include more direct communication with residents, or "you said, we did" style communications.

7. Housing services should keep residents informed of progress with delayed and complex repairs, and explain any relevant processes and the reasons for delays. The Repairs service should schedule reminders on case files for officers to provide regular updates to residents with unresolved repairs.

8. Housing services should consider the feasibility of allocating named case officers to deal with complex issues. This would ensure consistency in communication and reassure residents that their issue is being dealt with. These officers should be empowered to liaise with other services to secure the best outcome for residents.

9. It is recommended that a booklet is produced after each capital works scheme detailing the works carried out with before and after images and the cost of the scheme. This booklet should be provided to both tenants and leaseholders, and should be available in a range of formats.

10. The mechanism for officers to report out of date information on the council's website should be promoted further in internal communications.

Supporting staff and joined up working

11. The council should use internal communications to raise awareness of communications guidance and relevant training courses. Service managers should encourage their staff to make use of the guidance and training available.

12. The Housing Service Ambassadors should have a key role in encouraging joined up working. It is recommended that the Service Ambassadors scheme be extended to include representatives of all Housing services, and other key services that work in partnership with Housing, such as Adult Social Care.

13. To encourage joined-up working and improve services for residents, staff workshops should be held which focus on how best to resolve specific and complex issues. These workshops should include representation from all relevant housing services and partners, and should consider how internal processes and working arrangements can be improved to ensure the best possible outcome for residents. This would assist in particularly complex matters such as damp and condensation, the repairs access procedure, anti-social behaviour, and other matters that require a coordinated response.

14. Housing services should review their use of CRM, the council's customer record management system. Wider use of the system would assist officers in communicating with residents and assist officers in providing joined up services. It is suggested that interaction with other key systems, such as the repairs management system, would be beneficial.

15. Caretakers and other front line staff should be empowered to report and follow up issues on behalf of residents.

Developing online services

16. The online repairs reporting system should be promoted further to encourage greater usage. It is suggested that the system could be developed further by incorporating the reporting of communal repairs.

Other service developments

17. The Committee welcomes that the Housing Operations service has been redesigned as a Homes and Communities service. The Committee requests that an update be submitted to the Committee in 12 months' time on progress in transforming the service.

18. Better use should be made of mailings to residents, such as the annual rent statement. For example, the reverse side of letters could include information and advice on property maintenance, tenancy management, or promotion of early intervention services. The council should also review the key contact information circulated with the rent statement, as residents commented that they were unsure which teams to contact about different issues.

19. The council should produce a structure chart for housing services detailing key officers and the responsibilities of different teams. This would assist officers and councillors in directing their queries.

MEMBERSHIP OF THE HOUSING SCRUTINY COMMITTEE – 2017/18

Councillors:
Councillor Mick O'Sullivan (Chair)
Councillor Marian Spall (Vice-Chair)
Councillor Alex Diner
Councillor Gary Doolan
Councillor Aysegul Erdogan
Councillor Troy Gallagher
Councillor Osh Gantly
Councillor Mouna Hamitouche MBE

Resident Observers:
Rose Marie McDonald
Dean Donaghey

Substitutes:
Councillor Satnam Gill OBE
Councillor Gary Heather
Councillor Jenny Kay
Councillor Una O'Halloran
Councillor Olly Parker
Councillor Angela Picknell
Councillor Dave Poyser
Councillor Nurullah Turan

Acknowledgements:
The Committee would like to thank all the witnesses who gave evidence to the review.

Officer Support:
Stephen Nash – New Homes and Development Manager.
Jonathan Moore – Senior Democratic Services Officer

1. Introduction

1.1 The review commenced in September 2017. The overall aim of the review the effectiveness of Housing Service communications.

The Committee also agreed the following objectives:

- To review the effectiveness of verbal, online and written communication channels; with residents, tenant and resident associations, and internally.
- To assess if internal processes and staff training are sufficient to achieve effective communication with residents.
- To review how Housing Services respond to and learn from feedback and complaints.
- To evaluate the take-up of new electronic communication methods used by the Council's Housing Services, if these have been successfully implemented, and plans for any further 'channel shift'.
- To review how the council can be assured that the council's contractors and their subcontractors are communicating with residents effectively.
- To identify areas of good practice and how housing communications could be improved.

1.2 In carrying out the review the Committee met with council officers from housing services and the corporate communications team, as well as front line staff and residents in order to get a balanced view.

Local context

1.3 Communications channels used by the council's housing services include printed publications such as the quarterly IslingtonLife magazine, the council's website and social media, targeted mailings, consultations, community events, estate notice boards, telephone communication, email correspondence and face to face communication with council officers. There are also internal communications channels for council staff and members, including the intranet and weekly and monthly staff email bulletins.

1.4 Islington's Corporate Plan 2015-19 identifies 'providing residents with good services on a tight budget' as a priority. The Corporate Plan also sets out the council's underpinning principles, which include providing people-centred services, rather than systems or process led approaches; and 'making every contact count' to avoid people having to negotiate their way through complex systems.

2. Findings

Quality of Communications

2.1 The Committee reviewed the guidance available to staff on how to communicate effectively with residents. Evidence from the corporate Communications team set out the principles that all services should adhere to in their communications: written communication should be simple, clear, and easy to read; communications should provide the right level of detail for the audience; communications should follow the council's brand guidelines; and information should be timely and effectively coordinated.

2.2 The Committee welcomed Islington Council's brand guidelines, which were produced by the corporate Communications section. These contained guidance on writing style and the use of plain English, accessibility standards, providing contact details, and commissioning translation services. This guidance, as well as factsheets on a variety of communications issues, was available from the council's Intranet.

2.3 The council's corporate Learning and Development team provided a range of training courses for staff. These included: Make Every Contact Count, on signposting residents to support services; Courageous Conversations, on difficult workplace conversations; Influencing and Persuading; Customer Care Excellence, which covered active listening, body language, and handing conflict; and Write First Time, which focused on written skills and covered structure, tone of voice, grammar, vocabulary and plain English. The Communications team also held themed workshops from time to time; a workshop was recently held on tone of voice and 'nudge' theory.

2.4 Major communications such as mail-outs, consultations and website pages were produced jointly by Housing and Communications officers. Communications officers had also worked with housing services to develop their communications; this included drafting template letters and other documents. However, it is not feasible for Communications to oversee the production of all communications produced by housing services.

2.5 The Committee welcomed the guidance and training available to staff, noting that it provided comprehensive advice on how to communicate effectively. However, the Committee noted that housing service communications did not always meet the council's agreed standards. Members commented that they had received housing casework which highlighted a lack of coordination, respect and empathy in communications from council staff. A member commented that she worked as a translator for residents and remarked that the tone and attitude of staff was sometimes poor, and this could have a detrimental effect on vulnerable people. The Committee also commented that key messages about housing issues and events were not always communicated effectively. These concerns were reflected in evidence received from residents. Officers advised that resident feedback on housing communications had previously highlighted the need for simplicity and a more empathetic tone.

2.6 Although a range of guidance is available to council staff, the Committee expressed concern that council contractors, and their sub-contractors, are not required to follow council communication guidelines. Members also noted inconsistencies between the council's communication standards and those of key partner organisations, including Partners for Improvement in Islington, housing associations, and tenant management organisations. Whilst the Committee recognises that the council only has limited influence over these organisations, a more consistent approach to communication with residents would be welcome. The Committee suggests that a Code of Communication should be established for the council's housing services. This would draw on the council's corporate communications guidance and clearly set out service specific standards on a range of communications and customer service issues.

2.7 **It is recommended that the council should agree a Code of Communications among the council's Housing services, Partners for Improvement in Islington, and contractors. This should set out agreed principles for effective communication, and should seek to ensure consistent quality in communication with residents. The Code should cover issues such as responsiveness, accessibility, tone of voice, joined up working and record keeping. Tenant Management Organisations and Housing Associations should be encouraged to adopt a similar code, if they have not done so already.**

2.8 The Committee considered complaints management processes. Housing Property Services had its own Customer Service Team which was responsible for investigating complaints and member enquiries in relation to responsive repairs, gas servicing, and mechanical and engineering matters. The majority of housing complaints were related to repairs and issues not being resolved to the satisfaction of residents.

2.9 Officers understood that property repairs was a highly emotive area and staff needed to handle repairs issues sensitively. The residents providing evidence to the review commented that most members of staff were polite and helpful. However, the Committee received some evidence from residents that communications on their repair issues had not been satisfactory, and in particular it was commented that sometimes staff could be more sympathetic to residents' issues. One resident reported that officers had put the phone down on him several times when reporting a repair; another resident provided email correspondence in which she repeatedly asked for an update on her repair, a leak into her flat from a neighbouring property, however no substantial update was provided from July to October 2017. Officers acknowledged that there can be examples of poor service from time to time, and explained that repairs satisfaction was independently monitored by Kwest. It was commented that the number of upheld complaints had reduced in recent years.

2.10 The Committee considered how Property Services learn from complaints about inadequate or late repairs. The Customer Services Team record service failures and pass them to the resident liaison manager, who investigates the matter with the relevant service manager. The service manager will agree to actions, and these are then reviewed at a bi-monthly meeting between the Customer Services Team Manager, the Resident Liaison Manager, and relevant service managers and group leaders.

2.11 The Committee values the work of the Customer Service Team in processing resident complaints, and appreciates that this work can be challenging and emotionally demanding. However, the Committee considers that more robust quality monitoring processes are required to achieve consistently good quality and joined up communication with residents across housing services. Although senior officers are consulted before major communications are published, it is suggested that greater management involvement in reviewing communications, complaint responses and customer journeys would be beneficial. This would help to identify and resolve process issues which may contribute to poor customer service and communication, particularly in relation to significant service failures, and complex issues which require input from multiple services.

2.12 It is important that any changes to management oversight of communication and customer service are clearly communicated to front line staff, with details of how quality will be monitored and how issues will be escalated for management review. The findings of management reviews should be reported to relevant services and corporate Learning and Development as appropriate, to enable any learning to be incorporated into training and internal processes.

2.13 **It is recommended that processes for Housing management to review the quality of staff communications, complaint responses and customer journeys should be enhanced. Communications and complaints should be reviewed on a regular basis, with clear procedures for how quality will be monitored, how these can be escalated for management review, and how this will inform officer training and development and internal processes.**

2.14 The Committee queried if the content of communications guidance was well known by staff. In response, Communications officers advised that the take up of this guidance was not regularly evaluated. The Committee suggests that awareness of communication guidelines could be assessed through the appraisal process. It is also suggested that all front-facing housing staff should be appraised on their customer service and communication skills. It is important that staff receive regular feedback on their performance, and that management review their team's performance in this area.

2.15 **It is recommended that all front-facing housing staff should have an objective in their appraisal related to providing high quality customer services and communication. Progress against this objective should be regularly reviewed in one-to-one meetings with management.**

2.16 The Committee also considered the quality of communications from Partners for Improvement in Islington. Partners tenants received a regular newsletter five times a year, as well as direct mailings on topical issues such as fire safety. All staff received the council's 'Make Every Contact Count' training, and had revised some communications, such as their leaseholder FAQs, following feedback from residents. Ensuring good communication was one of Partners' priorities for 2017/18.

2.17 The Committee considered Partners' internal performance data on communications and commented that this did not provide an accurate representation of the organisation's performance. The Committee held an additional meeting in February 2018 to consider Partners overall performance in more detail.

<u>Communicating the right information to residents</u>

2.18 The Committee considered the content of housing service communications. It is important that communications are both of a high quality and communicate relevant and useful information to residents.

2.19 The residents who participated in the committee's focus group welcomed the introduction of digital notice boards on estates. The Committee suggests that these could be developed further by including more localised content. For example, information about local community events and public meetings, details of estate maintenance works, and other targeted communications relevant to the estate.

2.20 To ensure that communications are relevant to local people, it is suggested that local residents are consulted on the types of information they would like the digital notice boards to display. The council could consult with residents associations, community organisations, local youth groups, and others.

2.21 **Digital notice boards on estates should be developed further to include more localised content. It is suggested that residents' associations and other groups be consulted on the information these notice boards should display.**

2.22 Members and officers identified that they regularly received queries for the same information. Although it was acknowledged that there is a great deal of information on the council's website, it was reported that both officers and residents could find the website difficult to navigate. The Committee suggests that a regularly updated 'Frequently Asked Questions' section would be beneficial to officers, residents, and councillors; this would help to resolve the most common enquiries and assist with directing queries to relevant services.

2.23 **A 'Frequently Asked Questions' section should be added to the Housing section of the council's website. This would help to signpost residents and officers to relevant**

information and answer the most common queries. It is thought that this would free-up staff time for other issues.

2.24 Residents identified that they would like to receive feedback on the issues they reported, such as estate environmental issues and communal repairs. Although residents were satisfied that these issues were being resolved once reported to the council, it was commented that receiving feedback would remove any doubt in regards to if issues were being progressed or had been completed. It is also thought that receiving positive feedback may encourage residents to report issues again in future. This feedback could be on a one-to-one basis, such as an email or text message, or could be posted on a notice board or other prominent location if the issue has been raised by a number of residents.

2.25 **Housing services should seek to provide better feedback to residents on issues they report, including estate environmental issues and communal repairs. This could include more direct communication with residents, or "you said, we did" style communications.**

2.26 Residents expressed frustration with a lack of progress on delayed and complex repairs. Some residents said they did not know if their repair was being progressed or not, or when it might be resolved. Some residents said that they felt exasperated, and were considering giving up on pursuing their repairs issue, even when it related to a significant issue such as a leak into their property. The Committee was concerned that some residents, particularly the most vulnerable, may not feel confident in pursuing repairs issues, and this could result in their repair not being resolved.

2.27 The Committee raised these concerns with officers. In response, it was explained that some processes are lengthy and involve several different teams. For example, the Repairs Access Procedure had to be followed when it was necessary to access a property to complete a repair that was causing damage to a neighbouring property. A common example of this was a leak from a property above dripping into a property below. Officers explained that this was not a straightforward issue; only the courts could grant the council entry into a property without the tenant or leaseholder's permission. The council had to demonstrate that it had repeatedly tried to contact the tenant or leaseholder without response. This was a lengthy process which required liaison between Property Services, Legal Services, third parties, and the courts. The Committee acknowledged that due process had to be followed, however legitimate delays and processes may appear as inaction to residents if they are not made aware of processes and are not provided with regular updates. Residents commented that they would value courtesy calls, and not having to chase issues themselves.

2.28 **It is recommended that housing services should keep residents informed of progress with delayed and complex repairs, and explain any relevant processes and the reasons for delays. The Repairs service should schedule reminders on case files for officers to provide regular updates to residents with unresolved repairs.**

2.29 Residents suggested that they should be allocated a named case officer when raising repairs, complaints, nuisances, and other matters. It was commented that residents preferred to speak to the same officer and build a relationship with them, rather than deal with a different officer each time. Residents also voiced their frustration with having to repeat themselves by explaining their issue to several different officers. The Committee appreciates that case management systems should allow any officer to access all details about a particular issue, however, this may not be possible if an issue requires cross-service collaboration, and may not capture all relevant details.

2.30 **Housing services should consider the feasibility of allocating named case officers to deal with complex issues. This would ensure consistency in communication and reassure residents that their issue is being dealt with. These officers should be empowered to liaise with other services to secure the best outcome for residents.**

2.31 The Committee considered examples of communications issued prior to capital works schemes commencing. Members thought that the booklets produced by the council were of good quality and provided helpful information. The Committee suggests that a follow up booklet should be produced after the works are completed with 'before and after' photographs and details of the cost of the scheme. This would be particularly useful to leaseholders for record keeping purposes, and would help to communicate the quality of work being carried out through the capital programme.

2.32 **It is recommended that a booklet is produced after each capital works scheme detailing the works carried out with before and after images and the cost of the scheme. This booklet should be provided to both tenants and leaseholders, and should be available in a range of formats.**

2.33 Front-line officers expressed frustration with out of date information on the council's website, commenting that this sometimes led residents to have inaccurate expectations of council services. It was suggested that there should be more robust mechanisms for officers to report any inaccuracies or other issues they have. Communications officers advised that website inaccuracies may be raised by completing the form under the 'Was this information helpful?' tab on the council's website, or by emailing the Online Services Team. The Committee suggests that these mechanisms should be promoted further in internal communications, and that officers are encouraged to report out of date or inaccurate information.

2.34 **It is recommended that the mechanism for officers to report out of date information on the council's website should be promoted further in internal communications.**

<u>Supporting staff and joined up working</u>

2.35 The Committee considered the importance of joined up working, and supporting staff to communicate with residents effectively. Residents identified joined-up working between different services as a priority, commenting that it was frustrating to be given conflicting information from different officers, and having to repeat yourself to different teams. It was also commented that join-up between Housing and Adult Social Services was very important for vulnerable tenants, and these residents needed a consistent approach from the council.

2.36 The range of communications-related guidance and training is set out elsewhere in this report. Although some communications-related training courses are mandatory for front-facing housing staff, this varies from service to service. However, as many communications-related training courses are open to all staff, the Committee would support the further promotion of training and guidance in internal communications.

2.37 **The council should use internal communications to raise awareness of communications guidance and relevant training courses. Service managers should encourage their staff to make use of the guidance and training available.**

2.38 A number of staff members interviewed by the Committee had recently been appointed as ‘service ambassadors’. This was a new scheme implemented in the Homes and Communities service to build links between service areas, and to work together to improve services for residents. The ambassador role was voluntary and it was intended to have an ambassador from each relevant service area. The ambassadors had signed up to a charter which set out the values of service ambassadors: this included that homes and communities promote a sense of belonging and wellbeing, that early intervention helps to prevent problems and create better chances for residents, and that ambassadors would work to create better opportunities for residents.

2.39 The Committee was impressed with the service ambassador scheme, noting that it had the potential to significantly develop communication between services and improve joined up working at an operational level. The Committee would support the scheme expanding to other areas of the housing service and key partner services such as Adult Social Care. This would help to encourage joined up working beyond housing services, and may further improve services for residents.

2.40 **The Housing Service Ambassadors should have a key role in encouraging joined up working. It is recommended that the Service Ambassadors scheme be extended to include representatives of all Housing services, and other key services that work in partnership with Housing, such as Adult Social Care.**

2.41 The Committee discussed how services could work closer together with the service ambassadors. The ambassadors suggested that the council could hold staff workshops focused around specific complex issues and have staff from all relevant services attend. This would help to clarify the responsibilities of all officers involved, and the processes that should be followed to ensure a coordinated response. This may result in new solutions to complex issues, and overcome common barriers.

2.42 Issues such as damp and condensation, the repairs access procedure, and anti-social behaviour often require input from several different teams. It is thought that an issue-specific focus on joined-up working will help to achieve more effective person-centred services.

2.43 **To encourage joined-up working and improve services for residents, staff workshops should be held which focus on how best to resolve specific and complex issues. These workshops should include representation from all relevant housing services and partners, and should consider how internal processes and working arrangements can be improved to ensure the best possible outcome for residents. This would assist in particularly complex matters such as damp and condensation, the repairs access procedure, anti-social behaviour, and other matters that require a coordinated response.**

2.44 Officers were aware that residents can be frustrated by having to repeat the same information to different officers. Some officers suggested that this could be improved through an expanded use of CRM, the council’s customer record management system. The system allows officers to access information on residents and properties and service requests associated with them. It was acknowledged that the system had limitations, for example it did not integrate with the repairs management system, however it was thought that greater use of the system would assist in joined-up working between services.

2.45 **Housing services should review their use of CRM, the council’s customer record management system. Wider use of the system would assist officers in communicating**

with residents and assist officers in providing joined up services. It is suggested that interaction with other key systems, such as the repairs management system, would be beneficial.

2.46 The Committee noted the key role that caretakers and other front line staff have in communicating with residents. These staff meet with residents on a daily basis and have a good knowledge of their patch and the issues that matter to local people. The Committee would support front line staff being empowered to report and follow up issues on behalf of residents, particularly the most vulnerable.

2.47 **Caretakers and other front line staff should be empowered to report and follow up issues on behalf of residents.**

<u>Developing online services</u>

2.48 The Committee received evidence on online housing services, in particular the online repairs reporting system. The online repairs system was not intended to replace traditional routes of reporting repairs, but was intended to supplement the existing service. It was thought that reporting repairs online would be preferable to some residents, and the system had the potential to generate savings as it needed significantly less officer resource in comparison to the telephone service. The online repairs reporting system was fully integrated with the repairs management system and did not need officers to input information.

2.49 The Committee received a demonstration of the online repairs reporting system. The system was designed to be user friendly and operated on a pictogram basis, which was intended to overcome language barriers and knowledge gaps. The system was fully functional on mobile phones and allowed residents to report non-urgent repairs 24 hours a day, as opposed to the 8am to 8pm telephone service offered by Housing Direct.

2.50 Whilst resident feedback on the system has been positive, uptake has been low. It was explained that some council services are entirely online; this includes the council home bidding process, and the school admissions service. However, only around 100 repairs a month are reported online, as opposed to the 4,000 calls the repairs service receives. The council had set a target of achieving £315,000 savings through the system; however, this would require 2,000 repairs a month being reported online, a significant increase in usage. Officers commented that if these savings targets cannot be achieved then there may be an impact on other aspects of the service.

2.51 The Committee was impressed with the online repairs reporting system, and would support further promotion of the system given its effectiveness and potential for financial savings. The Committee also considered that there is scope for further improvements. For example, the system is not able to process communal repairs and it is thought that this would be a positive development.

2.52 **The online repairs reporting system should be promoted further to encourage greater usage. It is suggested that the system could be developed further by incorporating the reporting of communal repairs.**

2.53 The Committee would support the development of further online housing services. It is noted that some residents are not confident in using online services, and the Committee welcomes initiatives such as the council's Digital Champion Scheme, which is training staff to support residents in getting online. However, it is also acknowledged that some housing services are not appropriate to migrate entirely online, particularly those which provide essential services to vulnerable people.

<u>Other service developments</u>

2.54 The Committee received evidence on the refreshed Homes and Communities service, formerly Housing Operations, which included estate services, tenancy services, area housing offices, income collection, concierge services, and the voluntary and community sector team. The service had a renewed focus on developing local communities, supporting health and wellbeing, and supporting residents into employment.

2.55 The service redesign will mean that staff will need to work in new and different ways. The stronger emphasis on early intervention, empowerment, resilience and prevention would require staff to have supportive and challenging conversations with residents. Residents could expect to see a greater emphasis on co-designed services, a greater use of online services, and interactions with staff to focus on wellbeing issues as well as core housing functions.

2.56 The Committee notes that transformation work in the Homes and Communities service is ongoing and implementation work will take up to 12 months. The Committee supports the new approach of the service, and would welcome a progress update in future.

2.57 **The Committee welcomes that the Housing Operations service has been redesigned as a Homes and Communities service. The Committee requests that an update be submitted to the Committee in 12 months' time on progress in transforming the service.**

2.58 The Committee supported the council's work to 'make every contact count' and considered if there were unused opportunities to communicate useful information, including wellbeing messages, to residents. It was suggested that better use could be made of large-scale mailings; leaflets could be included in the annual rent statement, and information could be included on the reverse side of letters.

2.59 **Better use should be made of mailings to residents, such as the annual rent statement. For example, the reverse side of letters could include information and advice on property maintenance, tenancy management, or promotion of early intervention services. The council should also review the key contact information circulated with the rent statement, as residents commented that they were unsure which teams to contact about different issues.**

2.60 The Committee noted that there can be a level of uncertainty among non-housing officers and members in relation to the responsibilities of different teams in the housing service and where enquiries should be directed to. It was suggested that a structure chart should be produced for this purpose.

2.61 **The council should produce a structure chart for housing services detailing key officers and the responsibilities of different teams. This would assist officers and councillors in directing their queries.**

3. Conclusions

3.1 The Committee has made 19 recommendations in response to the evidence received. These relate to the quality of communications, communicating the right information to residents, supporting staff and joined up working, and other aspects of housing service communications. It is hoped that these recommendations will assist housing services in providing good services on a tight budget.

3.2 The Committee recognises the importance of Housing Communications and may wish to continue to review communications-related matters in future.

3.3 The Committee would like to thank the officers who provided evidence to the review. The officers interviewed said that they were motivated to provide a good service to residents and were frustrated when things did not go well. Although the review has partially focused on service failures and complaints, the Committee also suggests that services should promote the positive work they are doing on behalf of residents; when the council provides a good service this should be recognised and communicated. The Committee would also like to thank the residents who contributed to the review by providing relevant casework and their views on housing services. The Executive is asked to endorse the Committee's recommendations.

APPENDIX A

SCRUTINY INITIATION DOCUMENT (SID)
Review: The Effectiveness of Housing Service Communications
Scrutiny Review Committee: Housing Scrutiny Committee
Director leading the review: Maxine Holdsworth, Service Director, Housing Needs and Strategy
Lead officer: Paul Byer**,** Service Development Manager Lynn Stratton, Deputy Head of Communications and Change
Overall aim: To review the effectiveness of Housing Service communications
Objectives of the review: • To review the effectiveness of verbal, online and written communication channels; with residents, tenant and resident associations, and internally. • To assess if internal processes and staff training are sufficient to achieve effective communication with residents. • To review how Housing Services respond to and learn from feedback and complaints. • To evaluate the take-up of new electronic communication methods used by the Council's Housing Services, if these have been successfully implemented, and plans for any further 'channel shift'. • To review how the council can be assured that the council's contractors and their subcontractors are communicating with residents effectively. • To identify areas of good practice and how housing communications could be improved.
How is the review to be carried out: <u>Scope of the review</u> The review will focus on: 1. Ensuring the quality of communications • Internal communications, including communication between departments and with councillors • External communications to residents, including output from third party contractors • External communications to stakeholders such as TRAs • Communication processes – how are letters and other forms of written communication drafted • Staff training – what training is received? • How the quality of Housing Service communications is evaluated • How the service seeks to achieve consistency • Expectations of service communications

2. Feedback, complaints, and resident journeys
    - Examples of common complaints and feedback
    - How Housing Services learn from feedback and complaints
    - How can feedback and complaints processes be improved
    - How can housing services resolve issues to avoid them being escalated
    - Do housing services consider the 'bigger picture' when issues are raised by multiple residents, or are issues considered on an individual basis?
    - What barriers to communication do residents face, and how these can be overcome?

3. The development of Housing Communications
    - How do residents prefer to be communicated with?
    - The effectiveness of new online communications methods (inc. repairs reporting)
    - The reasons for 'channel shift' and the benefits and costs of online services
    - Plans for the further development of online services
    - Can the take-up of online communications channels be encouraged?
    - If staff need additional support in communicating with residents

4. Organisational culture relating to communications

Types of evidence

- The results of previous reviews of communications
- Feedback received through resident surveys and engagement
- Complaints data
- Website data and website performance information
- Structure chart indicating key communication channels
- Examples of communications related complaints and casework
- Evidence from residents on their priorities, preferences, and experiences.
- Evidence from third parties, such as Partners
- Evidence on best practice
- Workshop for members and officers to jointly review how complaints have been handled, as well as other issues. This could take the form of a focus group with frontline staff such as customer services, Housing Direct, caretakers, service ambassadors, repairs operatives, AHO staff, and complaints teams.

Additional information:

In carrying out the review the committee will consider equalities implications and resident impacts identified by witnesses. The Executive is required to have due regard to these, and any other relevant implications, when responding to the review recommendations.

Programme	
Key output:	To be submitted to Committee on:
1. Scrutiny Initiation Document	17 July 2017
2. Draft Recommendations	11 December 2017
3. Final Report	13 March 2018

APPENDIX B

The Effectiveness of Housing Services Communications – Witness Evidence Plan

Overall aim: To review the effectiveness of Housing Service communications.

Committee Meeting – 4 September 2017		
Who / What	**Organisation / Purpose**	**Other key information**
Lynn Stratton, Deputy Head of Communication and Change	To provide the committee with a range of information on Housing Communications which will inform the review.	To include: • a summary of previous communications reviews, • a summary of resident priorities, regular feedback and complaints • feedback received on specific communications issues, i.e. from the Housing Disability Panel • details of staff training, • details of how staff are supported in communicating (templates etc) • overview of current range of communications channels used by the service • a structure chart identifying key communications channels • how the quality of communications is evaluated, • What is the housing service's approach to making communications accessible to residents needing different formats? To meet SID objectives: • To review the effectiveness of verbal, online and written communication channels; with residents, tenant and resident associations, and internally.
Lorenzo Heanue, Group Leader - Productivity & Compliance	To look in detail at how feedback and complaints are handled – to focus on the Repairs service as a case study of a front line service which receives a number of complex complaints	To include: • Examples of common complaints and feedback • How can feedback and complaints processes be improved • How can housing services resolve issues to avoid them being escalated To meet SID objectives • To review how Housing Services respond to and learn from feedback and complaints.

Committee Meeting – 3 October 2017		
Who / What	**Organisation / Purpose**	**Other key information**
Tom Irvine, Deputy Managing Director, Partners for Improvement in Islington	Representative from Partners on how they communicate with residents	To meet objective: • To review how the council can be assured that the council's contractors and their subcontractors are communicating with residents effectively.
Matt West, Head of Repairs and Maintenance	To provide the Committee with an update on the council's online housing services; including performance and accessibility, the effectiveness of online repairs reporting, the reasons for 'channel shift', how channel shift can be encouraged, and plans for the further development of online services.	To include: • Web data and website performance information To meet objective: • To evaluate the take-up of new electronic communication methods used by the Council's Housing Services, if these have been successfully implemented, and plans for any further 'channel shift'

Resident Focus Group – 1 November 2017	
Members of the Committee to interview residents on their priorities, preferences and experiences of housing communications. Findings of the Focus Group to be reported to the next Committee Meeting	To meet objective: • To review the effectiveness of verbal, online and written communication channels; with residents, tenant and resident associations, and internally.

Staff Focus Group – 6 November 2017	
Members of the Committee to interview staff from a range of front line services – Customer Services, housing Direct, caretakers, service ambassadors, repairs operatives, AHO staff, complaints teams, etc. Findings of the Focus Group to be reported to the next Committee Meeting	To meet objective: • To assess if internal processes and staff training are sufficient to achieve effective communication with residents.

Committee Meeting – 16 November 2017		
Who / What	**Organisation / Purpose**	**Other key information**
Jo Murphy, Service Director – Homes and Communities	To provide a strategic insight into Housing Service communications and to respond to any specific issues raised in the course of the review	To include: • Principles and expectations of communication • Do housing services consider the 'bigger picture' when issues are raised by multiple residents, or are issues considered on an individual basis?
Christine Short, Head of Capital Programming	To provide evidence on how capital works contractors communicate with residents, and how the council could seek to influence this.	To meet objective: • To review how the council can be assured that the council's contractors and their subcontractors are communicating with residents effectively.
Notes of focus groups sessions.	To note the findings of the focus groups held with residents and staff.	

Draft recommendations – 11 December 2017

ISLINGTON

Resources Department
Town Hall, Upper Street
London N1 2UD

Report of: Chair of Housing Scrutiny Committee

Meeting of	Date	Ward(s)
Executive	19 April 2018	All

Delete as appropriate		Non-exempt

Subject: The Council's New Build Programme Mini-Review – Findings of the Housing Scrutiny Committee

1. Synopsis

1.1 This report requests that the Executive receive the recommendations of the Housing Scrutiny Committee following the completion of its mini-review of The Council's New Build Programme. A response to the recommendations set out in the report will be considered at a future meeting of the Executive.

2. Recommendations

2.1 That the report of the Housing Scrutiny Committee be received.

2.2 That the Executive Member's response be reported to a future meeting of the Executive, including having due regard to any relevant implications of the Housing Scrutiny Committee's recommendations.

3. Background

3.1 The mini-review commenced in December 2017. The overall aim of the mini-review was to review the progress of the council's new build programme in comparison to other boroughs. The objectives of the mini-review included to review the principles underpinning the new build programme; to review the design, build, and environmental standards of the council's new build housing; to assess the obstacles to developing more council housing in Islington; and to evaluate the performance of the New Build team. Evidence was received over two meetings from council officers and officers of the neighbouring London Borough of Camden. The mini-review concluded in March 2018.

4. Implications

4.1 Financial Implications

The proposals in the report need to be costed before a response is made by the Executive.

4.2 Legal Implications

Relevant legal implications will be considered as part of the response to the mini-review.

4.3 Environmental Implications

There are no environmental implications at this stage. Any environmental implications will be identified as part of the Executive Member response.

4.4 Resident Impact Assessment

The council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The council must have due regard to the need to tackle prejudice and promote understanding.

The Committee has had regard to any equalities implications and resident impacts identified by witnesses during the course of the mini-review. Details of any such implications are set out in the appended report. A Resident Impact Assessment has not been completed as the Executive is only asked to receive the report at this stage. The impact on residents will need to be fully considered as part of the Executive Member response to the mini-review, at which point a Resident Impact Assessment will be completed if required.

5. Conclusion and reasons for recommendations

5.1 The Committee is supportive of the council's ambitious new build programme. Three recommendations have been made in response to the evidence received. These relate to increasing public engagement, lobbying for relaxed restrictions on right-to-buy receipts and HRA borrowing, and encouraging housing associations to deliver a greater amount of new affordable housing.

5.2 The Committee will continue to monitor the number of affordable new council and housing association homes built through quarterly performance monitoring reports. The Committee would like to thank the witnesses that gave evidence in relation to the scrutiny. The Executive is asked to endorse the Committee's recommendations.

Appendices:
- The Council's New Build Programme Mini-Review – Report of the Housing Scrutiny Committee

Background papers:
- None.

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ISLINGTON

The Council's New Build Programme Mini-Review

REPORT OF THE HOUSING SCRUTINY COMMITTEE

London Borough of Islington
March 2018

EXECUTIVE SUMMARY

The Council's New Build Programme Mini-Review

Aim:

To review the progress of the council's new build programme in comparison to other boroughs.

Evidence:

The Committee considered evidence at its December 2017 and January 2018 meeting. Evidence was received from Stephen Nash, New Homes and Development Programme Manager, and officers from the London Borough of Camden. The Committee also received written evidence on specific information requested by members.

Main Findings:

- The objective of Islington's new build programme is to maximise the amount of social rented housing in the borough. This is achieved by the development of new social housing, and also the development of private housing, the proceeds of which are re-invested into the new build programme.
- The type of units developed by the council is informed by the needs of residents on the housing waiting list. In order to reduce overcrowding, the council is developing a high proportion of two-bed units, as well as family sized three and four bed properties.
- Officers advised of the challenges of achieving the corporate objective of delivering 500 new council homes between 2014/15 and 2019/20. Although the council is currently behind target, it is expected that delays will be overcome shortly and the council will exceed this objective.
- Overall, the Committee welcomes the new build team's consultation practices, however considers that there is scope to develop these further, particularly in relation to significant new build schemes. The council should ensure that local concerns are addressed as far as possible and developments are progressed in cooperation with the majority of the local community.
- The Committee considered the financial challenges associated with the new build programme. Camden Council is lobbying the government to relax restrictions on right to buy receipts and the Committee suggests that a sector-wide joined up approach to new build funding might yield better results.
- The Committee was supportive of high environmental standards in new build housing and noted that these measures can reduce utility bills for residents.
- The Committee considers that if the council is to significantly increase the amount of affordable housing developed in the borough, then robust conversations about housing association ambitions and aspirations are needed.

Conclusions:

The Committee is supportive of the council's ambitious new build programme. Three recommendations have been made in response to the evidence received. The Committee will continue to monitor the number of affordable new council and housing association homes built through quarterly performance monitoring reports. The Committee would like to thank the witnesses that gave evidence in relation to the scrutiny. The Executive is asked to endorse the Committee's recommendations.

Recommendations:

1. Islington Council should consider if it can enhance public engagement and consultation processes in advance of significant new build schemes. This could include holding community events, the appointment of local residents to community liaison positions, and co-designing aspects of the scheme that will have a direct impact on local residents.

2. Islington Council should work with other local authorities to lobby for relaxed restrictions on the use of right-to-buy receipts and HRA borrowing.

3. Islington Council should consider how it can support or incentivise housing associations to deliver a greater amount of new affordable housing on development sites, especially smaller housing associations that have surpluses and are based in the borough.

MEMBERSHIP OF THE HOUSING SCRUTINY COMMITTEE – 2017/18

Councillors:
Councillor Mick O'Sullivan (Chair)
Councillor Marian Spall (Vice-Chair)
Councillor Alex Diner
Councillor Gary Doolan
Councillor Aysegul Erdogan
Councillor Troy Gallagher
Councillor Osh Gantly
Councillor Mouna Hamitouche MBE

Resident Observers:
Rose Marie McDonald
Dean Donaghey

Substitutes:
Councillor Satnam Gill OBE
Councillor Gary Heather
Councillor Jenny Kay
Councillor Una O'Halloran
Councillor Olly Parker
Councillor Angela Picknell
Councillor Dave Poyser
Councillor Nurullah Turan

Acknowledgements:
The Committee would like to thank all the witnesses who gave evidence to the review.

Officer Support:
Stephen Nash – New Homes and Development Manager.
Jonathan Moore – Senior Democratic Services Officer

1. Introduction

1.1 The mini-review took place over two meetings in December 2017 and January 2018. The overall aim of the review was to review the progress of the council's new build programme in comparison to other boroughs.

The Committee also agreed the following objectives:

- To review the principles underpinning the council's new build programme.
- To review the design, build, and environmental standards of the council's new build housing.
- To assess the obstacles to developing more council housing in Islington.
- To evaluate the decision making process for how new council developments are identified and progressed.
- To assess the level of resident involvement in the new build process.
- To consider how new build properties are allocated.
- To evaluate the performance of the New Build team.
- To compare the council's approach to new build to another London borough and housing associations.

1.2 In carrying out the review the Committee met with the council's New Homes and Development Manager and officers from the neighbouring London Borough of Camden.

Local context

1.3 Islington is an area of severe housing need. There are around 20,000 households on the housing register, but only around 1,000 council homes become available each year. 40% of council homes are one-bedroom properties and are not suitable for families. As a result, many Islington families suffer from overcrowding. Overcrowding is associated with increased physical and mental health problems and poor educational achievement by children. It can also have an impact on family life and relationships and lead to family breakdown.

1.4 Islington's Corporate Plan 2015-19 identifies building more council housing as its first priority. The corporate plan committed to the development of 2,000 affordable homes between 2015 and 2019, including 500 new council homes. In addition, Islington Council has committed to the development of more new homes in future; the 2018-21 capital programme allocates over £224 million to new council housing.

2. Findings

Overview of Islington's New Build Programme

2.1 The objective of Islington's new build programme is to maximise the amount of social rented housing in the borough. This is achieved by the development of new social housing, and also the development of private housing, the proceeds of which are re-invested into the new build programme. Although private units are sold on the open market, priority is given to those who live or work in Islington. The council does not sell new build units to foreign investors, and does not want to sell to buy-to-let landlords.

2.2 The new build programme does not generate any 'profit'. Occasionally a new build scheme may achieve a surplus, for example if rising property values result in private units achieving a higher than expected sale price. In this instance, any surplus is re-invested into the new build programme.

2.3 The type of units developed by the council is informed by the needs of residents on the housing waiting list. In order to reduce overcrowding, the council is developing a high proportion of two-bed units, as well as family sized three and four bed properties. The council is also developing a small amount of supported housing for vulnerable people, as well as community infrastructure such as libraries and community centres. New build properties are allocated in accordance with the council's local lettings policy, which gives priority to those on the estates where new units are being developed.

2.4 The council has a framework contract with local architects, including the council's own in-house architects, to design new build schemes. The build process is carried out by contractors appointed on a 60% quality, 40% cost basis. Officers emphasised that there was no benefit to building poor quality social rented housing. The New Build team makes use of a robust set of Employers Requirements. This ensures that properties meet, and often exceeded, the standards set out in the London Design Guide. All works are signed off by Islington Council Building Control, who carry out regular inspections during the construction process.

2.5 The New Build team had considered innovative approaches to maximising the amount of social rented housing. This included build-overs of existing blocks and the development of modular housing. The majority of new council developments are located on small council-owned sites. The team also considered the purchase of development sites on the open market, however this was challenging as the council can be outbid by private developers, who have significant financial resources. It was suggested that that some private developers are prepared to pay over market value for sites, with the intention of maximising their profit by reducing the affordable housing offer.

2.6 The New Build Team considers various factors when identifying sites for development, including if the site attracts anti-social behaviour. The new build team looked to design-out antisocial behaviour in new developments.

2.7 The New Build team has made approaches to develop land held by other public bodies, such as the Police, Fire Brigade, GLA, Ministry of Defence and the NHS; however this has not been successful so far. It is understood that these organisations have their own financial difficulties and usually wish to achieve the highest possible sale price for their sites.

2.8 Islington Council generally does not 'pepper pot' private and social housing in mixed developments. Instead, the council tends to develop separate private and social housing blocks. The Committee noted concerns about community cohesion and the social mix of the borough, however, officers advised that developing separate blocks maximised the sale value of private housing and therefore ensured a greater subsidy for social rented housing. Officers also commented that it was more difficult to manage mixed blocks of private and social housing. Evidence from Camden Council indicated that they also did not 'pepper pot' schemes, highlighting different expectations between private and social tenants.

2.9 Officers advised of the challenges of achieving the corporate objective of delivering 500 new council homes between 2014/15 and 2019/20. At December 2017, 250 homes had been completed; 9 schemes were on site and would provide 317 homes; and a further 11 schemes were due to commence during 2018/19 which would provide 333 homes. Although the council was intending to exceed the corporate objective, the new build programme was behind target. It was explained that there had been delays to the completion of new build schemes, which included delays to Network Rail completing works affecting development sites, delays to utility companies connecting new build properties to their networks, the discovery of asbestos and bones requiring investigation and removal, and delays associated with pressures in the Planning and Legal departments. Nevertheless, it is expected that these delays will be overcome shortly and the council will achieve its objective.

Public engagement

2.10 The New Build team is keen to involve residents in the design process and carries out consultations as schemes are developed. The level of consultation is bespoke to the scheme and dependent on the scale of the development; major developments require a significant amount of public consultation, whereas more limited consultation is carried out on smaller schemes. Consultation methods currently used by the New Build team include door knocking, drop-in sessions, exhibitions and producing publicity. Officers advised that one to one engagement tended to result in more measured and useful comments. Public meetings were occasionally held, however officers commented that these could be fractious.

2.11 Consultation is carried out with specific groups when appropriate. For example, the Housing Disability Panel may be consulted when new developments include adapted properties. The Committee notes that the Islington Fair Futures Commission has recommended that all major developments in the borough should include consultation with children and young people. The council carried out specific consultation with both young people and older people in advance of the Kings Square development.

2.12 Officers commented that improvements had been made to the public engagement process in recent years; there was a suggestion that consultation had previously been rushed, however officers now took more time to work through local concerns before development commenced. However, officers acknowledged that engagement and consultation processes could be improved further.

2.13 If the council is to significantly address the housing need in the borough through its new build programme, then it is possible that the council will need to focus on larger developments in future. However, the committee appreciates that larger developments tend to attract a higher level of public opposition. Larger developments will require an enhanced level of engagement and public consultation to ensure that local concerns are addressed as far as possible and developments are progressed in cooperation with the majority of the local community.

2.14 The Committee received evidence from the London Borough of Camden on their public engagement practices. Camden was carrying out a major rebuild of the Agar Grove estate which would double the density of the estate. Whilst there had been initial opposition to the proposals, the scheme was now progressing with the support of the majority of residents. Camden officers emphasised the importance of community engagement, commenting that transparency and working collaboratively with the local community was essential. Schemes were co-designed with the community and developments provided local residents with new community facilities. Local people were not only consulted on the design of the new properties, but helped to develop decant strategies, and were involved in the selection of architects.

2.15 Camden had employed local residents to provide peer-to-peer liaison on new housing schemes; these residents had a strong presence in their local area, and were well placed to engage with the local community. Camden had also sought to address local opposition by giving scheme-specific commitments on new developments. For example, if local concerns focused around a loss of greenspace, then Camden would seek to re-provide the same amount of greenspace in the vicinity of the development. Camden Council also held community events, which attracted a different audience to traditional formal consultation meetings.

2.16 Overall, the Committee welcomes the new build team's consultation practices, however considers that there is scope to develop these further, particularly in relation to significant new build schemes. It is recommended that **Islington Council should consider if it can enhance public engagement and consultation processes in advance of significant new build schemes. This could include holding community events, the appointment of local residents to community liaison positions, and co-designing aspects of the scheme that will have a direct impact on local residents.**

Financial Challenges

2.17 The Committee considered the financial challenges associated with the new build programme. The government's annual 1% cut in social rents had an adverse impact on the Housing Revenue Account and in turn the new build programme. The development of some schemes had been paused and others had stopped altogether. As a consequence, Islington Council was primarily funding the new build programme through receipts from property sales, without significantly drawing on the HRA.

2.18 Some local authorities fund new build schemes through borrowing, however the HRA borrowing cap limits the amount that local authorities are able to borrow for this purpose. In late 2017, the government announced that the HRA borrowing cap could be lifted for local authorities in high need. Islington Council has already applied to the Treasury requesting that its borrowing cap be lifted; however it is understood that several other local authorities have made similar requests, and it is not known when a response will be received.

2.19 Construction costs had increased following the EU referendum, and it was expected that costs would increase further after Brexit. Officers advised that the average construction cost of each home was around £290,000; however the total cost, including contribution to local public realm improvements, landscaping, demolition costs, legal and planning fees, the provision of community facilities and so on, was in the region of £380,000.

2.20 The government had previously pledged that Right to Buy properties would be replaced on a 'one for one' basis. However, officers advised that for each unit lost the council only received approximately 30% of the construction cost of a single unit. The use of these funds was tightly regulated, and the government prohibited them being combined with other forms of "public subsidy", such as GLA grant funding, to develop new housing.

2.21 Camden Council is lobbying the government to relax restrictions on right to buy receipts and the Committee suggests that a sector-wide joined up approach to new build funding might yield better results. It is therefore recommended that **Islington Council should work with other local authorities to lobby for relaxed restrictions on the use of right-to-buy receipts and HRA borrowing.**

Environmental matters

2.22 The Committee noted the environmental standards of Islington Council's new build housing. Solar panels were fitted where appropriate and properties were well insulated, which was both energy efficient and helped to reduce fuel poverty. The New Build team was working with officers in the Energy Team and Property Services to ensure that schemes were energy efficient and were designed in a sustainable way, with components that were easy to maintain.

2.23 Officers have commented that Islington's energy performance requirements are robust. The council aims to achieve 'Code for Sustainable Homes Level 4' in its new developments, even though this is no longer a requirement. The code covers a range of sustainability criteria including energy efficiency and CO_2 emissions, water saving measures, the environmental impact of materials, the minimisation of pollution, reducing waste in the construction process, and other matters.

2.24 The Committee heard that Camden Council was also developing properties to high environmental standards; some properties were being built to the passivhaus standard, in which homes are highly insulated and heated through the circulation of air. Camden officers commented that these homes were very energy efficient, and the council had received comments that some of these homes were too warm, rather than too cold. Some Camden properties also made use of rainwater for flushing toilets.

2.25 The Committee is supportive of new build properties meeting high environmental and energy performance standards, and would welcome the development of more homes built to the passivhaus standard. It is noted that homes with a high energy performance rating help to reduce utility bills for residents.

Working with housing associations

2.26 The Committee recognises that Islington Council is not able to end the housing crisis alone. The Committee is keen for the council to work in close partnership with housing associations that are willing to develop high quality, genuinely affordable, social housing in the borough. The Committee considered details of proposed housing association new build developments up to 2020/21, and expressed concern that some of these contained a low proportion of affordable housing. Islington's planning policies require that new developments achieve the maximum reasonable amount of affordable housing, which should be around 50%. The Committee did not consider the detail of all proposed housing association schemes, however noted that several proposed schemes were due to achieve significantly less than this amount.

2.27 The Committee raised concerns that the process through which housing associations bid for development sites put these organisations in competition with each other. This could artificially inflate the cost of schemes and therefore decrease the viability of social housing. The Committee considers that if the council is to significantly increase the amount of affordable housing developed in the borough, then robust conversations about housing association ambitions and aspirations are needed. The Committee would support a joined up and strategic approach to working with Housing Associations which encourages and incentivises them to develop a high proportion of affordable housing in the borough.

2.28 The Committee would particularly support further work with smaller housing associations that have surpluses and are based in the borough. These organisations may be better placed than large national housing associations to work closely with the council to meet the demand for genuinely affordable social housing in accordance with local priorities.

2.29 It is therefore recommended that **Islington Council should consider how it can support or incentivise housing associations to deliver a greater amount of new affordable housing on development sites, especially smaller housing associations that have surpluses and are based in the borough.**

Other findings

2.30 The Committee queried the toxicity of paint used in council developments. It was advised that the paint was a well-known brand suitable for internal walls and was hardwearing in communal areas.

2.31 The council's new build schemes met Building Control regulations regarding entrances and exits. One entrance/exit was acceptable if there was enhanced protection for the staircases, generally achieved through ventilation. Officers advised that providing more than one entrance/exit would reduce the number of new homes built.

3. Conclusions

3.1 The Committee is supportive of the council's ambitious new build programme. Three recommendations have been made in response to the evidence received. The Committee will continue to monitor the number of affordable new council and housing association homes built through quarterly performance monitoring reports. The Committee would like to thank the witnesses that gave evidence in relation to the scrutiny. The Executive is asked to endorse the Committee's recommendations.

APPENDIX A

SCRUTINY INITIATION DOCUMENT (SID)
Title: The Council's New Build Programme (Mini-Review)
Scrutiny Review Committee: Housing Scrutiny Committee
Director leading the review: Sean McLaughlin, Corporate Director of Housing and Adult Social Services
Lead officer: Stephen Nash, New Homes and Development Programme Manager
Overall aim: To review the progress of the council's new build programme in comparison to other boroughs.
Objectives of the review: • To review the principles underpinning the council's new build programme. • To review the design, build, and environmental standards of the council's new build housing. • To assess the obstacles to developing more council housing in Islington. • To evaluate the decision making process for how new council developments are identified and progressed. • To assess the level of resident involvement in the new build process. • To consider how new build properties are allocated. • To evaluate the performance of the New Build team. • To compare the council's approach to new build to another London borough and housing associations.
How is the review to be carried out: <u>Scope of the review</u> • The principles of the new build programme; including what type of properties are developed, and what proportion of properties are for social housing, shared rent, and private ownership. • The design, build and environmental standards the new build programme must meet, and how these are achieved. • The obstacles to development, including financial and planning constraints and land availability. • Decision-making processes, and how the new build programme is managed and funded. • Resident engagement in the new build programme. • How the council's new build properties are allocated, including social, shared-ownership and private housing. • Performance against corporate targets. • How the council's new build programme compares to that of another London borough.

- Design standards in regards to entrance and exit routes in both high rise and low rise properties
- Environmental standards in regards to the toxicity of paint
- The checks and balances related to decision-making on design and build choices, including decisions on the use of materials such as cladding.
- The average building costs of new housing schemes
- How housing revenue account surplus is spent, and if any funds are allocated to new build projects.

Types of evidence

- Evidence from officers in the New Build team.
- Evidence on another London borough's new build programme.
- Potential visit to new build properties.

Additional information:

Building new council homes is a key priority of the council. The Corporate Plan 2015-19 identifies 'Building more council housing and supporting private renters' as a priority, setting a target of 500 new council homes over the period.

In carrying out the review the committee will consider equalities implications and resident impacts identified by witnesses. The Executive is required to have due regard to these, and any other relevant implications, when responding to the review recommendations.

Programme

Key output:	To be submitted to Committee on:
1. Scrutiny Initiation Document	11 December 2017
2. Recommendations & Report	13 March 2018

ISLINGTON

Resources Department
Town Hall, Upper Street
London N1 2UD

Report of: **Chair of Children's Services Scrutiny Committee**

Meeting of	**Date**	**Ward(s)**
Executive	19 April 2018	All

Delete as appropriate		Non-exempt

Subject: Co-ordinated and joined up services for vulnerable adolescents – Findings of the Children's Services Scrutiny Committee

1. Synopsis

1.1 This report requests that the Executive receive the recommendations of the Children's Services Scrutiny Committee following the completion of its review of co-ordinated and joined up services for vulnerable adolescents. A response to the recommendations set out in the report will be considered at a future meeting of the Executive.

2. Recommendations

2.1 That the report of the Children's Services Scrutiny Committee be received.

2.2 That the Executive Member's response be reported to a future meeting of the Executive, including having due regard to any relevant implications of the Children's Services Scrutiny Committee's recommendations.

3. Background

3.1 The review commenced in September 2017. The overall aim of the review was to review how effective the council is in providing joined up services; and to ensure that there are effective processes and practices that ensure young people are involved in all aspects of their support and intervention.

3.2 The objectives of the review included: to evaluate how the views and experiences of vulnerable adolescents are considered when planning and delivering services; to assess if the support available to vulnerable adolescents from council services is sufficient, and how other support networks in the family, community, and peer groups can be developed to support further; and to consider the effectiveness of partnership and integrated arrangements that the council has, if these achieve better outcomes, and to consider if further join up operationally and strategically would assist.

3.3 In carrying out the review the Committee met with young people, council officers and representatives of partner organisations to gain a balanced view. The Committee also considered relevant strategies, plans and other documents.

4. Implications

4.1 Financial Implications

The proposals in the report need to be costed before a response is made by the Executive.

4.2 Legal Implications

Relevant legal implications will be considered as part of the response to the mini-review.

4.3 Environmental Implications

There are no environmental implications at this stage. Any environmental implications will be identified as part of the Executive Member response.

4.4 Resident Impact Assessment

The council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The council must have due regard to the need to tackle prejudice and promote understanding.

The Committee has had regard to any equalities implications and resident impacts identified by witnesses during the course of the mini-review. Details of any such implications are set out in the appended report. A Resident Impact Assessment has not been completed as the Executive is only asked to receive the report at this stage. The impact on residents will need to be fully considered as part of the Executive Member response to the mini-review, at which point a Resident Impact Assessment will be completed if required.

5. Conclusion and reasons for recommendations

5.1 Overall the Committee was impressed with the wide range of support services available for vulnerable adolescents. The Committee considered a number of examples of different services and agencies working together to provide co-ordinated services for the benefit of young people. It is clear that the council and its partners recognise that providing joined up services is the best approach to supporting vulnerable young people. However, further improvements could be made to improve the effectiveness of services.

5.2 14 recommendations have been made in response to the evidence received. These are related to a greater strategic join-up between services; working differently by adopting new practices, such as trauma informed and contextual safeguarding approaches; closer work with the Police around domestic violence and the sharing of intelligence; making the most of existing resources; and communicating more effectively with young people and the professionals that support them. The Committee would like to thank all the witnesses that gave evidence in relation to the review. The Executive is asked to endorse the Committee's recommendations.

Appendices:

- Co-ordinated and joined up services for vulnerable adolescents – Report of the Children's Services Scrutiny Committee

Background papers:

- None.

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ISLINGTON

Co-ordinated and joined up services for vulnerable adolescents

REPORT OF THE CHILDREN'S SERVICES SCRUTINY COMMITTEE

London Borough of Islington
March 2018

EXECUTIVE SUMMARY

Co-ordinated and joined up services for vulnerable adolescents

Aim:

To review how effective the council is in providing joined up services; and to ensure that there are effective processes and practices that ensure young people are involved in all aspects of their support and intervention

Evidence:

The Committee commenced the review in September 2017. Evidence was received from a variety of sources:

Evidence from Council Officers:

- Lisa Arthey, Director of Youth and Community Services
- Finola Culbert, Service Director of Safeguarding and Family Support
- Laura Eden, Head of Safeguarding and Quality Assurance
- Catherine Briody, Head of Youth and Community Services
- Curtis Ashton, Head of Targeted Youth Services and Youth Offending Service
- Abi Onaboye, Head of Early Help
- Holly Toft, Head of Play, Youth and Post-16
- Helen Cameron, Health and Wellbeing Manager
- Naomi Bannister, CSE Lead
- Sarah Whelan, Safeguarding Gangs Lead
- Gabriella Di-Sciullo, Head of Admissions and Children Out of School
- Sheron Hosking, Head of Children's Joint Health Commissioning

Evidence from young people:

- Simone Headley, Chair of the Childrens' Active Involvement Service Council
- Visit to the Children's Active Involvement Service

Evidence from partner organisations

- Inspector Kier Newman, Police representative for Safer Schools and Youth Engagement
- Freddie Hudson, Community Manager, Arsenal in the Community
- Abi Billinghurst, Founder and Director of Abianda

Documentary evidence:

- Early Intervention and Help Strategy for Islington, 2015-2025
- Working together to safeguard young people in Islington - Youth Crime Plan, 2017-20
- Recommendations & Executive Summary of Policy and Performance Scrutiny Committee report on Knife Crime, 2015/16
- Child and Adolescent Mental Health Services Transformation Plan
- Islington Safeguarding Gang Protocol and Procedure 2016
- Briefing Note on Contextual Safeguarding

Main Findings:

- There are many services available to support vulnerable adolescents in Islington; these may be universal or targeted, statutory or non-statutory, provided directly by the council, or commissioned and delivered by others. The Committee is concerned by the growing demand for these services, and the increasing complexity of cases.

- The council has carried out a great deal of work in recent years to strengthen its services for vulnerable adolescents. Committee welcomes the council's sustained focus on improving services for vulnerable young people, however considers that there is scope for further improvement.

- Although the Committee was satisfied that a consistent and joined up approach was being taken by Children's Services, young people and their families also reply on a range of other local services. The Committee would welcome a greater strategic join up between these services and Children's Services, particularly on issues affecting the most vulnerable young people.

- The Committee received evidence on the challenges faced by the council in providing effective services for vulnerable adolescents. The borough's administrative boundaries made it challenging to engage with Islington's young people who choose to congregate outside of the borough. The Committee also noted that traditional family-based safeguarding approaches may not be wholly relevant to the issues faced by vulnerable adolescents. The Committee considers that a cross-borough approach to safeguarding is needed, which makes use of contextual safeguarding methods to protect vulnerable young people across London.

- The Committee is supportive of trauma informed approaches to working with young people, and would support these approaches being used more widely in schools and by other professionals working with young people.

- The Committee would support stronger and earlier interventions on domestic violence and abuse from both the council and the Police. The Committee would also support further work in schools to support young people affected by domestic violence and abuse. This is crucial to ensure that young people receive support at the earliest possible opportunity.

- The Committee believes that there is a great deal of potential in the local community and voluntary sector, and suggests that working even closer with the sector could assist in safeguarding and supporting vulnerable young people.

- Witnesses providing evidence to the Committee commented on the difficulty of communicating the range of services available to marginalised young people, particularly to those who did not access services at Islington's youth hubs. The Committee would support the development of an app/website, to communicate targeted information about support services, events, health and wellbeing messages, and other advice and guidance for young people. It is also suggested that young people should be able to contact their social worker through instant messaging, subject to all necessary safeguarding and data security criteria being met.

- Evidence received by the Committee highlighted a number of positive examples of services listening and responding to the views of children and young people.

Conclusions:

Overall the Committee was impressed with the wide range of support services available for vulnerable adolescents. The Committee considered a number of examples of different services and agencies working together to provide co-ordinated services for the benefit of young people. It is clear that the council and its partners recognise that providing joined up services is the best approach to supporting vulnerable young people. However, further improvements could be made to improve the effectiveness of services.

14 recommendations have been made in response to the evidence received. These are related to a greater strategic join-up between services; working differently by adopting new practices, such as trauma informed and contextual safeguarding approaches; closer work with the Police around domestic violence and the sharing of intelligence; making the most of existing resources; and communicating more effectively with young people and the professionals that support them.

The Committee would like to thank all the witnesses that gave evidence in relation to the review. The Executive is asked to endorse the Committee's recommendations.

Recommendations:

1. A borough-wide pledge to support vulnerable young people should be developed by Summer 2018. Ownership of this pledge at Chief Executive level will help support accountability cross the council. All council services should commit to working collaboratively to reduce the risks to young people and improve their wellbeing. Partner organisations should also be encouraged to commit to the pledge. This would assist in developing more joined up early intervention approaches.

2. It is suggested that the delivery of the pledge should be incorporated into the terms of reference and work plans of all relevant multi-agency forums. These forums should monitor delivery of the pledge through their work. A member of the Children's Services Scrutiny Committee should be invited to observe relevant meetings. In addition, the Youth Council and CAIS should be invited to undertake an annual review of the effectiveness of the Pledge and report their findings back to the Chief Executive.

3. To foster a more effective and joined-up approach to safeguarding across London, Children's Services should seek to work with neighbouring boroughs and other agencies to develop a contextual safeguarding approach. This approach is focused on reducing risks and vulnerabilities and promoting safeguarding by intervening in the social environments experienced by young people, rather than focusing interventions on individuals. As part of this work, the council should lead on the development of protocols across borders with neighbouring local authorities focusing on risk management and the sharing of good practice.

4. Subject to the results of the trauma-informed approaches pilot, Children's Services should work with the Community of Schools to encourage schools to engage with these approaches and adopt related screening tools. This may assist in identifying a range of issues, including the diagnosis of mental health issues, at a much earlier age. The five schools engaging in the ARC pilot project should be asked to support in cascading this approach.

5. A trauma-informed approach to working with young people should be embedded in multi-agency training through a review of the Safeguarding Children Board training offer.

6. A high number of vulnerable adolescents have experienced or witnessed domestic abuse earlier in their lives. It is crucial that these young people receive support at the earliest possible opportunity. It is recommended that the council and police work together to develop stronger and earlier interventions on domestic abuse. This work should include the development of Operation Encompass in schools and a focus on partnership work through Islington Safeguarding Children Board.

7. Children's Services should review if greater information can be shared between agencies to develop a more joined up approach to working with vulnerable adolescents. The Council should work with Police to ensure that lower level non-criminal concerns about young people are reported to the school via the Safer Schools Officer, so that young people's behaviour can be monitored and they can be referred to appropriate support services as appropriate.

8. The Committee considers that greater use could be made of Safer Schools officers. The promotion of Safer Schools officers and their role in safeguarding children should be reiterated through the Islington Community of Schools.

9. The council should ensure its strategic and commissioning priorities for vulnerable adolescents are shared with the voluntary and community sector and that priorities between the council and voluntary and community sector organisations are aligned. This could include the alignment of grant funding to these priorities.

10. Children's Services should continue to work closely with voluntary and community sector organisations and develop these relationships further as appropriate. This may assist in generating referrals, normalise accessing support, and help to ease transitions between services.

11. The council should work to improve its communications to young people. The Council should lead on the development of a multi-purpose young people's app/website to ensure a wider reach for communicating targeted messages and information about health and wellbeing and support services.

12. Children's Services should review the feasibility of allowing young people to contact their social worker through instant messaging.

13. The council should review its directory of services and ensure it is proactively promoted to professionals in the health, education, and voluntary and community sectors to raise awareness and understanding of the range of support services available to vulnerable adolescents.

14. The council should review if support services for young people are sufficiently flexible and accessible, and should consider the appropriateness and feasibility of providing evening and weekend support services, if such services are not already available.

MEMBERSHIP OF THE CHILDREN'S SERVICES SCRUTINY COMMITTEE – 2017/18

Councillors:
Councillor Theresa Debono (Chair)
Councillor Nick Wayne (Vice-Chair)
Councillor Troy Gallagher
Councillor Rakhia Ismail
Councillor Michelline Safi Ngongo
Councillor Marian Spall
Councillor Nick Ward

Co-opted Members:
Erol Baduna – Primary Parent Governor Representative
Mary Clement – Roman Catholic Diocese Representative
James Stephenson – Secondary Parent Governor Representative

Substitutes:
Councillor Alex Diner
Councillor Satnam Gill OBE
Councillor Mouna Hamitouche MBE
Councillor Clare Jeapes
Councillor Angela Picknell
Councillor Dave Poyser
Councillor Nurullah Turan

Acknowledgements:
The Committee would like to thank all the witnesses who gave evidence to the review.

Officer Support:
Tania Townsend – Children's Partnership Development and Strategy Manager
Jonathan Moore – Senior Democratic Services Officer

1. Introduction

1.1 The review was held between September 2018 and February 2018. The overall aim of the review was to review how effective the council is in providing joined up services; and to ensure that there are effective processes and practices that ensure young people are involved in all aspects of their support and intervention.

The Committee also agreed the following objectives:

- To further understand the current and future risks and challenges faced by our young people who are vulnerable and how the council is continually responding to these in Islington.
- To evaluate how the views and experiences of vulnerable adolescents are considered when planning and delivering services.
- To assess how the current transition arrangements for vulnerable adolescents between early help, targeted and specialist services are continuously effective in providing a seamless support and intervention service/approach.
- To assess if the support available to vulnerable adolescents from council services is sufficient, and how other support networks in the family, community, and peer groups can be developed to support further.
- To explore the support network of young people within the family, community and friendships, and how they can support council services for vulnerable adolescents to reach their full potential.
- To consider the effectiveness of partnership and integrated arrangements that the council has, if these achieve better outcomes, and to consider if further join up operationally and strategically would assist.

1.2 In carrying out the review the Committee met with young people, council officers and representatives of partner organisations to gain a balanced view. The Committee also considered relevant strategies, plans and other documents.

<u>Context</u>

1.3 Adolescence is a difficult time for young people. As children develop into adults they face a range of social pressures and expectations, new freedoms, boundaries and responsibilities, and changes to their relationships with their family, peers, and wider society. Whilst the majority of young people living in Islington progress through adolescence in an overall positive way, this is not the case for all young people. Some young people have negative experiences during their childhood which can make them vulnerable. The council has statutory duties to protect vulnerable young people, and a moral obligation to support these young people in achieving the best possible outcomes.

1.4 There are many different views on when adolescence begins, however it is generally accepted that adolescence commences at the onset of puberty. The Committee focused its review on early adolescence, between the ages 10 to 13, as this is a key time during child development. It is also a time at which a young person’s relationship with the local authority changes dramatically. Young people of this age are no longer the small children accessing early years provision and adventure play activities, however they are not yet the teenagers with complex and entrenched needs accessing the council’s support services. It is crucial that young people, particularly vulnerable young people, receive effective and joined up support during this key period of change in their lives.

1.5 The Committee wished to review if the council and its partners could better support vulnerable adolescents; if there are opportunities for closer partnership work; if different approaches to working with these young people would be beneficial; and if the council is listening to the voices of young people when planning, commissioning and delivering services.

2. Findings

Summary of issues and risks faced by Islington's vulnerable adolescents

2.1 The Committee considered the wide variety of issues and factors which may make a young person vulnerable. Some young people will face a range of issues, and may have multiple and complex vulnerabilities.

2.2 Adolescents may be vulnerable due to neglect or physical or emotional abuse. They may be deprived of food, education, parental care, or normal childhood experiences. Young people, or their parents, may have mental health issues or special educational needs. Young people may be victims of domestic abuse, or may have witnessed domestic abuse between their parents. Drug and alcohol misuse may be a factor for parents, or young people themselves. Vulnerable adolescents may be victims of exploitation. They may be victims of child sexual exploitation, which in Islington is generally perpetrated in a peer-to-peer context. They may be affiliated to a gang, or on the periphery of gang involvement. They may be being groomed to commit criminal activity, being used as a drug mule, or be involved in county lines drug dealing. They may be a young offender, or frequently go missing from home, care, or education. They may display challenging behaviour in school, commit anti-social behaviour on the streets, or be involved in serious youth violence.

2.3 There are many services available to support vulnerable adolescents in Islington; these may be universal or targeted, statutory or non-statutory, provided directly by the council, or commissioned and delivered by others. The Committee is concerned by the growing demand for these services, and the increasing complexity of cases. Officers advised that the number of adolescents on child protection plans had increased in recent years. Historically, the majority of child protection plans related to babies; however roughly the same number of adolescents as babies were now the subject of a child protection plan. Nationwide, the number of children aged 16 or over on a child protection plan increased by 70% between 2010 and 2013. Since 2010 there has been a national increase of 132% of the number of children aged 16 or over in care. In Islington, young people aged 13 to 17 represent 62% of looked after children, 17% of those on child protection plans, and 28% of those classified as a child in need. Over 3,000 referrals were made to social care in 2016/17, an increase of over 500 on the previous year. There are various factors contributing to this increase in demand and complexity, including escalating poverty, deprivation, and associated parental stresses.

2.4 The council has carried out a great deal of work in recent years to strengthen its services for vulnerable adolescents. The Policy and Performance Scrutiny Committee previously reviewed Knife Crime and Mobile Phone Theft and made a number of recommendations to improve services. A Youth Crime Plan was subsequently developed by the council in partnership with the Safeguarding Children Board and Safer Islington Partnership. This plan is consistent with the council's Early Intervention and Help Strategy, which recognises that it is more effective to intervene earlier by supporting families, before needs escalate and issues become entrenched. The Children's Services Scrutiny Committee previously carried out a review of the council's early help services and made recommendations to develop them further. Work has also been carried out to transform the Youth Offending Service, young people's mental health services and youth employment services. In 2016/17 the council allocated an extra £500,000 for targeted support for young people most at risk of turning to gangs and crime.

2.5 Islington considers young people's involvement in gangs to be a safeguarding issue; whereas some boroughs only consider gang activity from a criminal perspective. Islington's overall approach is to build resilience in adolescents, to support them in making the right choices, and to improve their outcomes. The Committee welcomes the council's sustained focus on improving services for vulnerable young people, however considers that there is scope for further improvement.

Promoting joined up working between council services and partners

2.6 Children's Services provide and commission numerous services for vulnerable young people, the majority of which fall under either the Safeguarding and Family Support directorate, or the Youth and Communities directorate.

2.7 The Safeguarding and Family Support directorate includes early help and family support services, the 'front door service' which provides a single referral point for the council's services for vulnerable young people, Children in Need social work teams, Looked After Children social work teams, the 'Independent Futures' care leavers service, fostering and adoption services, and safeguarding and quality assurance teams.

2.8 The Youth and Community Services directorate was established in 2016 to align the early intervention and prevention of youth crime alongside safeguarding and family support services. The directorate includes the Youth Offending Service, the 'Targeted Youth Team' which carries out community outreach work with young people at risk of offending, the Integrated Gangs Team which works with the Police to offer support to those involved in gang activity, play and youth services, and the council's three youth hubs.

2.9 The Committee considered a number of case studies related to vulnerable adolescents and their families accessing a range of support services. Officers explained how the council's services work to minimise the risks to vulnerable adolescents, and as a result help young people and their families to build resilience, improve school attendance and attainment, cease gang involvement, reduce offending, secure employment, develop confidence and personal and social skills, engage with health services, reduce substance misuse, and achieve other positive outcomes. The Committee reviewed how different services operate in considerable detail.

2.10 Although the Committee was satisfied that a consistent and joined up approach was being taken by Children's Services, young people and their families also reply on a range of other local services. These may be other services provided by Islington Council, such as housing services or benefits assessment, or services provided by partners, including the Police, Schools, NHS, and the voluntary sector. Although Children's Services already engage with all of these partners, the Committee would welcome a greater strategic join up between these services and Children's Services, particularly on issues affecting the most vulnerable young people.

2.11 During the review officers commented that both GPs and schools could be more effective in referring vulnerable young people to support services at an earlier stage. Specific actions to support this are set out elsewhere in this report. However, it is suggested that further join up across services and partner organisations would foster a more consistent and holistic approach, and may in turn improve outcomes for vulnerable adolescents. Having a shared vision and priorities is key to this; and for this reason, it is recommended that a borough-wide pledge to support vulnerable young people is developed. This pledge should be owned at Chief Executive level to ensure that all council services contribute to the delivery of the pledge.

2.12 **A borough-wide pledge to support vulnerable young people should be developed by Summer 2018. Ownership of this pledge at Chief Executive level will help support accountability cross the council. All council services should commit to working collaboratively to reduce the risks to young people and improve their wellbeing. Partner**

organisations should also be encouraged to commit to the pledge. This would assist in developing more joined up early intervention approaches.

2.13 It is important that the delivery of the pledge is monitored to ensure that all services are working together in the best interests of vulnerable young people. Rather than task an individual or group with monitoring the pledge, it is recommended that delivery and monitoring should be incorporated into the terms of reference of all relevant multi-agency forums. This approach would allow services and partner organisations to hold each other to account without significantly increasing the burdens on services. Members of the Children's Services Scrutiny Committee could be invited to attend relevant meetings where delivery of the pledge will be reviewed to provide democratic oversight and scrutiny.

2.14 The Committee also considers that it is important for young people to monitor the delivery of the pledge. Young people have valuable insights into the reality of service delivery and it is essential that their voices are heard. The Committee received evidence from Simone Headley, Chair of the Children's Active Involvement Service (CAIS) Council, and visited the CAIS Council to discuss their views on council services. The CAIS Council is open to all young people who are looked after or who have a social worker, and regularly provides feedback on services through the Corporate Parenting Board and other forums. Simone Headley commented that she was keen to keep senior officers "on their toes" and make sure they were listening to young people.

2.15 Young people should have a key role in holding services to account. This would not only help to improve services, but also help to develop the skills of the young people participating the process. The Committee recommends that both the CAIS Council and the Youth Council should carry out an annual review of how the pledge is being delivered and report their findings to the Chief Executive.

2.16 **It is suggested that the delivery of the pledge should be incorporated into the terms of reference and work plans of all relevant multi-agency forums. These forums should monitor delivery of the pledge through their work. A member of the Children's Services Scrutiny Committee should be invited to observe relevant meetings. In addition, the Youth Council and CAIS should be invited to undertake an annual review of the effectiveness of the Pledge and report their findings back to the Chief Executive.**

Working differently to achieve the best outcomes for vulnerable adolescents

2.17 The Committee received evidence on the challenges faced by the council in providing effective services for vulnerable adolescents. Officers commented that the borough's administrative boundaries presented certain challenges. Although the council engages with young people on Islington estates, holds events in local youth hubs, and has a positive working relationship with the Police's local Safer Neighbourhood Teams, it was noted that some vulnerable young people from Islington frequently gather outside the borough boundary in Wood Green, Kings Cross, and the West End. The council is not able to target interventions in these areas, which makes it more difficult to engage with these young people.

2.18 The Committee also noted that traditional safeguarding approaches may not be wholly relevant to the issues faced by vulnerable adolescents. Traditional social work approaches are based on safeguarding children within a family; they work with young people and their parents on an individual basis, with interventions related to what happens within the family home. Whilst this is very effective for some vulnerable adolescents, this approach does not adequately address the risks to vulnerable adolescents in the community. Young people are not only influenced by what happens at home, but what happens in their peer group. Family based approaches only have limited relevance to, for example, a young person being exploited by a gang, or peer to peer child sexual exploitation. Parents have little influence over these risks.

2.19 The Committee received evidence on ‘contextual safeguarding’, a new approach being trialled in the London Borough of Hackney through government innovation funding. This new approach recognises the need to protect children from risks outside of the home; from peer groups and social media, and the community risks in their neighbourhoods and schools. The approach seeks to work in partnership with organisations that would not normally be involved in safeguarding, such as transport providers, local businesses, and fast food restaurants. The approach recognises that peer relationships are increasingly influential during adolescence, and these relationships are shaped by the local context of where they develop. Targeting interventions outside of the family home provides a more holistic safeguarding approach, in which children are protected in the places they are most vulnerable.

2.20 The Committee is supportive of contextual safeguarding approaches, however notes that current statutory frameworks are based on traditional family-based approaches. For this reason it is not possible for the council to fully implement contextual safeguarding approaches at present. However, the Committee considers that a cross-borough approach to safeguarding is needed, which makes use of contextual safeguarding methods to protect vulnerable young people across London. It is recommended that Islington Council work with other boroughs and key agencies such as the Police to develop such an approach as far as possible within the current statutory framework.

2.21 **To foster a more effective and joined-up approach to safeguarding across London, Children’s Services should seek to work with neighbouring boroughs and other agencies to develop a contextual safeguarding approach. This approach is focused on reducing risks and vulnerabilities and promoting safeguarding by intervening in the social environments experienced by young people, rather than focusing interventions on individuals. As part of this work, the council should lead on the development of protocols across borders with neighbouring local authorities focusing on risk management and the sharing of good practice.**

2.22 The Committee also received evidence on a new approach to working with young people in schools and other settings. Islington Council is currently delivering a project in partnership with Islington Clinical Commissioning Group and Whittington Health, which is seeking to implement trauma informed approaches in primary schools. This ‘ARC Pilot Project’ recognises that young people are affected by trauma; this might include physical, emotional or sexual abuse; physical or emotional neglect, or ‘household dysfunction’ such as domestic violence, substance misuse, mental illness, an incarcerated relative, or divorce. Experiences of trauma can lead to children developing coping strategies which may express as distressing behaviours, such as provoking conflict or avoiding seeking help. As a result, children who have experienced trauma may be under-developed in areas which are not useful to coping with trauma. For example, young children who have experienced trauma may have difficulty in sharing, problem solving, sustaining attention, seeking help, forming relationships, and managing emotions.

2.23 The pilot project was working with teachers and others working with young children to help them identify signs of trauma and target support at vulnerable young people who need it. This could include taking different approaches to managing behaviour in the classroom, or making referrals to support services as appropriate. It was suggested that those who have experienced trauma were more likely to have poorer outcomes, or develop vulnerabilities including mental health issues.

2.24 Whilst the results of the pilot project have not yet been evaluated, the Committee is supportive of trauma informed approaches, and considers that this work has significant potential to support vulnerable young people from an early age. The Committee suggests that these approaches, and related screening tools for vulnerabilities, should be adopted more widely by schools. Engagement with the Community of Schools on this would be beneficial.

2.25 **Subject to the results of the trauma-informed approaches pilot, Children's Services should work with the Community of Schools to encourage schools to engage with these approaches and adopt related screening tools. This may assist in identifying a range of issues, including the diagnosis of mental health issues, at a much earlier age. The five schools engaging in the ARC pilot project should be asked to support in cascading this approach.**

2.26 There may be learning from the trauma informed approaches pilot which would benefit all professionals working with young people. To ensure this learning is shared as widely as possible, it is suggested that any relevant information should be incorporated into existing training provided through the Islington Safeguarding Children Board. It is hoped that this will assist professionals in identifying vulnerabilities and increase the number of referrals to support services.

2.27 **A trauma-informed approach to working with young people should be embedded in multi-agency training through a review of the Safeguarding Children Board training offer.**

Working with the Police to facilitate earlier intervention

2.28 The Committee received evidence on the close working relationship between Children's Services and the Police. The Committee welcomes that key agencies are working together through the Integrated Gangs Team, which includes staff from the council, Police, the Probation Service, the NHS, Victim Support, and others. The Police also engage in various multi-agency forums focused on safeguarding vulnerable young people, including the Islington Safeguarding Children Board. A sub-group of the Safeguarding Children Board has been formed to focus on the exploitation of young people, and this is chaired by the Police's safeguarding lead. This work makes a positive contribution to safeguarding in the borough, however, the Committee suggests that more could be done by both the council and the Police to ensure even earlier intervention for vulnerable young people.

2.29 Officers reported that domestic abuse and violence is a key factor experienced or witnessed by vulnerable adolescents. Officers suggested that around 60% of the most vulnerable adolescents had been affected by domestic abuse. The Committee noted that this is a sensitive topic and acknowledged the difficulties associated with addressing domestic violence issues; some perpetrators of domestic violence are very effective in controlling and coercing their victims, and some victims of domestic violence will not seek help out of fear.

2.30 The council and Police work in partnership to provide services for both victims and perpetrators of domestic violence. This work is informed by the multi-agency Violence against Women and Girls (VAWG) Strategy. Services include confidential drop in services and targeted interventions. Officers advised that there have been a number of local success stories where victims have left their abusive partner, perpetrators have changed their behaviour and formed healthy relationships, and vulnerable young people are protected. Whilst this work is welcomed, the Committee would support stronger and earlier interventions on domestic violence and abuse from both the council and the Police, given the high proportion of vulnerable adolescents being affected by domestic violence and abuse.

2.31 The Committee would also support further work in schools to support young people affected by domestic violence and abuse. Operation Encompass is a national partnership between the Police and Education. Participating boroughs establish processes for the Police to report to schools the next day if a young person has been exposed to or witnessed domestic abuse the previous evening. This information is passed to a responsible person at the school who can then arrange support as required. The Committee would support Islington participating in Operation Encompass. The Safeguarding Children Board may be best placed to lead on the implementation of the partnership.

2.32 **A high number of vulnerable adolescents have experienced or witnessed domestic abuse earlier in their lives. It is crucial that these young people receive support at the earliest possible opportunity. It is recommended that the council and police work together to develop stronger and earlier interventions on domestic abuse. This work should include the development of Operation Encompass in schools and a focus on partnership work through Islington Safeguarding Children Board.**

2.33 The Committee considers that there are further ways in which the Police could strengthen their partnership work with schools. The Police may hold useful information on young people which, if shared with schools and the local authority, could help to target support and interventions at an earlier stage. For example, Safer Neighbourhood Teams may have useful intelligence on young people at risk of gang activity. The information held may not be related to a particular crime, but local police officers may know, for example, which young people have been involved in anti-social behavior the previous evening, or who has been socialising with known gang members. The Committee noted that a young person's activity in a gang tends to escalate over time; young adolescents my start their gang involvement as a drug mule, before progressing to serious youth violence. It is important to engage with these vulnerable children as early as possible, before their gang involvement becomes entrenched. Greater use of Police intelligence may help in targeting this engagement.

2.34 **Children's Services should review if greater information can be shared between agencies to develop a more joined up approach to working with vulnerable adolescents. The Council should work with Police to ensure that lower level non-criminal concerns about young people are reported to the school via the Safer Schools Officer, so that young people's behaviour can be monitored and they can be referred to appropriate support services as appropriate.**

Making the most of existing resources

2.35 The Committee is acutely aware of the financial constraints on local authorities, schools, the Police, and the wider public sector. Resources to invest in new or enhanced services to support vulnerable adolescents are increasingly limited. It is essential that all partners involved in safeguarding children make the best use of existing resources.

2.36 The Committee received evidence on the Safer Schools offer provided by the Metropolitan Police. In Islington, every secondary school is assigned a Safer Schools Officer. This is a named Police Officer who will work in close partnership with the school, providing advice to pupils and staff on personal safety, crime prevention, safeguarding issues, drug awareness, exploitation, hate crime, knife crime, and domestic abuse. Although it was not possible to objectively measure the impact of Safer Schools officers, the sessions and advice provided was tailored to the needs of each school, and the project was intended to reduce the risks to young people and offending rates.

2.37 The Police advised the Committee that Safer Schools officers were being underused in Islington, and noted that Islington currently received a higher resource level than many other London boroughs, some of which only had four Safer Schools officers covering an entire borough. The Police commented that if Islington schools did not make greater use of Safer Schools officers then resource levels would have to be reviewed. The Committee considers that Safer Schools officers provide a valuable service and suggests that the benefits and opportunities they provide should be promoted through the Community of Schools.

2.38 **The Committee considers that greater use could be made of Safer Schools officers. The promotion of Safer Schools officers and their role in safeguarding children should be reiterated through the Islington Community of Schools.**

2.39 The Committee received evidence on how the community and voluntary sector supports vulnerable adolescents. The Committee received a presentation on the work of Arsenal in the Community. Although the organisation delivers activities through the medium of football, the focus of the organisation is on education, employment, and reducing youth crime. The organisation received funding from MOPAC, the Home Office and Sport England to deliver projects, and the effectiveness of its work was evaluated through key performance indicators. The organisation engaged with 5,700 participants a week through a range of short-term and long-term programmes. It was commented that long term approaches were most effective for vulnerable adolescents. These allowed workers to build relationships with young people; workers could then recognise when young people were struggling, and also when they were most receptive to support and open to changing their behaviour.

2.40 The Committee also received a presentation on the work of Abianda, a small social enterprise that works with young women affected by gangs and the professionals that support them. Abianda provided targeted services and bespoke projects for these young women, working with them on a one-to-one or small group basis. The organisation's work includes the Star Project, which explores issues such as healthy relationships, violence and exploitation; the Young Trainer Programme, which trains young women affected by gangs to become young trainers who can engage with professionals and help them to tailor their services; and the 'Be Your Own Boss' project, run in partnership with the London Village Network, which provides advice and support to young women wanting to start their own business. Abianda's work was focused around solution-based therapies, and all services were non-judgemental; they focused on the young woman's strengths and her future. Young women did not have to disclose any information about their relationships, associates or past traumas if they did not feel comfortable doing so. It was commented that this approach tended to allow young women to build relationships quickly with their support worker, even if the young woman had a history of non-engagement with support services. The organisation was currently working with 25 high-risk young women in Islington. Abianda hoped to develop services for younger girls as a form of early intervention, however this would require additional funding.

2.41 The Committee welcomes the work of the community and voluntary sector in supporting vulnerable adolescents. These organisations provide valuable services and are able to work with young people in a way that local agencies are not able to. Young people can face stigma when engaging with council services, health services, or the Police. For this reason, young people are more likely to engage with support organisations based in their community. The Committee is encouraged that this is recognised in the commissioning of services for young people, and that the council is working closely with voluntary sector organisations that deliver innovative and high quality support programmes.

2.42 The Committee believes that there is a great deal of potential in the local community and voluntary sector, and suggests that working even closer with the sector could assist in safeguarding and supporting vulnerable young people. Engaging with the sector on the council's priorities and early intervention approach would be a valuable exercise, and may result in greater alignment between council priorities and the priorities of the sector. It is also thought that aligning grant funding to these priorities may encourage a greater join up between council services and the community and voluntary sector. This could result in a more coherent approach to working with vulnerable young people across the borough.

2.43 **The council should ensure its strategic and commissioning priorities for vulnerable adolescents are shared with the voluntary and community sector and that priorities between the council and voluntary and community sector organisations are aligned. This could include the alignment of grant funding to these priorities.**

2.44 The Committee notes that some smaller community and voluntary sector organisations may be keen to work with the council on projects to support vulnerable young people, but need help in developing their approach. Developing closer relationships with these organisations may assist in generating referrals to the council, normalising accessing support services, and help to ease transitions between voluntary sector services and the council's support services.

2.45 **Children's Services should continue to work closely with voluntary and community sector organisations and develop these relationships further as appropriate. This may assist in generating referrals, normalise accessing support, and help to ease transitions between services.**

Improving communication with young people and professionals

2.46 The Committee considered the importance of communicating effectively with young people. There are a range of support services available to vulnerable adolescents, and it is crucial that young people are signposted to these services successfully.

2.47 The Committee visited the CAIS Council to discuss young people's views on council services. It was commented that some young people working with CAIS did not know about all of the services available to them. For example, a regular drop-in health clinic was held for these young people, however not all of those eligible were aware of this. It was commented that young people working with CAIS were provided with a printed booklet of services. The young people wanted to be able to find out about services in a more engaging way, and had recommended through the Corporate Parenting Board than an app be developed. The young people wanted the app to contain key information which could be updated regularly, and send notifications about upcoming events and drop-in sessions. Officers commented that progress on the development of the app had been slow due to technical and contractual issues.

2.48 The Committee considers that an app/website would be useful, not only for young people working with CAIS, but for all young people in the borough. Witnesses providing evidence to the Committee commented on the difficulty of communicating the range of services available to marginalised young people, particularly to those who did not access services at Islington's youth hubs. Abianda had received feedback from gang affected young women that they did not know there were services available to support them.

2.49 It is thought that a young person's app/website could communicate targeted information about support services, events, health and wellbeing messages, and other advice and guidance for young people, particularly vulnerable young people. Although it is suggested that the council lead on this, the app/website could also include useful information from the Police, NHS, voluntary sector, and others. Any app/website developed would need to be promoted regularly through schools and social media.

2.50 **The council should work to improve its communications to young people. The Council should lead on the development of a multi-purpose young people's app/website to ensure a wider reach for communicating targeted messages and information about health and wellbeing and support services.**

2.51 The CAIS Council also reported that young people were frustrated at not not being able to contact their social worker at short notice. The CAIS Council understood that social workers had a caseload of around 20 young people and were generally not free for unscheduled meetings or calls, however commented that the use of instant messaging would be a good service development and provide them with a faster response. Some young people knew they could email their social worker, but the CAIS Council highlighted that this was not a form of communication widely used by children and younger adolescents. There was a duty social worker available for short notice appointments, but young people emphasised that they did not have a relationship with this individual and wanted to be able to talk to their own social worker, who knew and understood their issues. The Committee would support allowing young people to contact their social worker through instant messaging, subject to all necessary safeguarding and data security criteria being met.

2.52 **Children's Services should review the feasibility of allowing young people to contact their social worker through instant messaging.**

2.53 It is suggested that services could be better promoted to professionals working with young people also. A directory of services is available on the council's website; however, witnesses queried the effectiveness of this. Both Arsenal in the Community and Abianda commented that their services were sometimes misunderstood by professionals, and this resulted in young people having different expectations of their services. The directory of services should be reviewed to ensure that it clearly communicates how a service is able to support a young person; this could include details of the programmes available and the methods they use alongside eligibility criteria. This would support professionals in judging whether a referral is appropriate or not.

2.54 It is also important that the directory is proactively promoted to all relevant professionals working with young people. The Committee suggests that the directory should be promoted through a series of communications about how to use it effectively; and if necessary officers could visit professional network meetings to discuss its use with colleagues in other sectors, including education and health. The directory could also be promoted through relevant safeguarding training.

2.55 **The council should review its directory of services and ensure it is proactively promoted to professionals in the health, education, and voluntary and community sectors to raise awareness and understanding of the range of support services available to vulnerable adolescents.**

Other findings

2.56 Members of the CAIS Council suggested that services for young people could be more flexible and accessible. One care leaver commented that she was unable to access certain support services as she worked full time and the services were only available during standard office hours, Monday to Friday. It was thought that other young people may be in a similar position, or have other reasons why they are not able to access services during usual hours. For this reason, it is suggested that it may be appropriate to provide evening and weekend services if there is sufficient demand from young people. This would need to be reviewed on a service-by-service basis.

2.57 **The council should review if support services for young people are sufficiently flexible and accessible, and should consider the appropriateness and feasibility of providing evening and weekend support services, if such services are not already available.**

2.58 Evidence received by the Committee highlighted a number of positive examples of services listening and responding to the views of children and young people. The Youth Council has an active role in developing and reviewing services. Young people accessing Children in Need services are asked about their views and experiences, which inform targeted interventions with their parents. Senior officers regularly engage with the CAIS Council and officers suggested that this resulted in Islington providing some of the most comprehensive services for looked after children in London. Young people have been consulted to co-design future CAMHS services. Young people regularly sit on staff interview panels to ensure that the child's voice is reflected in the recruitment of relevant staff. The Council had established the Fair Futures Commission, which worked closely with young people and included young commissioners. The Commission had made several recommendations to the council and others on how to improve services for young people.

2.59 Of course, it is not possible to implement all suggestions made by young people. For example, it was highlighted that some young people were keen to self-refer to support services, however officers thought that this would not allow for the effective triaging of support. There was a concern that if access to certain services was not managed effectively then services could become overwhelmed. The Committee appreciates these concerns, welcomes that services proactively seek the views of young people, and is satisfied that services are positively responding to young people's feedback when possible.

3. Conclusions

3.1 Overall the Committee was impressed with the wide range of support services available for vulnerable adolescents. The Committee considered a number of examples of different services and agencies working together to provide co-ordinated services for the benefit of young people. It is clear that the council and its partners recognise that providing joined up services is the best approach to supporting vulnerable young people. However, further improvements could be made to improve the effectiveness of services.

3.2 14 recommendations have been made in response to the evidence received. These are related to a greater strategic join-up between services; working differently by adopting new practices, such as trauma informed and contextual safeguarding approaches; closer work with the Police around domestic violence and the sharing of intelligence; making the most of existing resources; and communicating more effectively with young people and the professionals that support them.

3.3 The Committee would like to thank all the witnesses that gave evidence in relation to the review. The Executive is asked to endorse the Committee's recommendations.

APPENDIX A

SCRUTINY INITIATION DOCUMENT (SID)
Title: Co-ordinated and joined up services for vulnerable adolescents
Scrutiny Review Committee: Children's Services Scrutiny Committee
Directors leading the review: Lisa Arthey, Director of Youth and Communities Finola Culbert, Director of Safeguarding and Family Support
Lead officers: Catherine Briody, Head of Youth and Community Services Laura Eden, Head of Service – Safeguarding and Quality Assurance
Overall aim: To review how effective the council is in providing joined up services; and to ensure that there are effective processes and practices that ensure young people are involved in all aspects of their support and intervention
Objectives of the review: • To further understand the current and future risks and challenges faced by our young people who are vulnerable and how the council is continually responding to these in Islington. • To evaluate how the views and experiences of vulnerable adolescents are considered when planning and delivering services. • To assess how the current transition arrangements for vulnerable adolescents between early help, targeted and specialist services are continuously effective in providing a seamless support and intervention service/approach. • To assess if the support available to vulnerable adolescents from council services is sufficient, and how other support networks in the family, community, and peer groups can be developed to support further. • To explore the support network of young people within the family, community and friendships, and how they can support council services for vulnerable adolescents to reach their full potential. • To consider the effectiveness of partnership and integrated arrangements that the council has, if these achieve better outcomes, and to consider if further join up operationally and strategically would assist.
How is the review to be carried out? <u>Scope of the review</u> The review will focus on: • vulnerable adolescents who are missing from home, care, or education; • young people aged 10 to 13 years (but not exclusively); • the issues faced by vulnerable young adults and what services or actions would have helped them as younger adolescents; • the 'child's voice' and how the council ensures that services for vulnerable adolescents are tailored to their specific needs; • the specific local causes of vulnerability.

Types of evidence
 • Evidence from officers across Children's Services • Evidence from partner organisations that work closely with vulnerable adolescents • Visits to services, to enable the committee to interview young people and front-line staff • Evidence from other local authorities which demonstrate best practice in terms of services for vulnerable adolescents and integrated and joined up services • Documentary evidence on young people's vulnerabilities, best practice, and service performance.
Additional information: For the purposes of this scrutiny review, adolescents are young people aged from the onset of puberty to 19 years. Focus will be given to young people aged 10-13, as this is a crucial age at which they transition from young people to teenagers and change schools. In carrying out the review the committee will consider equalities implications and resident impacts identified by witnesses. The Executive is required to have due regard to these, and any other relevant implications, when responding to the review recommendations.

Programme	
Key output:	To be submitted to Committee on:
1. Scrutiny Initiation Document	19 September 2017
2. Draft Recommendations	20 February 2018
3. Final Report	20 March 2018

APPENDIX B

WITNESS EVIDENCE PLAN

Aim:

To review how effectively the council is in providing joined up services for Adolescents; and to ensure that there are effective processes and practices that enable young people to be involved in all aspects of their support and intervention

Scope of the review:

- The changing vulnerabilities and risks identified by the young people themselves and professionals working in Islington
- The current services provided to vulnerable adolescents in Islington
- The young person's pathway between preventative, early help and specialist services and how successfully this is navigated.
- A closer look at the engagement with young people across all services, and how effective this is in ensuring the voice of the young person is heard and acted upon.
- Different models of service delivery, including multi-disciplinary and wrap-around services, and exploration what works best for the young person in achieving change

Theme	Related SID Objective
From risk to resilience	**SID Objective 1:** To further understand the current and future challenges and risks faced by our young people who are vulnerable and how the council is continually responding to these in Islington.
The network of support for vulnerable adolescents	**SID Objective 3:** To assess how the current transition arrangements for vulnerable adolescents between early help, targeted and specialist services are continuously effective in providing a seamless support and intervention service/approach. **SID Objective 4:** To assess if the support available to vulnerable adolescents from council services is sufficient across the age range and demographic of the borough **SID Objective 5:** To explore the support network of young people within the family, community and friendships, and how they can support council services for vulnerable adolescents to reach their full potential.
Working collaboratively with adolescents, across the council and with partners	**SID Objective 2:** To evaluate how the views and experiences of vulnerable adolescents are considered when planning and delivering services. **SID Objective 6:** To consider the effectiveness of partnership and integrated arrangements that the council has, if these achieve better outcomes, and to consider if further join up operationally and strategically would assist.

Suggested Work programme

Given the breadth of the subject area chosen, the committee has identified a number of areas for the review to focus on. These are:

- vulnerable adolescents who are missing from home, care, or education;
- young people aged 10 to 13 years (but not exclusively);
- the issues faced by vulnerable young adults and what services or actions would have helped them as younger adolescents;
- the 'child's voice' and how the council ensures that services for vulnerable adolescents are tailored to their specific needs;
- the specific local causes of vulnerability.

1. Witnesses

Tuesday 19 September: Witnesses	
Who / Organisation	**Area of focus**
• Lisa Arthey, Service Director of Youth and Community Services, • Catherine Briody, Head of Youth and Community Services • Laura Eden, Head of Safeguarding and Quality Assurance	Scene-setting / introduction to vulnerable adolescents and what is currently in place to support and work with this age group.

<table>
<tr><th colspan="2">Monday 30 October: Witnesses</th></tr>
<tr><th>Who / Organisation</th><th>Area of focus – Preventative services</th></tr>
<tr><td>• Finola Culbert, Service Director of Safeguarding and Family Support
• Lisa Arthey, Service Director of Youth and Community Services</td><td>Overview of how services for vulnerable adolescents are structured.</td></tr>
<tr><td>• Evidence from a young person: Simone Headley,
Chair of the In Care Council.</td><td>A young person to share their experiences and give their views on council services</td></tr>
<tr><td rowspan="5">• Inspector Kier Newman – Police representative for Safer Schools and Youth Engagement
• Freddie Hudson – Community Manager, Arsenal in the Community
• Abi Billinghurst - Founder and Director of ABIANDA
• Sheron Hosking – CAMHS, Head of Children's Joint Health Commissioning</td><td>Services provided and/or procured</td></tr>
<tr><td>Involvement of young people in planning/commissioning/reviewing services or support</td></tr>
<tr><td>Use of other support networks - family, community, and peer groups</td></tr>
<tr><td>Different models of service delivery and what works best for delivering change</td></tr>
<tr><td>How effective are these services? How can we measure if they are effective or not? Are services joined up?</td></tr>
</table>

Documentary evidence:

- Early Intervention and Help Strategy for Islington, 2015-2025
- Mapping of preventative services / resources in the borough for adolescents
- Working together to safeguard young people in Islington - Youth Crime Plan, 2017-20
- Recommendations & Executive Summary of Policy and Performance Scrutiny Committee report on Knife Crime, 2015/16
- CAHMS transformation plan

Tuesday 28 November: Witnesses	
Who / Organisation	**Area of focus – Early Help & Specialist Services Part 1** *Instability in the family / anti-social and criminal behaviours*
• Curtis Ashton – Head of Targeted Youth Services and Youth Offending Service • Abi Onaboye –Head of Early Help Children Skills and Employment Services • Holly Toft – Head of Play, Youth and Post-16 • Helen Cameron – Health and Wellbeing Manager (Trauma Informed Practice)	Services provided and/or procured - Step up from early help / step down from specialist
	How the child's voice can be heard throughout service commissioning and delivery.
	Involvement of young people in planning / commissioning / reviewing services or support where risk behaviours are identified
	Use of other support networks - family, community, and peer groups and how they support the young person
	How effective are these services? How can we measure if they are effective or not? Are services joined up?

Tuesday 9 January: Witnesses	
Who / Organisation	**Area of focus – Early Help & Specialist Services Part 2** *Abuse and neglect / missing from home, care or education* *Child Sexual Exploitation / Edge of care work*
• Laura Eden – Head of Safeguarding and Quality Assurance • Naomi Bannister – CSE lead • Sarah Whelan – Safeguarding Gangs Lead for Children, Employment and Skills • Gabriella Di-Sciullo – Head of Admissions & Children Out of School	Services provided and/or procured - Step up from early help and how to support where risk is identified that impacts on the young person's level of vulnerability
	How the child's voice can be heard throughout service commissioning and delivery.
	Involvement of young people in planning / commissioning / reviewing services and how this translates to actions
	Use of other support networks - family, community, and peer groups
	How effective are these services? How can we measure if they are effective or not? Are services joined up?

Documentary evidence:

- Islington Safeguarding Gang Protocol and procedure 2016

Tuesday 20 February: Concluding Discussion and Draft Recommendations for approval	
Who/Organisation	**Area of focus – Conclusions**
• Lisa Arthey – Service Director, Youth and Community Services • Finola Culbert – Service Director, Safeguarding and Family Support	To assist the Committee in forming conclusions and to provide updates on any outstanding matters. To provide comparative information on how other authorities deliver their services.

Documentary evidence:

- Briefing Note on Contextual Safeguarding

2. Visits

Visits			
Who	**Organisation/remit**	**Area of focus**	**When**
Young people: • CAIS representatives	Looked after children engaging in the CAIS Council	What works or could work better for them re: - Support - Involvement in planning or reviewing services	February 2018

3. Report

- **20 February 2018:** Draft recommendations
- **20 March 2018:** Draft report

ISLINGTON

Environment & Regeneration
1 Cottage Road, London, N7 8TP

Report of: Executive Member for Environment and Transport

Executive	**Date: 19 April 18**	**Ward(s): ALL**

Delete as appropriate	~~Exempt~~	Non-exempt

SUBJECT: Thames Water, response to Burst Water Mains – Executive Member's response to the Policy and Performance Scrutiny Committee's recommendations

1. Synopsis

1.1 The Executive received a report on 28 September 2017 from the Policy and Performance Scrutiny Review Committee on Thames Water's response to Burst Water Mains. The Scrutiny report proposed 28 recommendations to address the following review objectives:

a) To understand the risks we face in Islington and Hackney, as a result of our aging water supply, including but not limited to those caused by climate change
b) To review Thames Water response to reducing those risks and their progress on investment in new infrastructure
c) To understand the impact of flooding on individual residents and businesses in the Angel and identify measures which could be taken to reduce the damage and disruption caused in the future and to liaise with other London Boroughs suffering similar incidents
d) To review the responses to flooding caused by water mains bursts by public bodies, by Thames Water and by private sector bodies, such as insurance companies, covering both the immediate emergency and longer term support
e) To recommend improvements to the long term prevention and short term response to flooding in Islington and Hackney in liaison with other London Boroughs suffering recent flooding incidents
f) To identify any similarities between the recent flood incidents across London Boroughs and to recommend improvements that can be made by Thames Water in order to minimise the threat of flooding in the future
g) To investigate the position of residents/businesses in respect of claims made to Thames Water for uninsured loss and compensation that have suffered as a result of the recent flooding

This report proposes the actions to be taken in response to the Thames Water scrutiny.

2. Recommendations

2.1 To welcome the findings of the Policy and Performance Scrutiny Review on Thames Water.

2.2 To agree the responses to the recommendations of the Policy and Performance Scrutiny as set out in section 4 of this report

2.3 To agree that officers report back on progress to the Committee in one years' time.

2.4 To note the responses being taken forward by Thames Water, GLA, TfL, Fire Brigade, OFWAT and the Police, in response to the Policy and Performance Scrutiny Committee's recommendations a-r, u-y and bb.

2.6 To note that no further progress is currently possible with the Policy and Performance Scrutiny Committee's recommendation z and aa.

2.7 To note that the Executive Member for Transport and Environment will continue to campaign to deliver the Policy and Performance Scrutiny Committee's recommendations s and t.

2.8 To note that a Project Board has been set up to drive progress and monitor milestones with respect to Scrutiny Committee's recommendations.

3. Background

3.1 Following the water mains burst at the Angel on 4 December 2016, the Councils' Policy and Performance Scrutiny Committee commenced a review of flooding, its underlying causes, and the response by public services at the Angel and at other major bursts throughout London. The purpose was to:

- reduce the risk of future floods,
- better protect homes and businesses from flooding risk, and
- improve responses to future flooding situations.

3.2 Overall the Committee concluded that the response to the Thames Water burst at Angel and the general handling of burst water mains within Islington and Hackney is unacceptable. It recognised the causes of these bursts related to ageing infrastructure, climate change and the lack of ongoing investment by Thames water.

3.3 The Committee made 28 recommendations relating to the Review objectives, directed to both the Council and external organisations (Thames Water, GLA, TfL, Fire Brigade, Police, Water Services Regulation Authority (OFWAT))

3.4 Whilst the Committee concluded that it was the responsibility of a number of organisations, there were actions that we as the Council can take to help reduce the risk of flooding.

3.5 The final report of the Scrutiny Committee's was published in July 2017 and received by Executive at its meeting on 28 September 2017.

4. Response to the Scrutiny Committee Recommendations

4.1 **Recommendations (a) to (n) are directed to Thames Water**

<u>Committee Recommendation (a):</u>

That improved emergency response arrangements be instituted, these should include the following: Procedures for identifying major leaks in the Thames Water control room and directing emergency

response teams on site need to be more effective to ensure major trunk main bursts are dealt with more speedily.
Identifying information received more effectively, in order to assess whether the leak is a major trunk mains leak, and if this is the case, effective communication channels be put in place with the Fire Brigade and other appropriate partners for them to attend on site as quickly as possible.
Improving the provision and location of emergency response team arrangements, so that they are more accessible in the event of major trunk main bursts – this could necessitate a team located in a control centre in inner London – and that the possibility of a 'blue light' service from the Police be investigated where a major incident is declared – see recommendation (w) below.

A dedicated emergency response line be instituted, in order that the Public can report leaks directly to Thames Water, if they wish to do so. There should also be a dedicated 'emergency hotline' introduced for the Fire Brigade to call in the event of major burst main.
Developing with the Police, TfL, Fire Brigade and Local Authorities an effective communications strategy for informing the Public where leaks can be reported, and that such leaks should be reported as soon as possible, in order that appropriate action can be taken.

. Develop and publish performance and attendance standards, both in relation to major and minor pipe bursts.

Develop with the Fire Brigade, Police, TfL and Local Authorities an effective early warning system for residents at risk of flooding, so that when an incident occurs, the danger to residents can be reduced.

Response to recommendation (a)

After a series of bursts on their trunk water main network in 2016, Thames Water undertook an independent forensic analysis led by Paul Cuttill OBE, and following this report, they undertook a Trunk Main Strategic Review (Attached at Appendix 1). This review addresses all the recommendations in (a) except the recommendation for blue light services to assist with emergency attendance which can only be done on a case by case basis.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor implementation of the review and progress.

Committee Recommendation (b)

That improved technologies be investigated and be put in place to detect the likelihood of bursts on the major trunk mains in Islington, and in addition sensors be installed on the pipes in the major trunk mains in Islington, particularly Upper Street and Essex Road, with immediate effect.

Response to recommendation (b)

As a result of the Trunk Mains Strategic Review, Syrinix and Hydroguard monitoring sensor units have been installed as part of the water mains re-lining work on Upper Street, Islington High Street, Essex Road and Astey's Row. These monitors are now connected directly to Thames Water's control room and are monitored 24/7.

The Executive accepts this recommendation and the Public Realm Highways Team will continue to work with Thames Water to expand the installation of monitors across the borough.

Committee Recommendation (c)

That Thames Water, when submitting their case to OFWAT for their future 5 year investment plans, should prioritise the phased improvement of ageing Victorian pipe replacement on major trunk mains in Islington, this to be completed within a specified period to be determined and published by Thames Water, but we propose 15 years, given the problems that major bursts on these roads cause to businesses and residents. Any replacement programme should take account of any increase that may result in increased costs for customers. In the interim Thames Water should ensure that monitoring takes place to minimise the risk of future flooding.

Response to recommendation (c)

Thames Water have a duty to consult the Council on their 5-year investment plan. The Council will respond to the consultation and will ensure that the Scrutiny Committees' recommendations are incorporated in the response.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor the investment plan and report back

Committee Recommendation (d)

That relevant policies regarding clean up/insurance/compensation and goodwill payments should be properly communicated and most importantly be available on the company website. Policies should set out clearly what businesses and residents affected by flooding due to burst mains can expect. Compensation for inconvenience should be formally recognised and a corporate policy be established to ensure that this is fairly and consistently applied. This should cover goodwill payments, expenses and indirect business losses (e.g. from reduced footfall in a flooded area)

Response to recommendation (d)

As a result of the burst water main at Angel, Thames Water produced an information booklet, based on customer's experiences ('Putting things right' – attached at Appendix 2), laying out claimants' options following flooding and explaining the claims process. The draft booklet was consulted with Islington customers affected by flooding and further refinement were made, particularly in relation to clarity on insurance and goodwill payments.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (e)

That, given residents and businesses concern at the insensitive handling of some insurance claims, there should be improved communication with residents and businesses in dealing with insurers and the handling of claims (possibly by the provision of a laminated information sheet) following flooding incidents

Response to recommendation (e)

This is addressed through the new Thames Water customer booklet 'Putting things right' as detailed in response(d)

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (f)

That Thames Water should also issue guidance to businesses and properties on the remedial measures necessary, following flooding incidents, in order to ensure properties are properly dried out and residents and businesses can move back in to their premises as soon as possible

Response to recommendation (f)

This is addressed through the new Thames Water customer booklet 'Putting things right' as detailed in response(d)

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (g)

That Thames Water adopt a suitable communications policy, including the use of social media, in order to inform residents and businesses and other interested parties, of developments when leaks occur, and to give any appropriate information needed

Response to recommendation (g)

The Thames Water Trunk Mains Strategic Review addresses this recommendation through its new customer experience programme.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor the implementation of the programme.

Committee Recommendation (h)

That the Committee welcome Thames Water commitment to share with the Fire Brigade and the appropriate Local Authority, information on the location of the major trunk mains in the borough. This will assist, not only in major flooding situations, but in mapping GIS information on the Local Flood Risk Management strategy and afford the Council a better overview of the risks of flooding in the borough and to take any appropriate measures. Thames Water should also develop a GIS application that will enable staff and other partners to identify the level of risk that a major burst main will cause in order to inform staff responsible for handling and assessing incidents of flooding

Response to recommendation (h)

The Executive accepts this recommendation and the Public Realm Highways Team will monitor the implementation of the new GIS application.

Committee Recommendation (i)

That the Committee welcome Thames Water commitment to ensure businesses and residents are materially not worse off, as a result of the Upper Street flood. The Committee hope that relevant payments of compensation and other appropriate losses take place as soon as possible

Response to recommendation (i)

The Angel BID Working Group has been set up to address this recommendation and will continue to monitor Thames Water's actions to ensure that any adverse impacts on the Angel Flood victims are rectified.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (j)

That Thames Water work with the Angel BID and local businesses to organise a suitable programme of reopening events, including the provision of capital and revenue investment in the Camden Passage area, together with appropriate publicity, to ensure residents and visitors are aware that businesses are open for trading.

Response to recommendation (j)

The Angel BID Working Group and officers in Public Realm will continue to liaise with Thames Water to take forward community projects funded by Thames Water.

The Executive accepts this recommendation and the Public Realms Highways Team will monitor progress.

Committee Recommendation (k)

That Thames Water take account of resident's concerns, surrounding the security of premises in the aftermath of major flooding, and that such security measures should be improved in future – this should form part of a major incident protocol or standard operating procedure.

Response to recommendation (k)

Thames Water are developing an Emergency Management System which should address this recommendation.

The Executive accepts this recommendation and the Public Realms Highways Team will work with Thames Water on this system.

Committee Recommendation (l)

That the Committee welcome the findings of the Cuttill Review and be kept informed of progress of implementation of the recommendations and the Strategic Review that they are undertaking.

Response to recommendation (l)

The Executive accepts this recommendation and the Public Realm Highways Team will monitor progress and report back.

Committee Recommendation (m)

That Thames Water should reduce the number of customers affected by water mains bursts and publish the numbers of bursts that have occurred and a performance target for such bursts.

Response to recommendation (m)

This is addressed in the Thames Water Trunk Main Strategic Review.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (n)

That Thames Water, in conjunction with TfL, (and other public utilities), review the current arrangements for co-ordination of works, with a view to establishing a more effective means of collaboration across London. This should include sub-regional and borough-by-borough working, as appropriate.

Response to recommendation (n)

The Executive accepts this recommendation and the Public Realm Highways Team will work with Thames Water to review and improve current arrangements.

4.2 **Recommendations (o) to (u) are directed to the GLA, TfL and London Fire Brigade**

Committee Recommendation (o)

That TfL ensure, when future flooding incidents occur, that there is a better communication process in place to make the Public and businesses aware of diversions in place following such incident.

Response to recommendation (o):

This will be will be reviewed, tested and improved as part of future Emergency Planning exercises arranged by the Councils Emergency Planning Team through 2018.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (p)

That TfL, when planning major construction schemes, such as the Bridge works at Holloway Road and the gyratory scheme at Highbury Corner, should consult with other Public utilities and the Council to co-ordinate any works that are necessary, such as major trunks mains replacement, to minimise any future disruption to residents and road users – see also recommendation (n) above.

Response to recommendation (p):

The New Roads and Streetworks Act 1991 requires co-ordination of streetworks and the Council led coordination meetings should address this recommendation.

Executive accepts this recommendation. The Public Realm Highways Team will review the current arrangements.

Committee Recommendation (q)

That, in view of the fact that a bus driver first reported a minor leak at the site of the Upper Street burst at 3:57a.m. and that Thames Water had not been alerted to this leak until notified by the Fire Brigade at 5:07a.m., there should be an improved method of communication established between TfL, Police, Fire Brigade and the Council. (See recommendation (a) above). The delays in Thames Water responding to this situation led to Thames Water not being on site for some hours and this had exacerbated the devastation caused by the major trunk mains burst.

Response to recommendation (q)

This will be will be reviewed, tested and improved as part of future Emergency Planning exercises arranged by the Councils Emergency Planning Team through 2018.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (r)

That support be given to the case for the major investment in replacing ageing Victorian pipework in London on major trunk mains, and work with Thames Water and other public utilities take place, to ensure this is managed in a way that causes least disruption, for as short a time as possible, to residents, businesses and commuters

Response to recommendation (r):

The Public Realm Highways Team will lead on implementing workshops with Thames Water and TfL to gain an understanding of Thames Water's risk based approach to investment in its infrastructure and identify areas in Islington which may be at risk so that procedures can be put in place which are appropriate to the area.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (s)

That a Pan-London investigation be carried out on the frequency of leaks in London Boroughs, in order to establish the extent of the leaks, particularly major bursts, to strengthen the case for increased investment in the replacement of ageing pipes to OFWAT. Any recommendation should take account of the independent review undertaken on behalf of Thames Water into major bursts in London.

Response to recommendation (s)

The Executive Member for Environment and Transport will continue to campaign for and work towards the instigation of a Pan-London Investigation.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor.

Committee Recommendation (t)

That the Mayor, GLA and London Boroughs support the campaign for the Fire Brigade to become the statutory Emergency Response Service for flooding, as recommended in the Pitt review in 2008. This is in view of the recent major bursts resulting in severe flooding and given the fact that such occurrences are more likely in the future due to the ageing Victorian trunk mains network across London.

Response to recommendation (t)

The Executive Member for Environment and Transport will continue to campaign and work with the Mayor's Office to promote the changes necessary for the Fire Brigade to become the statutory Emergency Response Service for flooding.

The Executive accepts this recommendation and the Public Realm Highways Team will monitor

Committee Recommendation (u)

That the London Plan should include provision, when planning permission for basements is being requested, to ensure that a risk assessment is carried out prior to approval to ensure the risk to life of flooding is minimised

Response to recommendation (u)

The Council has adopted a Basement Development SPD which applies to any planning application for basement development. The SPD requires detailed site investigations to be undertaken, as well as providing design guidance on the depth and extent of basement development. Policy D9 of the draft London Plan suggests that boroughs should establish policies to address the negative impacts (particularly cumulative impacts) of basement development. However, the draft policy offers little detail on implementation. Islington's recent response to the Mayor's London Plan consultation has requested that the policy is expanded to require detailed investigation of impacts in line with the Council's own policy. We have also recommended (with reference to the Scrutiny Committee report) that the Mayor considers policies to ensure that the risk to life and livelihood from flooding is subject to a full and robust risk assessment prior to approval of any planning application involving basement development. The Executive Member for Environment and Transport will also take this forward.

4.3

The Executive accepts this recommendation and Public Realm Highways Team will monitor.

Recommendations (v) to (x) are directed to the Council

Committee Recommendation (v)

That the Council hold a stock of 350 sandbags, on an individual borough basis, and also investigate the provision of sandbags with neighbouring boroughs

Response to recommendation (v)

The Councils' Emergency Planning Team have taken responsibility for this and will work with the adjoining boroughs with whom we have a mutual aid agreement if incidents occur. A minimum stock of 350 sandbags is now available at the Councils' Vale Royal Depot.

The Executive accepts this recommendation.

Committee Recommendation (w)

That the Council involve public utilities with other partners in emergency planning sessions, including Thames Water, and that any non-attendance is recorded and reported to senior management within their respective organisations. This would result in increased liaison and information could be better co-ordinated and disseminated

Response to recommendation (w)

The Council invites public utilities to relevant emergency planning sessions and the Councils' Emergency Planning Team will ensure that any lack of attendance by utility companies at planning sessions is addressed through the relevant organisations at senior management level.

The Executive accepts this recommendation and Public Realm Highways Team will monitor.

Committee Recommendation (x)

That the Council compile a list of high rise blocks (over 6 metres) that will be vulnerable to loss of water in the event of a flooding situation. In addition, liaison should take place with Thames Water as to whether any situation of a reduction in water pressure is likely to impact on properties so that the Council can put in place contingency measures to supply water to residents

Response to recommendation (x)

The Councils Housing Team will work with Thames Water to address this recommendation.

4.4 The Executive accepts this recommendation and Public Realm Highways Team will monitor.

Recommendations (y) to (aa) are directed to OFWAT (The Water Services Regulation Authority).

Committee Recommendation (y)

That OFWAT ensure that in any future strategy that is agreed for the Thames Water 5 year investment plan, they prioritise ageing pipe replacement on major trunk mains in Islington to be completed within 15 years, and installation of new technologies to ensure that the risk of major flooding from major trunk mains is reduced.

Response to recommendation (y)

This recommendation is addressed in the OFWAT document "PR19 Delivering Water 2020: Our final methodology for the 2019 price review" (attached at Appendix 3). However, this is not specifically focused on Islington and provides no definitive timelines.

The Executive accepts this recommendation and Public Realm Highways Team will monitor.

Committee Recommendation (z)

That OFWAT ensure that Thames Water has adequate policies in place, in order that they can respond effectively in emergency situations and that their compensation policies, as a result of flooding, are clearly set out and easily accessible and that Thames Water deal with claims for compensation speedily and sympathetically

Response to recommendation (z)

This recommendation is also addressed in OFWAT's methodology for PR19 "Delivering Water 2020: Our final methodology for the 2019 price review"

In addition, OFWAT's "Resilience in the Round" document (attached at Appendix 4) challenges companies to consider how they can work with local partners to understand the impact of service disruptions and interactions with other wider services.

OFWAT does not have a specific statutory role in enforcing water companies to comply with their obligations under the Water Industry Act 1991 or to provide compensation for damage from water mains bursts. OFWAT have however, written to Thames Water to confirm that they remain committed to meeting and (as promised) going beyond their obligations to compensate customers affected by the trunk mains bursts, and will continue to push them to meet these.

Whilst the Executive notes that OFWAT cannot direct Thames Water to have robust policies in place to deal with flooding, the Public Realm Highways Team will nevertheless approach both OFWAT and Thames Water to understand the policy constraints with a view to refining them to address the recommendation.

The Executive notes this recommendation and Public Realm Highways Team will monitor

Committee Recommendation (aa)

That OFWAT should be given power to set targets for the number of people inconvenienced by water mains bursts per year/and or five-year period, (corresponding to the funding cycle) and a statutory compensation scheme covering inconvenience to customers be introduced

Response to recommendation (aa)

Executive acknowledges that OFWAT does not currently have the statutory powers to set targets. However, price controls are included in performance targets for companies, in the form of outcomes. OFWATs ongoing strategy is therefore for companies to work with their respective customers to set outcomes and targets that customers are willing to pay for.

4.5 Executive notes the recommendation, and the Council will continue to liaise with OFWAT as the situation develops.

Recommendation (bb) is the addressed to the Police

Committee Recommendation (bb)

That the Police, where there are major incidents of flooding, provide a 'blue light' service to Thames

Water emergency teams to enable them to reach the scene, as quickly as possible. Thames Water should ensure that emergency response teams are located in appropriate locations to enable this to be possible (see recommendation (a) above).

Response to recommendation (bb)

The Emergency Planning team will work with the Police to explore this recommendation.

The Executive accepts this recommendation and Public Realm Highways Team will monitor.

4.6 **Project Board**

The Council have set up a Project Board to drive progress and monitor milestones with respect to Scrutiny Committee's recommendations. Specifically, the Board will;

- Interrogate the project programme and review project progress against planned timescales and milestones;
- Provide a senior level steer on escalated issues and take decisions on matters that require a senior input;
- Provide monthly updates to the Executive Member for Transport and Environment
- Provide progress report to the Policy and Performance Committee in September 2018.

The Board's 'Terms of Reference' are attached at Appendix 5.

5 Implications

5.1 Financial Implications
The majority of the recommendations in this report do not have direct financial implications for the Council as they are the responsibility of other organisations or can be managed by existing budgets within the Emergency Planning service. If recommendations are taken forward there will be financial implications on the council, particularly with regard to recommendation (x) which will be quantified at the time.

5.2 Legal Implications
There are no specific legal implications arising out of this report. Legal advice and support will be provided as necessary regarding the implementation of the recommendations.

5.3 Environmental Implications
The recommendations in this report will have no adverse environmental impact.

5.4 Resident Impact Assessment
The Council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The Council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The Council must have due regard to the need to tackle prejudice and promote understanding.

The recommendations that require the Council to take action have been reviewed and no significant adverse impacts on residents have been identified.

<u>Appendices:</u>

Appendix 1 – Thames Water Trunk Main Strategic Review, 2 October 2017
Appendix 2 – Thames Water booklet “Putting Things Right”
Appendix 3 - PR19 Delivering Water 2020: Our final methodology for the 2019 price review
Appendix 4 - OFWAT’s “Resilience in the Round” document
Appendix 5 – Scrutiny Recommendations Project Board ‘Terms of Reference’

Background Papers – none.

Signed by:

11 April 2018

Executive Member for Environment and Transport Date

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Thames Water
Trunk Mains Strategic Review

Final Report

Date of issue: 2 October 2017

Table of contents

1 Executive Summary

We commissioned the Trunk Mains Forensic Review in mid-December 2016 as an independent review of the major burst / leak events that occurred in 2016. It covered the potential causes of the failures and our response, set in the context of our management framework to monitor, maintain and replace trunk mains.

We recognise how upsetting and disruptive these incidents were for our customers, and the very significant impact they had both at the time and since, particularly for people whose homes and businesses were flooded. We provided both immediate and longer term support and have been working with people to help them get their lives and businesses back to normal as quickly as possible.

This Trunk Mains Strategic Review report sets out the commitments we are making to reduce the risk of such events, and the distress and disruption they cause. The commitments have been drawn up in response to recommendations set out in the preceding Trunk Mains Forensic Review. Those recommendations have already been the subject of continuing discussions and meetings with the communities affected by the trunk main bursts of 2016, and a range of stakeholders, including their elected representatives in Parliament and London Boroughs. We have mapped the 80 recommendations in the Trunk Mains Forensic Review to 15 commitments set out in this report which we will deliver through an implementation phase over the next 18 months. Specifically;

- we have started work on 16 of the 80 Trunk Mains Forensic Review recommendations, each of which has been allocated to an accountable lead individual, and an implementation owner;
- 20 of the 80 Trunk Main Forensic Review recommendations are being addressed by business as usual activity or other programmes within Thames Water;
- 41 of the 80 Trunk Main Forensic Review recommendations are directly addressed by Trunk Main Strategic Review commitments and will be implemented through the trunk mains implementation phase though they may require some planning or, in some instances, further design work before implementation; and
- we have decided not to implement three of the Trunk Main Forensic Review recommendations at this time, and explain our reasons in this document.

We look forward to communicating and discussing the outcome of this review with affected communities, our customers more generally, their political representatives, Ofwat and other stakeholders. We recognise the importance of continuing the dialogue with them about the delivery of the commitments we have made. We are also committed to continuous learning from past and future trunk main burst events.

The Trunk Mains Forensic Review recognised that much of the trunk mains network was constructed in the early 19th century. A key recommendation was that there should be an 'intensive care' period for our Trunk Mains assets. We have interpreted this as the need for a period of focus across the end-to-end asset management lifecycle for our Water network assets. Through these two reviews, our work with communities and stakeholders, and the work to re-line and replace trunk mains that burst, we have had an intense focus on these assets since December 2016. We will continue this focus through the trunk mains implementation phase.

The trunk mains implementation phase will begin in earnest by October 2017. At its conclusion the changes and improvements that we have made will be continued as business as usual. The trunk mains implementation phase will:

- provide the focus and resource needed to implement the Trunk Mains Strategic Review commitments;

- satisfy the recommendation from the Trunk Mains Forensic Review; and
- provide the necessary end to end focus on trunk mains so that improvements are sustained.

We have set out a high level implementation plan for the trunk mains implementation phase, and it includes a number of pilot projects that will allow us to test our proposed improvements. Following these pilots we will revisit the commitments we have made in this report to confirm that we are implementing the right improvements for our customers and the business. We expect to conduct this review six months after the start of the trunk mains implementation phase. Significant improvement steps have already been taken and we have set aside additional money to support the trunk mains implementation phase. This is in addition to the dedicated budget for the re-lining of sections of burst trunk mains such as in Leigham Vale and Upper Street.

In the long term our strategy is to replace the trunk mains network, starting with those parts where the risk of a failure is greatest. Better information about our network and better risk models will help improve the detailed planning required. Our business plan for the period from 2020 onwards will be released for consultation in 2018 and will include options for a comprehensive long term programme of replacement.

The Trunk Mains Strategic Review is structured into five themes. We have made a total of 15 commitments across the five themes.

Theme 1 - Operating model: The operating model theme contains commitments that will improve the way in which the business is structured, the roles, accountabilities and responsibilities, and the governance to support this. The commitments in this theme build on work already done to develop and implement a ‘Single System Owner’ model for end to end asset management that is in line with international standards for asset management.

Theme 2 - Monitoring: The monitoring theme commitments will renew the trunk mains monitoring strategy, improve our use of monitoring data to proactively and reactively identify bursts, and achieve completion of the existing monitoring equipment installation programme.

Theme 3 - Asset information: The asset information theme commitments will improve the way that we collect, assure, view and analyse data on the trunk mains asset.

Theme 4 - Risk management: The risk management commitments will improve the way that we predict, model and understand the probability of a trunk mains burst and the consequence of such a burst.

Theme 5 - Event response: The event response commitments will develop and strengthen our incident and emergency management capability, including the operational response to containing the burst and repairing the trunk mains, customer communications and care, stakeholder engagement, and operational rotas and working patterns.

We are grateful for the support that Ofwat have given us in the direction and governance of the Trunk Mains Strategic Review report, including seconding their Principal Engineer to provide challenge and technical expertise through the Trunk Mains Strategic Review Steering Group.

We acknowledge that this is not the end of our learning process from the trunk main bursts in 2016, and we are committed to systematic changes that make it easier to identify and embed learning from past and future trunk main burst events. We are confident that the commitments in this report are deliverable, that they will improve our management of trunk mains, improve our response to trunk main bursts and reduce the impact of future bursts on our customers. We also recognise that due to the nature, age and use of these assets, it is inevitable that for the foreseeable future some trunk mains may continue to fail from time to time.

A high level programme and timescales to deliver the 15 commitments are presented in Table 1.

2 Introduction

2.1 Background to trunk mains

A trunk main is a classification given to larger diameter mains in a water transmission and distribution system. Historically our trunk mains were considered as those 12” diameter and greater in London and 10” and greater in Thames Valley. We are improving the classification of Trunk Mains to incorporate their function, focusing on the key mains that convey large volumes of water at high pressure from treatment works across our network to a number of service reservoirs.

Figure 1 - Modern trunk main

Figure 2 - Burst trunk main from the Upper Street event

We have over 3,200km of trunk mains. Approximately 2,000 km of these and their control mechanisms are in London, buried under busy streets, red routes and key third party assets. Much of the trunk mains network was constructed before 1900 using simple techniques, and fabricated in challenging environments with little or variable quality control. We currently experience an average of 310 trunk main bursts and leaks per year[1], of which we expect approximately 60 to be the result of failures on larger-diameter mains that are 18”/450mm and above (based on averages from the last 13 years[2]). Overall, the number of bursts in the entire network is running at about the same level as in 2015/16.

The planned investment in the AMP6 objectives[3] in the Thames Water Investment Strategy for Trunk Mains totalled £147m at 2012/13 prices. This included spending money on:

- expanding the monitoring of high consequence trunk mains from 5% to 8% of the trunk mains network by the end of AMP6;
- re-laying 45km of the highest consequence trunk mains. This replaces 1.2% of the overall network; and
- gathering information and building data models on trunk main condition and deterioration, in order to support the case for further investment in the next periodic review.

In March 2017 we committed to invest an additional £97m, over and above the budget in our Investment Strategy for Trunk Mains. This includes additional expenditure on the following:

- increased expenditure on re-lining trunk mains to include the trunk mains involved in recent bursts;
- additional condition surveys and monitoring equipment installation;
- trunk main focussed studies; and
- implementation of the Trunk Mains Strategic Review commitments.

[1] average visible leaks from the last 13 years, June (Regulatory) Return Period (”JR”) JR04 – JR16
[2] JR04-JR16
[3] Asset Management Planning period 6, from April 2015 to March 2020 inclusive

2.2 Summary of our overall response to the trunk mains bursts

In response to the eight high profile bursts that occurred between October and December 2016 we have implemented a staged programme to improve the service to customers both in the short-term (by identifying things we can do immediately) and in the longer term, by identifying appropriate levels of future investment. Specifically, this programme covers:

- **Our customer response**: We recognise how upsetting and disruptive these incidents were for our customers, and the very significant impact they had both at the time and since, particularly for people whose homes and businesses were flooded. We provided both immediate and longer term support and have been working with people to help them to get their lives and businesses back to normal as quickly as possible.
- Event teams were dispatched to isolate the bursts as quickly as possible, provide immediate customer support such as alternative water supplies and accommodation, work closely with the emergency services, and to provide information on the ground and at resident's meetings. We also provided welfare units, flood remediation services, sent loss adjustors to site as part of the immediate response, made ex gratia payments of £1,000 to household customers with internal flooding, and £2,000 to household customers who have been flooded more than once.
- **Re-lining critical trunk mains**: The additional budget commitment of £97m, over the period up to 2020, to deliver the full programme of relining, monitoring, and reviews has been approved. We have committed to re-line or replace the pipes at Upper Street (around) and Leigham Vale. At the time of publication, 1.31km of the 21" main at Leigham Vale had been re-lined, 0.43km of the 36" main at Upper Street had been re-lined with a total of 0.62km planned to complete by the end of September. Additional re-lining work is underway at Baker Street and New Malden.
- **The Trunk Mains Forensic Review**: A forensic review of 31 significant trunk main bursts in 2016, starting with the eight high profile trunk main bursts that occurred between October and December 2016. The Trunk Mains Forensic Review commenced in December 2016 and the report was published on the Thames Water website in April 2017. The review was commissioned by Thames Water and independently led by Paul Cuttill, OBE. The complete list of 80 Trunk Mains Forensic Review recommendations can be found in the Trunk Mains Forensic Review report available on our website at https://corporate.thameswater.co.uk/About-us/Investing-in-our-network/Trunk-mains-review
- **The Trunk Mains Strategic Review**: A review of our strategy for managing the trunk main assets. The review sets out the actions we are taking and commitments we are making in response to the Trunk Mains Forensic Review findings and recommendations, given the wider context of ongoing business change. Ofwat have participated in the Trunk Mains Strategic Review, in particular through the involvement of their Principle Engineer as part of the Trunk Mains Strategic Review Steering Group. The output of that review is summarised in this document.
- **Long-term investment strategy**: our long term strategy is to replace the trunk mains network, starting with those parts where the risk of a failure is greatest. The improved information about our network, and better risk model outputs from the above activities will feed into the work that we are already doing to develop the detail behind this long-term approach. This will form part of our proposed business plan for the period from 2020 onwards, on which we will consult widely with all our customers and stakeholders and will include the comprehensive programme to replace all our Trunk Mains assets over the longer term.
- **Social media and communications improvement plan**: A complete review of our customer engagement methods, with the intention of helping Thames Water customer engagement teams manage their interaction with customers more effectively, and position Thames Water as a role model for incident management. This includes analysis and improvement of contact centre practices, media engagement, social media response and event broadcasting/narrowcasting.
- **Stakeholder engagement**: Our approach to engaging with stakeholders is focused on building relationships before, throughout, and in the aftermath of an event in order to keep them sufficiently

well informed to ensure that they can carry out their own functions effectively. We maintain relationships with relevant third party organisations, including emergency services and Transport for London ("TfL"). We use stakeholders' communication networks to push out key messages to a more targeted audience to reduce customer contacts and improve customer experience.

- **Ofwat engagement**: The recent event in South London is an example of where we have raised issues with Ofwat pro-actively at the earliest opportunity. We accept that we did not follow this approach with the spate of bursts in 2016 on our trunk network in London. We have taken steps to improve our communications with Ofwat and will build upon this for future engagement.

2.3 The Trunk Mains Forensic Review

Following the eight high profile trunk main bursts that occurred between October and December 2016 our Chief Executive, Steve Robertson commissioned an immediate forensic review of all our trunk main bursts in 2016. The independent Trunk Mains Forensic Review was led by Paul Cuttill OBE. Paul has over 30 years' experience in utilities, including as EDF Power Networks' Chief Operating Officer. The Trunk Mains Forensic Review commenced in December 2016 and the report was published on the Thames Water website in April 2017. The Trunk Mains Forensic Review used a management framework to assess the Thames Water approach to managing the trunk main asset network across the 4 lifecycle stages (asset planning, asset operation and maintenance, asset monitoring, and event response.) The Trunk Mains Forensic Review produced 80 recommendations derived from the findings,

Specifically the Trunk Mains Forensic Review covered:

- the factors contributing to each burst – asset condition, its location and environment, and whether any patterns of failure could be identified;
- the impact – on customers, the wider community, and the cost;
- our immediate response – identifying what we and others did well and what we need to improve; and
- the network – whether we need to make changes to network configuration, pumping and control regimes.

The key findings from the Trunk Mains Forensic Review are:

- there is no single common cause of the bursts. Whilst age and condition of the pipes is an underlying factor in the eight high-profile failures, there were no systematic failings that could be said to have consistently caused or enabled the bursts
- there is a clear investment strategy and plan for our trunk mains that is supported by advanced risk and statistical modelling, we improve our understanding of our network and improve how we manage our existing data and knowledge
- the 'building blocks' necessary to deliver our trunk main plans and commitments are in place, we focus on improving the management of our planned works and make better use of local knowledge
- improving how we monitor our trunk mains and spot potential future bursts, recommending that we accelerate the roll-out of monitoring units (equipment that can monitor where bursts may happen or have already occurred), refresh how we prioritise alarms, increase our capacity to analyse data, and work with our alliances to develop new, innovative ways of assessing the condition of our pipes and
- a number of recommendations for improving communication with both customers and within the company immediately after bursts have happened, our capacity to deal with multiple major incidents, and how we can better learn from incidents after they've taken place.

The findings from the Trunk Mains Forensic Review have been communicated to our stakeholders and customers, particularly those who were affected by the 2016 bursts. This has involved presentations at London Borough Scrutiny committees, community liaison events, London Assembly committee meetings, and in one-to-one briefings. The Review is also available on our website.

2.4 Purpose and approach of the Trunk Mains Strategic Review

The purpose of the Trunk Mains Strategic Review is to:

- define and document our response to the Trunk Mains Forensic Review and the changes that we will commit to in order to meaningfully address its recommendations;
- deliver discrete improvements to trunk mains management based on the Trunk Mains Forensic Review recommendations; and
- define the changes we will make to reduce the impact of a trunk mains burst on our customers

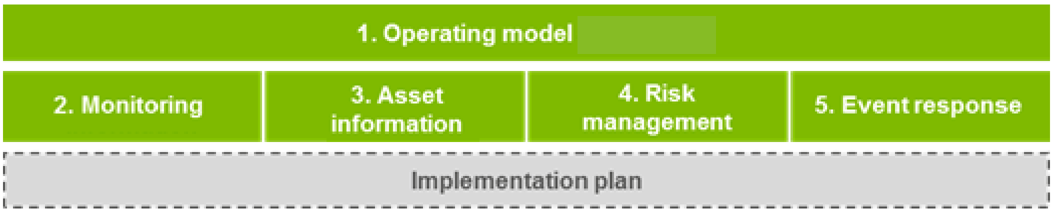
We commenced the Trunk Mains Strategic Review in February 2017 to coincide with and follow on from the Trunk Mains Forensic Review. We recognised that we needed to review our capability, supporting systems and accountabilities in light of the 2016 trunk main bursts and the findings of the Trunk Mains Forensic Review. The publication of this report is an important milestone in our programme of learning and improvements following the trunk mains bursts in 2016.

We look forward to communicating and discussing the outcome of this review with affected communities, our customers more generally, their political representatives, Ofwat and other stakeholders. We recognise the importance of continuing the dialogue with them about the delivery of the commitments we have made. Following the publication of this report we will focus on the implementation of the commitments through the trunk mains intensive care period, building on the changes that we have put in place already.

3 Summary of Commitments

This section provides a summary of each of the 15 Trunk Mains Strategic Review commitments. The Trunk Mains Strategic Review commitments were grouped into 5 themes, underpinned by an implementation plan. There are up to four commitments in each theme. Each commitment is made up of a number of improvements that we are committing to in order address specific Trunk Mains Forensic Review recommendations.

Further detail on each commitment can be found in sections 4 to 8.



Trunk Mains Strategic Review themes

3.1 Theme 1: Operating Model

The operating model theme contains commitments that will improve the way in which the business is structured, the roles, accountabilities and responsibilities, and the governance to support this. The commitments in this theme build on work already done to develop and implement a 'Single System Owner' model for end to end asset management that is in line with international standards for asset management. There is one commitment in the operating model theme.

- Commitment 1.1: Develop a 'Single System Owner' model and implement through the Trunk Mains Intensive Care Period

3.2 Theme 2: Monitoring

The monitoring theme commitments will renew the trunk mains monitoring strategy, improve our use of monitoring data to proactively and reactively identify bursts, and achieve completion of the existing monitoring equipment installation programme. There are four commitments in the monitoring theme.

- Commitment 2.1: Formalise the trunk mains monitoring policy
- Commitment 2.2: Provide updated and repeatable control room training
- Commitment 2.3: Develop our data utilisation capabilities
- Commitment 2.4: Revitalise the monitoring unit installation process

3.3 Theme 3: Asset information

The asset information theme commitments will improve the way that we collect, assure, view and analyse data on the trunk mains asset. There are four commitments in the asset information theme.

- Commitment 3.1: Improve our visibility of and access to reliable asset information
- Commitment 3.2: Develop new methods of data collection
- Commitment 3.3: Improve processes so that data is reliably collected across the trunk main network
- Commitment 3.4: Improve asset information standards and policies

3.4 Theme 4: Risk management

The risk management commitments will improve the way that we predict, model and understand the probability of a trunk mains burst and the consequence of such a burst. There are three commitments in the risk management theme.

- Commitment 4.1: Increase utilisation of existing risk management resources, models and tools
- Commitment 4.2: Improve risk management capability
- Commitment 4.3: Investigate an operational risk model

3.5 Theme 5: Event Response

The event response commitments will develop and strengthen our incident and emergency management capability, including the operational response to containing the burst and repairing the trunk mains, customer communications and care, stakeholder engagement, and operational rotas and working patterns. There are three commitments in the event response theme.

- Commitment 5.1: Mobilise a dedicated out of hours event response capability
- Commitment 5.2: Trunk mains event response improvement programme
- Commitment 5.3: Improve customer care standards and communications during a trunk mains event response

4 Theme 1: Operating Model

This section sets out the commitments under the operating model theme. The operating model theme contains commitments that will improve the way in which the business is structured, the roles, accountabilities and responsibilities, and the governance to support this. The commitments in this theme build on work already done to develop and implement a ‘Single System Owner’ model for end to end asset management, in line with international standards for asset management.

There is one commitment under the operating model theme:

- 1.1: Develop a ‘Single System Owner’ model and implement through the Trunk Mains Intensive Care Period

This components of this commitment have already been implemented. Further implementation of this commitment will be undertaken outside the trunk mains implementation phase. They will be implemented alongside other operating model improvements across the Thames Water business. The high level implementation plan can be found in section 9 of this report.

4.1 Commitment 1.1: Develop a ‘Single System Owner’ model and implement through the Trunk Mains Intensive Care Period

In order to provide clear ownership of the end-to-end asset management process and line of sight from organisation strategy to activity on the ground, the Strategy, Planning and Assurance (SPA) team took on an enhanced System Owner role for Infrastructure (below ground) in late 2016. Through this commitment we will further define and implement the Single System Owner model, which includes the enhanced System Owner role as well as establishing a new Head of Networks role. We will be commencing an implementation period by October 2017 to improve the focus across the end-to-end trunk main asset management lifecycle, and make it more consistent.

We have appointed a Head of Networks to operate as the Asset Manager alongside the role of SPA, and made some changes to the delivery of trunk mains outcomes by clarifying the role of deliverer, for example for trunk mains leak detection and repair, emergency repairs, trunk mains monitoring installation and trunk mains replacement.

We will complete the detailed design of the Single System Owner model and implement alongside wider operating model changes within our business. This will be done in line with a wider Organisation Design review to align with the delivery of our corporate strategy. This will improve our asset management capabilities in line with the Single System Owner model, and increase control of our assets through the establishment of four new roles.

- **Owner –** the head of the SPA team currently takes on this role of Asset Owner with accountability for the longer-term planning and end-to-end management of our assets;
- **Manager –** The Asset Owner will take on accountability for implementation of the recommendations in this report. We recruited a new Head of Networks in May 2017 who will fulfil the Manager role. This will address a gap we identified in translating the longer-term plan and strategy into a rolling 1 year plan. They will be responsible for ensuring the delivery of the plan to the correct standards.
- **Controller –** the Systems Operations teams currently perform the role of the Controller. They are accountable for maintaining the security of supply for the system by managing the operating risks. This includes facilitating access to the network for repair, installation and

shutdown. They are also responsible for managing the asset system during an event and managing the operating priorities across the asset system; and

- **Deliverer –** our alliances, eight$_2$O and the Infrastructure Alliance (''IA''), are accountable for delivering the programme of work agreed by the Head of Networks, to the agreed budget and timescales. They undertake maintenance and construction including trunk mains replacement and re-lining.

In addition, improvements to risk escalation processes through the risk management framework must encompass all relevant risks and not focus specifically on trunk mains risks. We are progressing these improvements across risk types, via our Enterprise Risk Management project.

5 Theme 2: Monitoring

This section sets out the commitments under the monitoring theme. The monitoring commitments will renew the trunk mains monitoring strategy, improve our use of monitoring data to proactively and reactively identify bursts, and achieve completion of the existing monitoring equipment installation programme.

There are four commitments under the monitoring theme:

- 2.1: Formalise the trunk mains monitoring policy;
- 2.2: Provide updated and repeatable control room training;
- 2.3: Develop our data utilisation capabilities; and
- 2.4: Revitalise the monitoring unit installation process.

The four commitments will be implemented as part of the Monitoring workstream activities in the trunk mains implementation phase. The high level implementation plan can be found in section 9 of this report.

Syrinix and Hydroguard are the two primary types of monitoring units that are used to identify bursts and leaks across the trunk mains network. They operate by detecting changes to pressure and sound in the trunk main. Data collected by Syrinix and Hydroguard is sent back to their respective third party servers and notifications are sent to us when certain thresholds are crossed, either by text message or email. Syrinix units are our preferred monitoring unit because it can alert us to leaks and bursts whereas Hydroguard units can only alert us to bursts.

Photograph of a Syrinix monitor on a main

5.1 Commitment 2.1: Formalise the trunk mains monitoring policy

Through this commitment we will develop and implement a policy that will shape how the business approaches trunk mains monitoring. This will provide us with appropriately-timed, accurate, and usable data to assist in response to trunk main leaks and bursts. This commitment seeks to provide the right data to support informed business planning, risk mapping, condition assessment, performance assessment and network optimisation.

There is internal monitoring guidance on how to invest in, use, and manage trunk mains monitoring solutions, however there is no detailed process documentation that sets out a consistent approach to achieving the end-to-end trunk mains monitoring policy. This commitment will address this.

The trunk mains monitoring policy will be structured into three tiers. The three tiers are aligned to our approach to risk management and the division of our trunk mains into sections ('spans') based on consequence of failure levels. Our risk model assigns a consequence level to each trunk main span. Tier 1 is composed of the trunk main spans with the highest consequence and tier 3 is composed of the lowest. Each tier has a different approach to trunk mains monitoring.

Once concluded, the policy will identify the appropriate monitoring equipment and supporting infrastructure, data collection, analysis and reporting for a range of conventional applications. Our formal change process will be improved to allow better adoption of learning and innovation across the monitoring network.

5.2 Commitment 2.2: Provide updated and repeatable control room training

Through this commitment we will increase the ability of the control room team to correctly and consistently use monitoring unit data. This will improve our ability to identify possible bursts and leaks.

The control room is a component of the System Controller role who acts as one of the primary users of the information received from the monitoring units. As part of this role, the System Controller will provide an auditable trail as to how alarms are responded to across all of the monitoring units. The System Controller will also develop capabilities for the proactive use of monitoring data to better inform risk management and event response.

The focus of this commitment is to provide all control room staff with the latest and most appropriate training on the Syrinix and Hydroguard systems so that raw data received from the monitoring units can be better interpreted and used. This will include training on how to perform analysis on the Syrinix and Hydroguard data so that we can identify trends that can be used to better mitigate the risk of or react to bursts and, in the longer term leaks. The longer term vision is that training will be provided to control room staff across all our relevant monitoring units to interpret leak data in order to develop a proactive response to identify and fix leaks before they result in bursts.

5.3 Commitment 2.3: Develop our data utilisation capabilities

Through this commitment we will make appropriate use of the data that is gathered by our monitoring units and increase our in-house capabilities to further the level of analysis that is carried out on this data to inform decisions.

The control room is staffed 24 hours a day so that burst alarms are appropriately dealt with. We have developed a process which sets out how a Syrinix or Hydroguard burst alarm will be dealt with. The process has been formally documented and is available to all control room staff for burst alarms however no such process or training exists for leak alarms.

There is guidance in place on how to set alarm thresholds across the trunk mains network. In some cases however, thresholds are not calibrated to account for the characteristics of leaks and bursts on particular spans of the trunk mains network. We are planning to conduct a pilot study to improve how we actively manage alarm thresholds. We are also carrying out a deep dive analysis exercise to identify potential leading indicators for a burst. This forms part of a wider review of all our existing trunk mains monitoring data to understand how we can get the best use from it.

To improve the visibility of trunk mains monitoring data the aim is improve the integration of all data. The integration of our Syrinix and Hydroguard monitoring unit data is being managed outside of the Trunk Mains Strategic Review and will form part of the business plan for the five year period from 2020. In the interim we are installing a bespoke desk in the control room which will receive all the raw data that is gathered by Syrinix, Hydroguard, and the district meters. This will allow an individual to view all monitoring data on dedicated screens so they do not have to log into separate systems on screens displaying other control room data.

5.4 Commitment 2.4: Revitalise the monitoring unit installation process

Through this commitment we will increase the speed and reduce the complexity of our processes for installing and commissioning Syrinix and Hydroguard monitoring units.

Through this commitment we will increase the pace of installation and commissioning of all monitoring units. We will develop a target profile of trunk main locations that should have monitoring units installed, aligning with the trunk mains monitoring policy as set out in commitment 2.1. The target profile will include an assessment of buildability risk to reduce the instances of the location not being suitable for installation due to a lack of physical space, encroachment by other utilities or difficulty in securing road closures.

The improvements identified will implemented as part of our ongoing trunk mains monitoring programme to design, scope, commission, install and handover new Syrinix monitoring units.

6 Theme 3: Asset Information

This section sets out the commitments under the asset information theme. The asset information commitments will improve the way that we collect, assure, view and analyse data on the trunk mains asset.

There are four commitments under the asset information theme:

- 3.1: Improve our visibility of and access to reliable asset information;
- 3.2: Collate historical data and develop new methods of data collection;
- 3.3: Improve processes so that data is reliably collected across the trunk main network; and
- 3.4: Improve asset information standards and policies.

The four commitments will be implemented as part of the Asset Information workstream activities in the trunk mains implementation phase. The high level implementation plan can be found in section 9 of this report.

6.1 Commitment 3.1: Improve our visibility of and access to reliable asset information

Through this commitment we will create and trial a tool that improves the visibility of all trunk main asset information to inform decision-making across our wholesale water business.

We are working with external experts to develop our current GIS[4] tool based on feedback and requirements from across the Wholesale Water business. This is referred to as the 'visibility tool' and it will include additional risk and event response features including contingency plans. We will pilot this tool with a limited user group and then will make decisions about further development and rollout.

Preliminary designs indicate that the tool will have a number of layers. Each layer will provide a map of the trunk main network overlaid with information that can be used by different teams working on the trunk main network. All the layers will be available to all our staff regardless of whether their role is office or field based. Pending a successful pilot and rollout across the business, certain features of the tool will then be made available to relevant external stakeholders (e.g. the emergency services) as appropriate.

We will invest in the setup and delivery of a programme of work to update our trunk main contingency plans for our trunk main 'shut-able' sections' (the length of trunk main between two shut-able valves). Once developed, the updated contingency plans will be regularly reviewed and updated. This will be done in conjunction with the development of the visibility tool as it is important the visibility tool allows easy access to the required contingency plans.

6.2 Commitment 3.2: Develop new methods of data collection

Through this commitment we will focus on developing new methods of data collection. In time, we expect that this will help drive a greater emphasis on the value of good quality data. This commitment will also collate our historic trunk mains data and improve its availability for evidence based decision-making.

By developing an accurate single view of data and increasing the interaction between our SPA[5] and operations teams, we will drive a culture that recognises the importance of data as a business asset. The

[4] Geographical Information Services
[5] Strategy, Planning and Assurance

SPA team is committed to engaging directly with our operations teams to formalise the understanding of how data will be accurately, consistently and efficiently updated in GIS.

We are committed to developing new and innovative technologies to better analyse trunk main condition. We will continue to work closely with the University of Surrey to develop these technologies and we are in the process of developing a new testing rig, operational in 2018, that will allow us to work with our supply chain to test new tools for assessing asset condition. This is being managed as a project outside of the Trunk Mains Strategic Review by our innovation team.

We are collating all of our historic trunk main burst data across the various databases to produce a single view of the data. We are undertaking infill analysis for trunk main spans where we have identified gaps or where we have low confidence in the data that is currently being recorded. We will develop and communicate a revised process to our in-house operations teams and our alliances, that clearly sets out how all trunk main bursts will be recorded in one single database in an accurate and timely manner.

6.3 Commitment 3.3: Improve processes so that data is reliably collected across the trunk main network

Through this commitment we will identify the most informative data types that exist for our trunk mains network and then develop appropriately governed processes that, once implemented, enable us to collect this data in a reliable and consistent way.

We will first identify the most informative trunk main data types that exist to enhance risk management and event response decisions. Once these data types have been identified we will assess the quality of the current data and the current process by which information is updated for each data type. We will then prioritise which data types and associated processes will be taken forward for improvement.

To address immediate recommendations on operational data collection from the Trunk Mains Forensic Review we have simplified the process to fully capture all local knowledge. We have also arranged a series of ''toolbox talks'' (workshops for our operations teams) to deliver the message to our operations teams on the importance of updating asset information and the correct process to follow.

6.4 Commitment 3.4: Improve asset information standards and policies

Through this commitment we will improve existing standards and policies to address how asset information will be collected and validated.

We will formalise key definitions regarding our trunk mains network (e.g. risk probability) in order to develop a consistent policy for trunk mains asset information that can be communicated and used across our wholesale water business. This policy will also formalise how we identify which trunk mains require a contingency plan.

The policy will also include all the trunk main data types identified as part of commitment 3.3 and will set out the owner and the formal processes that have been developed to collect data for each data type. We will underpin the data standards and policies by encouraging a cultural shift that places more trust in the information provided by our operations teams, rather than performing excessive validation activities. Appropriate governance and regular checks of the information provided by our operations team will continue to take place to maintain accuracy.

7 Theme 4: Risk Management

This section sets out the commitments under the risk management theme. The risk management commitments will improve the way that we predict, model and understand the probability of a trunk mains burst and the consequence of such a burst.

There are three commitments under the asset information theme:

- 4.1: Increased utilisation of existing risk management resources, models and tools;
- 4.2: Improve risk management capability; and
- 4.3: Develop an operational risk model.

The three commitments will be implemented as part of the Risk Management workstream activities in the trunk mains implementation phase. The high level implementation plan can be found in section 9 of this report.

7.1 Commitment 4.1: Increased utilisation of existing risk management resources, models and tools

Through this commitment we will focus on increasing the extent to which we utilise our existing risk management capabilities and tools to their full potential, enabling increased understanding of risk, improved maintenance of the trunk main network, and better resolution of trunk main events.

To support a one-off improvement activity we will conduct a capability assessment of the risk model to understand its strengths and weaknesses and compare it to risk models and methods used by companies and industries with similar asset failure risks to Thames Water. The assessment will cover the consequence and probability calculations as well as the quality and types of data used. This assessment will inform a number of improvement initiatives that we will prioritise and undertake as part of this commitment, for example development of our predictive analysis capability. It will also provide evidence on whether or not our approach to risk modelling is fit for purpose.

7.2 Commitment 4.2: Improve risk management capability

Through this commitment we will further develop and improve our risk management capability and, where possible and helpful, identify and manage risk at an operational level. This will require us to re-assess the capabilities of the existing risk model, harness the skills and experience of operations teams, seek more innovation in asset condition assessment and place greater emphasis on continuous improvement.

We are in the process of developing a more detailed model that will enhance our ability to accurately predict the flooding footprint of potential events. This in turn will improve our consequence modelling and enable future decision support tools for the control room team to use for ‘what if’ scenarios when managing events and assessing risk.

We are working more closely with our supply chain to develop new and innovative ways of assessing asset condition. The most notable examples of this are the trunk main condition assessment tool project and the building of a physical testing environment for testing new asset assessment tools. Going forward, this type of collaborative project will be incorporated into business as usual.

7.3 Commitment 4.3: Develop an operational risk model

Through this commitment we will develop and trial a dynamic operational risk model that can be used by our strategic business planning, system control and operational teams.

Once we have proved the use of the strategic hydraulic models we will adapt this model to include risks and make it usable as a day-to-day dynamic operational risk model. This model will be available for use by SPA, system control and operations team members to assess the impact of bursts, network changes and asset enhancements in a dynamic way that supports day-to-day network management decisions. The model will utilise up-to-date asset and network information, including asset status information, from the risk model, SAP and operational activity. This commitment is to develop a trial operational risk model and to pilot it with a limited user group. We will then make decisions about further development and rollout based on the success and benefits of the pilot.

8 Theme 5: Event Response

This section sets out the commitments under the event response theme. The event response commitments will develop and strengthen our incident and emergency management capability, including the operational response to containing the burst and repairing the trunk mains, customer communications and care, stakeholder engagement, and operational rotas and working patterns.

There are 3 commitments under the asset information theme:

- 5.1: Mobilise a dedicated trunk mains event response capability;
- 5.2: Trunk mains event response improvement programme; and
- 5.3: Ensure we provide appropriate customer care.

The three commitments will be implemented as part of the Event Response workstream activities in the trunk mains implementation phase. The high level implementation plan can be found in section 9 of this report.

8.1 Commitment 5.1: Mobilise a dedicated out of hours event response capability

Through this commitment, we will improve our ability to respond to water mains events by establishing a dedicated out of hours operational event response capability. This is in addition to the changes we have already made to provide a dedicated customer response team for major events such as a Trunk Mains burst..

We are considering various methods to better control and contain the impact of a burst main. Whilst we evaluate and develop a sustainable solution that works in the longer-term (commitment 5.2) we will mobilise a suitably equipped dedicated event response capability to handle mains bursts. These teams will be our first response to a potential burst and will work to provide on-the-ground information, control and contain the impact.

The service will bring together teams and expertise from across Thames Water and our alliances to ensure that when a burst occurs we can contain and isolate it in the most effective manner. We will define the processes, policies and service levels required to manage this team in line with our corporate strategy for improved holistic network management.

8.2 Commitment 5.2: Trunk mains event response improvement programme

Through this commitment, we will instigate a programme of works to improve our response and recovery capabilities by making changes to the way we are organised, our processes and governance as well as our capacity to respond to major events. We will evaluate options on how we manage events, and better prepare our core operations by reviewing skills, tools & equipment and ways of working across Thames Water and our alliances. We will set appropriate Service Level Agreements aligned to customers and stakeholder needs to improve our performance, and refine our event response processes to bring them closer into line with those of the Category 1 responders under the Civil Contingency Act.

Transforming the way our organisation operates will not happen overnight. Under commitment 5.1 we will take steps to reduce the time between an event being triggered and containment but this is not enough to radically improve the way we operate. Achieving longer-term sustainable change requires a coordinated programme of initiatives to understand, design, pilot, review and implement new ways of working.

We will instigate a comprehensive Trunk Mains Improvement Programme that will:

- Better align our operational response to customers & stakeholders needs;
- Provide our people with the right skills, training and support now and for the future;
- Streamline governance and decision making;
- Codify our processes and policies to simplify the way we work;
- Introduce technology and making better use of the of the data we manage; and
- Ensure we have the right equipment and resources in place to do our jobs well.

Whilst in many ways the high-level process and technical capabilities will not change significantly, cultural change is an integral part of the transformation journey for our Event Response. The working environment in which managers and staff operate will change considerably. The introduction of new technology, data transparency, simplifying governance arrangements and alternative working patterns will change the way in which staff are expected to operate daily. It will be these new ways of working and shaping a new culture of response that is focused on impacts and outcomes for customers.

8.3 Commitment 5.3: Improve customer care standards and communication during a trunk mains event response

Through this commitment, we will change the way customers and stakeholders experience a Trunk Mains burst event, mitigating the impact through communication, engagement and our in-field response. We will also develop a more joined up approach in line with commitment 5.2 on what we do for our customers during an event.

We will join up our customer communications across event response and customer teams to ensure accurate and consistent messaging. Our Customer Communications Playbook will also provide the Customer Incident Management team with clear standard messaging to support with customer engagement across all channels within input from Events Communications Lead.

There is a team within the contact centre that has clear accountability for liaising with operations teams to understand the customer impact and to ensure that customer messages are disseminated across all channels within 15 minutes and updated regularly.

We utilise a number of methods to interact and communicate with our customers in order to keep them regularly informed. We are investing more into social media, as this is a channel increasingly used by our customers. We have assigned more of our people to provide coverage 24/7 and we have a new tool that enables us to listen to customer conversations about Thames Water on social media and can respond rapidly.

During the recovery phase of an event we will aim where possible to return life back to normal for customers. Our commitment to customer communication and engagement will continue, our customer facing teams will be provided with clear information on the clean-up and insurance processes. Focus will be given to communicating to customers what our insurance coverage is able to provide to them and how to submit a claim.

A new Customer Advice booklet is being developed to be used by the insurance loss adjusters when engaging with customers. This will make it simpler and easier for customers, and teams engaging with customers, to understand insurance claims.

9 High Level Trunk Mains Strategic Review Implementation Plan

This section sets out the high level implementation plan for delivering the commitments through the trunk mains implementation phase. The implementation of the Trunk Mains Forensic Review recommendations has been in progress for several months as we did not want to wait for the conclusion of the Strategic Review to begin. Changes already implemented are those which did not require further design work to determine a solution and were identified as quick to implement.

The remainder of the recommendations were aligned to one of the five themes identified for the Trunk Mains Strategic Review for further investigation and development. Where these recommendations can be implemented this will occur during the trunk mains implementation phase.

There are three Trunk Mains Strategic Review recommendations that will not be implemented at this time. These are:

Recommendation	Reason for not addressing
R4.2.3 Remote valve cost/benefit analysis Work should be undertaken to better understand the feasibility and risks of increased valve automation on the network in order to build a cost/benefit analysis of the investment.	Increasing the number of automated valves on the network is considered as part of the existing trunk mains strategy for this AMP and will continue to be reviewed within our current business processes.
R6.6.1b Establish maximum response times Analysis of flood impact over time in different scenarios should be undertaken in order to understand the impact of response times on the extent of flooding and establish a 'maximum response time' for Trunk Main bursts, with a clear and detailed policy accordingly.	There is a dependency on the further development of the risk model to understand flood impact before dynamic SLAs can be put in place. This is not a capability that is currently available. The focus of the commitments for operational response will be to establish out of hours dedicated response teams.
R6.5.1b Contact Centre Location moved Move the Contact Centre location to sit alongside the Control Room to improve the dissemination of customer information and insight to the Control Room.	Physical space issues prohibit the movement of the Contact Centre to alongside the Control Room; this will be considered as part of any future reviews of our control functions.

The trunk mains implementation phase is a period of 'intensive care' of at least 18 months to improve and make more consistent our focus across the end-to-end asset management lifecycle. We will be commencing this period in October 2017. Within 18 months the changes and improvements that we have made will be continued as business as usual. The trunk mains implementation phase will:

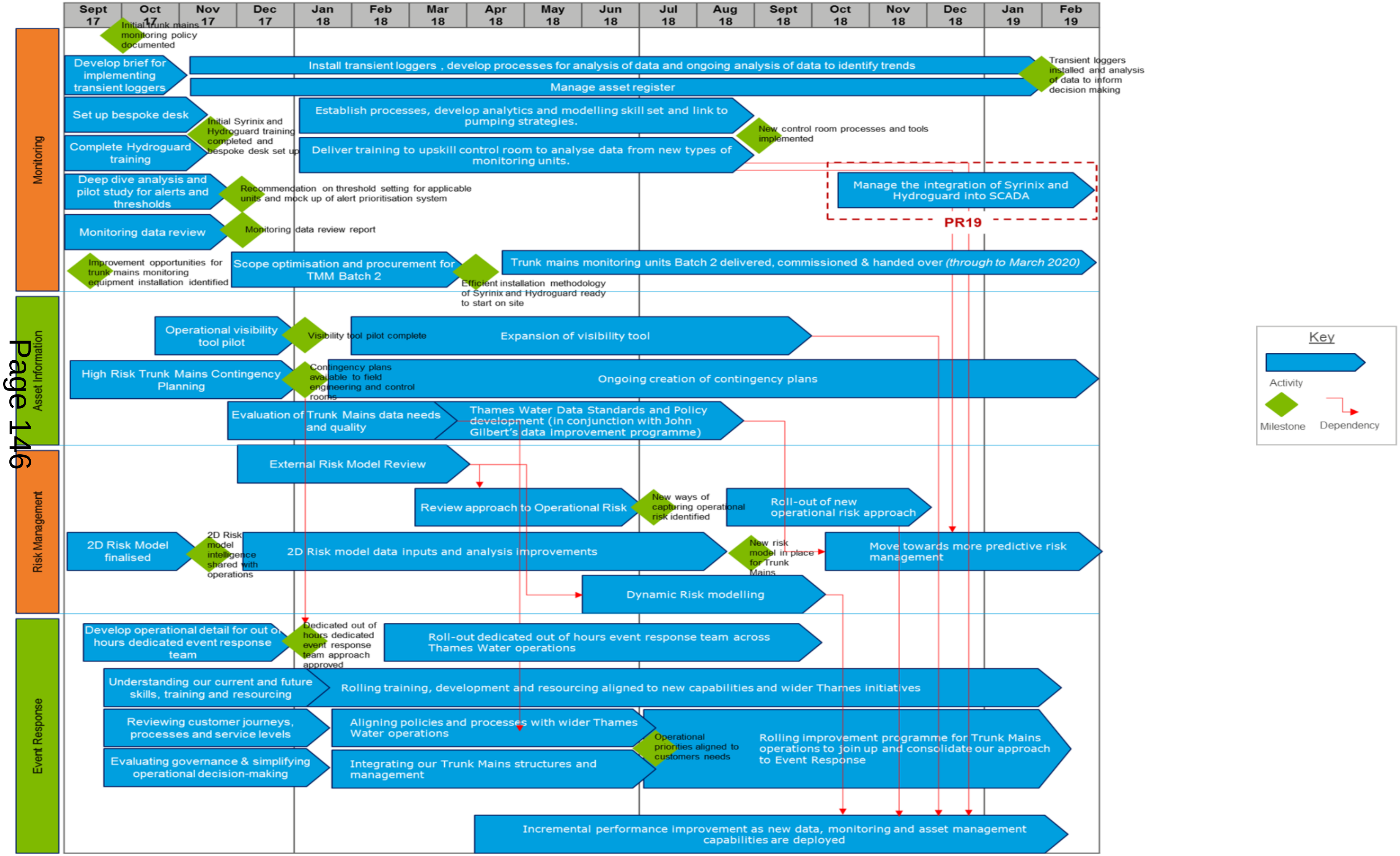
- provide the focus and resource needed to implement the Trunk Mains Strategic Review commitments;
- satisfy the intensive care period recommendation from the Trunk Mains Forensic Review; and
- provide the necessary end-to-end focus on trunk mains so that improvements are sustained.

To guide the activity during the trunk mains implementation phase we have developed an implementation plan aligned to the Trunk Mains Strategic Review commitments detailed in sections 4 to 8.

The high level implementation plan for the trunk mains implementation phase includes a number of pilot projects that will allow us to test our improvements. Following these pilots we will revisit the commitments we have made in this report to confirm that we are implementing the right improvements for our customers and the business. We will commence this review six months after the start of the trunk mains implementation phase. The implementation plan will be managed by a dedicated Programme Management Office (PMO) and overseen by the Head of Networks.

The implementation plan on the following page outlines the key activities and milestones. Each activity is aligned to the relevant theme and associated commitments.

Table 1: High level implementation plan for the Trunk Mains Strategic Review



10 Appendix 1: Glossary of Terms

AIM	Asset Investment Manager
AMP	Asset Management Planning period
AMP5	Asset Management Planning period 5, from April 2010 to March 2015 inclusive
AMP6	Asset Management Planning period 6, from April 2015 to March 2020 inclusive
AMP7	Asset Management Planning period 7, from April 2020 to March 2025 inclusive
APS	Asset Planning System
ARRC	Audit, Risk and Regulatory Committee
Broadcasting	Provision of information to a wide audience i.e. information available on the Thames Water website
Capex	Capital expenditure
CCTV	Closed Circuit Television
DEFRA	Department for Environment, Food and Rural Affairs
DMA	Distribution Management Areas
eight$_2$O	Alliance partnership to deliver capital investment programmes
FTE	Full Time Equivalent
GIS	Geographical Information Services
GPR	Ground penetrating radar
HCV	High consequences valve
Hydroguard	Monitoring units that are installed on trunk main valves that, through monitoring pressure and flow, can identify bursts. When a burst is identified a notification is sent to the Thames Water Control Room
IAD	Investment Area Document
IAM	Institute of Asset Management
IBM	A global cloud platform and cognitive solutions company who are part of the eight$_2$O alliance.
Infrastructure Alliance (“IA”)	Alliance partnership to maintain Thames Water’s supply network
IPT	Integrated programme team within the eight$_2$O alliance
ISO 55001	The requirements specification for an integrated, effective management system for asset management
LA	Local Authority
MP	Member of Parliament
Narrowcasting	Provision of information to a particular audience i.e. those within a specific postcode
NST	Network Service Technician
ODI	Outcome Delivery Incentive
Ofwat	Regulator for water and sewerage providers in England and Wales
Opex	Operational Expenditure
PR	Periodic review conducted by Ofwat for the purpose of determining one or more price controls in accordance with Condition B of the Thames Water Instrument of Appointment
PR14	Price Review 2014 covering the regulatory period from 1 April 2015 to 31 March 2020

PR19	Price Review 2019 covering the regulatory period from 1 April 2020 to 31 March 2025
PTW	Permit to Work
ROCC	Risk, Opportunities and Controls Committee
Sahara	A probe that is placed into the trunk mains network, whilst under pressure, that uses acoustics to identify leaks within the internal walls of the pipes
SFT	Strategic Field Technicians
SI4	Unplanned interruptions to customer > 4 hours
SI12	Unplanned interruptions to customer > 12 hours
SLA	Service Level Agreement
SPA	Strategy, Planning and Assurance
Syrinix	Leak and burst detection system that is installed on trunk mains that 'listens' to the acoustics of the water flow. When bursts are detected notifications are sent to the Thames Water Control Room
Single System Owner Operating Model	An operating model aligned to ISO 55001 and the Institute of Asset Management. It is intended to develop System Owner, System Management, System Controller and System Deliverer capabilities across end-to-end asset management.
TfL	Transport for London
Transient loggers	A monitoring unit that captures momentary pressure variations in our network
Trunk mains	A classification of larger diameter mains (typically 18" or greater) in a water distribution system
TTA	Thames Technology Alliance composed of Accenture, Bilfinger, Deloitte and IBM
WSC	Wholesale Service Centre

Putting things right.

How we'll support you after a burst water main.

Thames Water

Putting things right for you.

We're so sorry for the upset and disruption you're experiencing. We know this must be a very difficult time.

I would like to reassure you that we'll do everything we can to put things right as quickly as possible. Damage caused by a burst water main is our responsibility to fix.

We have a team of experts who are here for you. A dedicated member of our team will be with you every step of the way, from dealing with the immediate clean-up to resolving your claim.

If you don't have insurance cover or your policy doesn't cover everything, please don't worry. You will be able to claim through us.

The first thing we will do is send one of our Loss Adjusters to meet with you. They will assess the damage to your property, and let you know what to expect over the next few days and weeks. They will make arrangements for emergency works – such as pumping out water and installing drying out equipment. They will also arrange alternative accommodation if you need it. Our Loss Adjuster will be your main point of contact with us until your claim is resolved. Our customer representatives will also be available to support and advise you.

This booklet has been designed to help you understand the next steps and hopefully answer any immediate questions, so you can feel confident that we will put things right.

K.M.Macfarlane

Kelly Macfarlane
Managing Director,
Customer Service and Retail

Your questions answered.

The next steps.

We will do everything we can to put things right and limit how much you need to do.

What you need to do:

1. Decide if you would like us or your own insurer to handle your claim (if you have one). Please see page 6 for more information to help you make this decision.

2. If you have your own insurer, please notify them immediately – whether you wish to claim through them or not. If you don't, you may breach the conditions of your policy and invalidate your insurance.

3. Please collect evidence of any damage to your property and any 'out of pocket' costs and expenses you incur as a result of flooding. You will need to provide these when you make your claim. This may include things like photographs of the damage and receipts. Please see page 10 for more information.

What we will do:

We will send our loss adjuster to your home straight away to:

- make sure you're taken care of in the immediatly after of the flooding – this includes arranging emergency accommodation if you need it
- talk you through all of your options and the next steps
- arrange emergency works to take place at your property – such as pumping out water and installing drying out equipment.

If you decide to make your claim with us directly, our loss adjuster will also:

- arrange longer-term alternative accommodation for you if you need it
- assess the damage to your property and support you in making your claim
- recommend how much should be paid to you by our insurer for the damage caused
- arrange with our claims handler for your final settlement to be paid as soon as it has been agreed
- be your dedicated point of contact until your claim is resolved.

What will you do if I claim through my own insurer?

Even if you claim through your own insurer, our Loss Adjuster will still assist you with emergency repairs. As soon as you notify your own insurer, they will appoint their own loss adjuster who will oversee the management of your claim and will outline the next steps.

If you claim through your own insurers, you may find you have items you wish to claim which aren't covered by your own insurers such as any insurance excess under your policy. Our insurers will of course consider any such losses. Our loss adjuster or customer service representative will support you with this.

Claiming through Thames Water and/or my own insurers

If you have suffered loss or damage caused by our burst main, you can claim directly from us, but if you have your own insurers, you may of course wish to claim through them. For those items that aren't covered by your own insurers, our insurers will consider these. If you choose to go through your own insurers it's very likely your policy will be written on a new for old basis. If you claim directly from our insurers, your claim will also be settled on a new for old basis which means no deductions will be made for the age of the goods or wear and tear. To help guide you through which route to take, please see the main differences in the handling of your claims below.

Type of claim	Claim through Thames Water	Claim through your insurers (if you already have cover)
Building and contents damage	We will handle your claim on a new for old basis	They will usually handle your claim on a new for old basis – check with your insurer.
Alternative accommodation	We can arrange alternative accommodation for you while your home or business is undergoing drying out works and repairs.	In most cases they will arrange this for you. Please check with your insurer.
Loss of earnings	We cover this. Your claim will need to be fully substantiated by documentary evidence, see page 10 for more details.	This is unlikely, unless your policy states otherwise.
Business interruption		If you have business insurance please check your policy coverage.
Vehicle damage	We cover this.	They will cover this if you have comprehensive insurance.
General distress and inconvenience	We may consider this based on the length of time you have been inconvenienced	Your own insurers would not cover this

Our expert team

To make sure we put things right for you as quickly as possible, we employ a specialist team to support you throughout your claim. If you claim through your own insurers, they will let you know who is overseeing your claim.

What is a loss adjuster?

A loss adjuster is someone appointed by us or your insurance company to support you with the restoration of your property and making your claim.

We will send a loss adjuster to your home straight away, from a company called Cunningham Lindsay UK. If you decide to claim directly through Thames Water, they will continue to be your main point of contact for any claim-related queries. You can find their direct contact details at the back of this booklet.

What is a claims handler?

A claims handler will make you a financial settlement offer in writing. Once this is agreed with you, they will arrange payment.

If you claim through us, your loss adjuster will prepare a report and send it to Willis Towers Watson, who handle claims on our behalf. At this point, you will be assigned a dedicated claims handler, who will write to you and assist you until your claim is finally settled.

Should I use an independent insurance assessor?

An insurance assessor is an independent person who is employed by you to evaluate and negotiate claims on your behalf. They will provide a similar role to one of our loss adjusters, but will be specifically instructed by you. Whether you claim through us or your own insurer, it is up to you if you would like to appoint an independent assessor. If you do, this would be at your own expense and you won't be able to claim back the assessor's fees as part of your claim.

A dedicated member of our team will be allocated to you until your claim is resolved.

Timeline - from start to finish

Every claim is different, and the time to process your claim will depend on the severity of the damage, the availability of contractors to carry out the work, and how quickly you provide us with requested information, such as evidence of your loss.

Please note, this timeline may be different if you use your own insurer.

How long could it take for things to go back to normal?

Minor flooding – where a small amount of water has reached the property and is limited to one room, requiring only minimal restoration work (such as new carpets and replacing some furniture) are often resolved within a matter of days or weeks. However, where flooding has been severe, taking over the entire property so it is beyond restoration (such as plaster soaking off all the walls), it can take up to 12 months to put right.

2 hours

Our immediate response

Our loss adjusters will be at the scene of the burst water main within two hours of it being reported.

They will prioritise contacting customers who need alternative accommodation first, as well as customers who are elderly, have very young children or have a disability.

24 hours

Visiting everyone affected

As soon as it is practically possible, your dedicated loss adjuster will knock on your door and make themselves known to you. We will do everything we can to reach customers who are away.

Same day

Providing emergency accommodation

If you need accommodation on the same day/evening of the burst, our loss adjuster will make arrangements for you to stay in a hotel as near to your home as possible.
They will let you know whether you will be booked to stay for one night or longer so you can plan ahead for your next few days.
It is possible for you to arrange accommodation yourself if you would prefer, but you will need to agree costs with our loss adjuster before you book anything.

48 hours

Long-term accommodation

If you cannot stay in your property, our loss adjuster will work with you to arrange longer-term accommodation that meets your needs, while work is ongoing to repair your home.

48 hours

Cleaning up your property

Our loss adjuster will make arrangements for your home to be cleaned and drying out equipment to be installed.

Up to a few months

Drying out your property

Drying-out could take up to a few months depending on the severity of the damage. You will be refunded for the cost of any additional electricity used by the drying out equipment as part of your claim.

When report is agreed

Claiming compensation

Our loss adjuster will assess the damage to your property and will provide a report to our claims handlers. They will let you know what evidence you will need to provide to support your claim. As well as claiming for damage to your buildings and contents, you may also claim for other out of pocket expenses.

+10 days

Agreeing your claim

Once you have provided all appropriate evidence in support of your claim, a financial offer will be made to you in writing by our insurer. You may also claim interim payments during the early stages of your claim to ease hardship.
If you are not satisfied with the financial offer and have discussed this with your claim handler, you may wish to seek legal advice as to how to further progress your claim.

+10 days

Paying your claim

Once the settlement figure has been agreed with you, you will receive payment within 10 working days.

What evidence do I need to provide to support my claim?

Whether you submit your claim to us or your own insurer, you will need to provide evidence to support it.

Every case is different and your loss adjuster will let you know exactly what evidence you need – and will keep this to a minimum.

So you know what to expect, we have provided some guidance below on the type of evidence that we may require if you make a claim directly through us. This may differ if you claim through your own insurers.

Type of claim	Evidence for you to collect
Buildings	At least two written estimates from a suitably qualified builder and, if you have them, photographs of the damage. You should not be charged for estimates.
Contents	1. A list of the damaged items including the following details: a) The make/model/description of each item b) The age or purchase date of the item c) The original purchase price d) The cost to replace 2. Photographs of the damaged items if you have them 3. Original purchase receipts if you have them
Alternative accommodation	If we arrange your alternative accommodation, then you will not be required to provide any evidence. If you have arranged your own alternative accommodation (this must be pre-agreed) we will require a copy of the tenancy agreement and any invoices.
Loss of earnings	If you are employed on a PAYE basis, we will require copies of your payslips (or bank statements) for the period of the loss, and for the six-month period preceding it. If you are self-employed, then we will require copies of your accounting books, bank statements, and tax return for the period preceding the loss.
Business interruption	If you are a business and wish to claim for business interruption/loss of profits, we will require copies of your books, bank statements and previous tax return.
Vehicle damage	No evidence required – in most cases we will appoint an engineer to inspect your vehicle. Courtesy cars are available if required.
Out of pocket expenses	Please keep all receipts for any out of pocket expenses incurred. This may include travel expenses and meal costs that would not have been incurred without the incident.

We will do everything we can to put things right and limit how much you need to do.

Getting in touch.

Your loss adjuster

If you have any questions about your claim please contact your dedicated loss adjustor directly. They will know your situation best and contacting them directly will avoid any 'handling' delays. Their details are:

Name: ....

Direct phone number: ....

Direct email: ....

Thames Water

You will be supported throughout by a member of our team. If you want more information about our customer commitments please visit **thameswater.co.uk**. If you need to speak to us at any time, you can reach us on 0800 316 9800.

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PR19

Trust in water

Delivering Water 2020: Our final methodology for the 2019 price review

December 2017

Ofwat

www.ofwat.gov.uk

About this document

This document sets out our methodology for the 2019 price review (PR19) for the water and wastewater monopoly service providers in England and Wales.

The methodology sets out:

- our expectations and requirements for companies preparing their business plans to meet the needs of their customers from 2020 to 2025 and beyond;
- how these expectations form the basis for how we assess company business plans;
- the approach that we will use if we need to intervene in those plans to ensure that companies deliver the step change required by customers; and
- how our assessment will flow through into companies' price limits, service commitments and the wider incentive framework.

We consulted on our methodology in July 2017.

Contents

Ofwat's price review: delivering more of what matters

Water is vital for life – not just for people but for the environment and ecosystem on which we depend. This means that customers in England and Wales feel differently about water to other services: they need to trust that water and wastewater companies are serving the public benefit.

At the same time, customers expect great service, at least comparable to the service they get elsewhere. They expect water and wastewater services to be resilient to both short-term shocks and long-term challenges such as population growth and climate change. And they expect those services to be affordable for all, including those struggling to pay.

The only way water companies will achieve all this, is to find new and better ways of delivering those services. Our 2019 price review enables, incentivises and encourages water companies to achieve exactly that, so that customers will get more of what really matters to them.

What is a price review?

A price review is when, together with their customers, water companies create plans for the future that will deliver customers' wants and needs.

- We **set the framework** for these plans so that they innovate to push forward the performance of the whole sector and stretch the current boundaries for delivery and efficiency.
- We **scrutinise and challenge** the plans to make sure that they are efficient, affordable, provide resilience in the round and great customer service; and meet companies' statutory and licence obligations.
- We **set the five-year price, service and incentive package** that the water companies will deliver between 2020 and 2025.

Companies report each year on how they are delivering that package so that we, and others, can hold them to account for their performance.

Great customer service

Great customer service starts with an in-depth understanding of customer preferences and priorities and involves them in the development and delivery of services. In our price review:

- we expect companies to make performance commitments that reflect their customers' priorities and we will challenge individual companies to go further where necessary;
- where companies deliver great service that customers want and set new standards for the sector, they will receive payments reflecting the improvements they achieve and the risk they have taken. Where companies do not deliver their promises, customers will get money back through lower bills;
- we will compare water customers' experience with that of other sectors. The satisfaction of all customers, not only those who have contacted their company, will matter;
- we expect companies to identify and support customers in vulnerable circumstances, including temporary circumstances;
- for the first time, we are setting an explicit incentive to improve customer service to developers; and
- Customer Challenge Groups (CCGs) will provide independent assurance to Ofwat on the quality of a company's engagement with its customers to develop their business plan.

Affordable bills

Water and wastewater services must be affordable to customers. This means affordable overall, in the long term and for those struggling, or at risk of struggling, to pay.

- We expect companies to ensure that customers that are struggling to pay have easy and effective access to assistance.
- We expect companies to make a step change in cost efficiency providing scope for lower bills and help with affordability.
- Our initial view of the cost of capital – based on market evidence – is 3.4% (on a real CPIH basis). In RPI terms it is 2.4%, which is a reduction of 1.3% from the 2014 price review. The effect of this change alone should lower bills of an average water and wastewater customer by about £15 to £25.

Resilience in the round

Customers expect reliable water and wastewater services supplied by infrastructure that can avoid, cope with and recover from, disruption. The water companies that deliver these services need to make the best long-term decisions about operations, maintenance and investment. This in turn means they need the right information, systems, processes, governance and capabilities; and resilient balance sheets, cash flows and finances. They need to be resilient 'in the round'. In our price review, we expect companies to:

- Improve day-to-day resilience by reducing the number of supply interruptions, sewer flooding incidents and pollution incidents;
- reduce water leakage by at least 15%;
- make performance commitments specifically on improving resilience to drought and flooding;
- assess a wide range of options for securing water supply resilience including investment in new infrastructure, water transfers and measures to significantly improve water efficiency and reduce consumption;
- take a system-wide approach to understanding, planning and managing risks to the delivery of wastewater services;
- take account of our seven principles for resilience planning, including a naturally resilient sector reflecting the importance of ecosystems and biodiversity; and
- demonstrate the financial resilience of their businesses as part of their business plans.

We will take into account the quality of companies' information when we assess their plans and we expect companies' Boards to provide assurance on their plans.

Innovation

Innovation must be at the core of every company to deliver long-term resilience, great customer service and affordability. We expect companies to look beyond their boundaries in addressing the challenges they face. New markets such as direct procurement for customers for large infrastructure projects, the water resource and bioresource markets and markets for eco-services all offer companies scope for greater innovation and more effective co-operation with third parties to deliver for customers.

We will assess how innovative companies' plans are. Companies with the most innovative and ambitious plans delivering real benefits for customers and raising the bar for others will receive an additional return. This is in recognition of the additional effort and risk they will have taken preparing their plans.

Next steps

Company submission of business plans	3 September 2018
Ofwat's initial assessment of business plans and categorisation of plans	Late January 2019
Early draft determinations	March/April 2019
Other draft determinations	July 2019
Final determinations	December 2019

How to find out more

Find out more on our website, on Twitter, Instagram, LinkedIn, or by email.

#pr19 #moreofwhatmatters #imagine2025

What will you be doing over the next few years? We'll be keeping water bills low and improving service. Simple.

1. Overall framework

1.1 Introduction

Appointed water and wastewater companies[1] in England and Wales are monopoly providers of water and wastewater services[2]. We use price controls to regulate the price and service package that these companies offer to ensure that customers are protected. Where we refer to companies in this document and associated documents, we mean the appointed water and wastewater companies, in particular, the 17 largest companies for whom we are setting full price controls.[3]

The current price control period for appointed water companies in England and Wales ends on 31 March 2020. This document sets out our final methodology for the 2019 price review (PR19), which we will use to set price controls for the period from 2020 to 2025. This PR19 final methodology has been developed following full consideration of the views expressed by respondents to our draft methodology proposals, published in July of this year.

Our PR19 final methodology sets out:

- our expectations and requirements for companies preparing their business plans to meet the needs of their customers from 2020 to 2025 and beyond;
- how these expectations form the basis for the tests we will use to assess companies' business plans (our initial assessment of business plans);
- the approach we will use if we need to intervene in those plans to make sure companies deliver the step change customers need; and
- how our assessment will flow through into companies' price limits and service commitments and the wider incentive framework.

In this chapter, we put this PR19 final methodology into a broader context and explain the overall framework in which we operate. The remainder of this chapter is structured as follows:

[1] By water and wastewater companies we mean companies holding appointments as water and/or sewerage undertakers under the Water Industry Act 1991.
[2] Some services are subject to competition, for example following business retail market opening.
[3] We are not referring to the water supply and/or sewerage licensees (retailers) operating in the business retail market or smaller appointed water and wastewater companies for whom we will not be setting full price controls.

- building on PR14 (section 1.2);
- addressing future challenges (section 1.3);
- our strategy and the legal framework for our PR19 methodology (section 1.4);
- our key themes for PR19 (section 1.5);
- PR19 and the environment (section 1.6);
- what have we already determined about the framework for PR19? (section 1.7);
- our overall approach to PR19 (section 1.8); and
- navigating our PR19 final methodology (section 1.9).

1.2 Building on PR14

For the 2014 price review (PR14), we set a framework that focused on companies delivering the services that matter to customers and the environment. This framework included the following key elements.

- **Customer engagement.** Companies were given responsibility to engage with their customers to understand their priorities and preferences.
- **Focus on outcomes.** Each company developed a set of outcomes along with associated performance commitments, to reflect its customers' priorities as identified through the engagement process.
- **Risk-based review.** We adopted a risk-based approach to assessing companies' business plans, focusing on the issues that could have the biggest impact on customers. Companies that demonstrated their plans were in the best interests of customers received direct financial and reputational benefits.
- **Totex approach.** Rather than split companies' expenditure allowance into capital expenditure and operational expenditure, we considered their total expenditure (totex) as a whole.
- **Balanced package of risk and return.** We allocated risks to the party best able to manage them, and required companies to have meaningful outcome delivery incentives. This means that companies are incentivised to provide the best service for customers.

Our final methodology for PR19 builds on this framework and makes further changes to empower and incentivise companies to address the future challenges that the industry faces.

1.3 Addressing future challenges

While some companies have used the new regime to improve delivery for customers, it is clear that the sector as a whole needs to do much more to step up and address future challenges. These include the following.

- **Environmental challenges** – climate change and population growth will place increasing pressure on scarce water resources, particularly in drier areas, as well as challenging companies to ensure effective drainage and environmental quality.
- **Customer expectations** of the service and information they receive are growing, driven by ever greater improvements in the service provided by other competitive sectors and new opportunities from changes in technology.
- **Resilient systems and services** – to meet the challenges outlined above, the sector will need to do more to anticipate trends and variability. The sector will also need to be able to cope with, and recover from, disruption, to maintain services for customers and the economy and protect the natural environment, now and in the future.
- **Affordability of customer bills for all** – despite real terms price reductions from PR14, affordability remains an issue for many customers, so, companies will need to innovate to deliver more for less. There is also more that companies can do to identify and support customers in circumstances that make them vulnerable.

1.4 Our strategy and the legal framework for our PR19 methodology

Our PR19 final methodology furthers our vision for trust and confidence in water and wastewater services. It reflects our statutory duties, the strategic policy statements of both the UK Government and the Welsh Government, and is in line with regulatory best practice.

Our statutory duties[4] require us (in summary) to set price controls in the manner we consider is best calculated to:

- further the consumer objective to protect the interests of consumers, wherever appropriate, by promoting effective competition;
- secure that water companies properly carry out their functions;
- secure that the companies are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of those functions; and
- further the resilience objective to secure the long-term resilience of companies' systems and to secure that they take steps to enable them, in the long term, to meet the need for water supplies and wastewater services.

Subject to those duties, we also have duties to (among other things):

- promote economy and efficiency; and
- contribute to the achievement of sustainable development.

We must also set price controls in accordance with the UK and Welsh Governments' strategic priorities and objectives for Ofwat[5]. The UK Government's strategic priorities and objectives for Ofwat, referred to as the UK Government's 'strategic policy statement' throughout the rest of this document, came into force on 22 November 2017. The Welsh Government's strategic priorities and objectives for Ofwat, referred to as the Welsh Government's 'strategic policy statement' throughout the rest of this document, was laid before the National Assembly for Wales on 23 November 2017[6].

[4] The general statutory duties for most of our work as an economic regulator are set out in section 2 of the Water Industry Act 1991.
[5] The statements setting out strategic priorities and objectives for Ofwat that the UK and Welsh Governments can publish under sections 2A and 2B of the Water Industry Act 1991.
[6] We anticipate that, unless the Assembly resolves not to approve it, the strategic policy statement will be published in the following few weeks.

Table 1.1 summarises the strategic priorities set out in the strategic policy statements of both the UK and Welsh Governments. We then summarise the applicability of our PR19 final methodology across England and Wales, given differences in these strategic policy statements. You can find more detail on how the PR19 final methodology is delivering the UK and Welsh Governments' strategic priorities and objectives in UK Government priorities and our 2019 price review final methodology and Welsh Government priorities and our 2019 price review final methodology.

Table 1.1 UK and Welsh Government strategic priorities

UK Government	Welsh Government
Securing long-term resilience Protecting customers Making markets work	Affordability Innovation Long-term Markets and competition, where appropriate Resilience Strong customer focus Sustainable management of natural resources

Our strategy, 'Trust in water', describes a shared vision for the water sector in England and Wales – one where customers and wider society have trust and confidence in water and wastewater services. Our strategy is the means through which we will fulfil our duties as we look to the future.

Our PR19 final methodology also reflects our enduring price control principles. We set out these principles in PR14 to guide the development of our future price control methodology.

Applicability to England and Wales

Our methodology provides significant scope for companies to reflect the different needs of their nations, regions and communities – its common building blocks are designed to facilitate the development of business plans that reflect differences in operating and legal environments and give effect to the relevant government's strategic policy statement (SPS) and customers' needs. There is considerable consistency in our methodology, across England and Wales, reflecting the common themes in both governments' SPSs and the ability to tailor business plans within our framework. Consistency of approach, where appropriate, will benefit both Welsh and English customers by increasing comparability of performance and cost information across companies. This will increase our ability to set stretching cost baselines and service levels, holding companies to account and protecting customers. However, there are also important differences between the Welsh and UK Governments' strategic policy statements and this is reflected in our approach.

For example, the **UK Government's SPS** includes the following specific provisions (summarised here).

- Ofwat should further a **reduction in long-term risk to water supplies from drought and other factors** and a 'twin track' approach to improve water supply resilience through both new supply and reduced demand. Our PR19 methodology will facilitate this through: the neutral treatment of demand and supply based solutions under our cost assessment framework; our outcomes framework, including a common performance commitment on the risk of severe water supply restrictions in a drought; and our initial assessment of business plans, which will assess companies' approaches to managing resilience.
- Ofwat should **promote markets to drive innovation and achieve efficiencies**, including promoting upstream markets for water resources and bioresources. Our water resources price control will help promote a level playing field for the English bilateral water resources market if it opens during 2020-25.
- Ofwat should monitor the developing business retail market and **recognise small business customers as potentially vulnerable**. For all customers, including small businesses, we will challenge the wholesale component of bills and expect full company engagement to understand their expectations.

For example, the **Welsh Government's SPS** includes the following specific provisions (summarised here).

- Welsh Government notes that **sustainable development** is its central organising principle and has set a priority for Ofwat on this issue. Our initial assessment of plans will consider companies' approaches to ecosystem resilience and biodiversity as part of their decision making processes. Companies will also be incentivised to deliver on outcomes such as the environment, resilience and asset health.
- Ofwat should ensure its approach is consistent with **Welsh Government policy on retail and upstream competition**. Reflecting the Welsh policy, for Welsh water companies we will set revenue controls for retail activities to protect all business retail customers. We will not put in place mechanisms to enable any opening of a Welsh bilateral market for water resources.
- **Innovation** is a priority – Ofwat should incentivise new ways of delivering services for customers and the environment more efficiently. The outcomes and totex frameworks provide flexibility for companies to develop and apply innovative approaches and develop ecoservices markets, where appropriate.

1.5 Our key themes for PR19

To address the future challenges that the industry is facing, and given the strategic policy statements of the UK and Welsh Governments, there will be four key themes for PR19.

- **Great customer service** that shows real innovation, reliability and responsiveness, matching the experience that customers get from the best companies in other sectors.

  Customers should be active participants in water and wastewater services. Their actions can directly affect system resilience and affordability. Companies will need to do much more to understand customers' needs, and to use this insight to set stretching and powerful performance commitments on what matters most to customers and the environment.

- **Long-term resilience in the round**, building on our resilience framework.

  Resilience has always been important to customers. There is now an increased focus on resilience following our new additional duty on resilience, introduced by the Water Act 2014, and the emphasis on resilience in the strategic policy statements of both the UK and the Welsh Government.

- Resilience in the round is about considering all aspects of resilience, including – operational, corporate and financial resilience. Resilience is not just about outcomes and expenditure. It means making sure the right people, leadership, infrastructure, systems and processes, are all in place and working effectively. Our seven resilience planning principles capture how companies should plan for resilience in their business plans.

- Operational resilience is about reducing the probability of water supply interruptions and wastewater flooding, as well as mitigating the impact of any disruption through efficient handling, good communication and quick recovery. It also means long-term resilience to environmental pressures, demographic change, shifts in customer behaviour and the impacts of climate change.

  Each element of operational, financial and corporate resilience reinforces overall resilience. Companies will not be able to have good operational resilience if they do not have good corporate and financial resilience.

- **Affordable bills** should offer value for money and the scope for price reductions if this is what customers want.

Affordability remains an issue for many customers, not only those struggling to pay their bills. In PR19, we expect companies to understand and address affordability concerns for both current and future customers, and to develop effective measures to help customers who find themselves in circumstances that make them vulnerable and those struggling to pay. Companies will need to deliver a step change in efficiency to provide more for customers and the environment, while reducing bills.

- **Innovation** and new ways of working.

  Companies will need to innovate to deliver more of what matters to customers and the environment, including:

  - effectively working with customers to co-create and co-deliver;
  - greater use of markets: where appropriate, in water resources, bioresources, through direct procurement and more widely across the value chain;
  - demand management, water efficiency measures and leakage reduction;
  - developing and implementing new ways of working, including changing the culture and focus of companies and the ways they work with their supply chain and wider stakeholders; and
  - building on best practice from the water sector and other sectors.

1.6 PR19 and the environment

The environment, and the water environment in particular, is fundamental to the water sector

The water environment has improved significantly in recent decades. Since 1994, the amount of water lost through leakage has been reduced by around a third and, since 1990, there has been a 137% increase in the share of UK bathing waters achieving 'excellent' status. During the current control period, water companies are investing £44 billion in water and wastewater services, much of which benefits the environment. However, much remains to be done – climate change and population growth will put increasing pressure on scarce water resources, effective drainage and environmental quality.

For PR19, our ambition for the environment is higher than ever. Both the UK and Welsh Governments' SPSs recognise the importance of sustainably managed natural resources and a resilient ecosystem. Water companies must work with stakeholders to deliver their statutory and licence obligations and the environmental improvements customers want. Our PR19 final methodology contributes to this as follows.

Focus on the environment and long-term sustainability. Our resilience principles explicitly consider eco-system resilience. Water companies should consider the wider costs and benefits to the economy, society and the environment, including the sustainable use of natural capital. Companies must also adopt a long-term approach, providing assurance that their plans address long-term issues and setting indicative performance commitment levels for at least ten years beyond 2025.

Engaging with customers on the environment. When developing their business plans, we expect companies to actively, meaningfully and effectively engage with customers and stakeholders to gain an in-depth understanding of customers' requirements for environmental outcomes and investment.

Real incentives to meet environmental challenges. There will be **common performance commitments** for all companies on the environment including: pollution incidents, per capita consumption and treatment works compliance. We expect companies to adopt ambitious leakage commitments, justified against our challenges: a 15% reduction by 2025 and forward-looking upper quartile performance on leakage per property per day. We expect companies to have **bespoke performance commitments** on the environment and a commitment to reduce water abstraction at environmentally sensitive sites.

Assessing the innovation in companies' plans. Innovation can help to address environmental challenges, for example by adopting innovative catchment approaches and reaching agreements with abstractors and polluters. We will reward companies with high quality, innovative and ambitious plans.

Promoting markets. Markets can promote better environmental outcomes and make better use of existing resources: bioresources markets can realise the value of a wastewater by-product, water trading can alleviate water scarcity, and ecoservices markets can promote efficient catchment approaches.

1.7 What have we already determined about the framework for PR19?

We recognise that the long-term nature of the challenges faced by the sector means the regulatory framework needs to evolve to meet those challenges. Over the past two years we have developed the regulatory framework for water and wastewater companies in England and Wales, consistent with our statutory duties. This culminated in the publication of Water 2020: Our regulatory approach for water and wastewater companies in England and Wales in May 2016.

The Water 2020 regulatory framework identifies where, and how, we need to evolve our regulatory approach for PR19 and beyond. In particular, it promotes greater use of markets for water resources and bioresources to deliver improvements in efficiency and resilience, as well as making other improvements to price controls. The box below summarises the key features of the Water 2020 regulatory framework. PR19 is the first price control which reflects this framework.

Box 1.1 Water 2020 framework

The framework:

- strengthens our expectations about companies' customer engagement and the outcomes companies intend to achieve, with even greater emphasis on companies understanding the needs of all their customers and a strengthened role for customer challenge groups (CCGs);
- moves to a more credible, robust and legitimate index of inflation – the consumer price index (CPIH)[7] – for customers' bills and indexation of the regulatory capital value (RCV);
- promotes markets in water resources and bioresources (recognising the value of sludge as a resource) in England and, where it aligns with Welsh Government policy, in Wales, through:
    - separate binding price controls for bioresources and water resources, as well as water and wastewater network plus, and retail activities;
    - an information platform so that data is made available on bioresources facilities to assist trading;

[7] consumer price inflation including a measure of owner occupiers' housing costs

- an information platform for water resources, so that data is made available on supply demand deficits and water resource costs to facilitate conversations between companies that require water and those that have water resources, or have demand management solutions;
- a framework for monopoly companies to assess bids to provide new water resources; and
- a new access pricing framework to facilitate entry by companies that can provide new water resources in England; and
- encouraging the greater use of markets in the financing, design and delivery of new water assets by third parties, rather than incumbent water companies.

Licence modifications to facilitate these changes were supported by all 17 water companies for whom we will set full price controls, successfully laying the foundation for PR19.

1.8 Our overall approach to PR19

Our final determinations for PR19, which will be published in December 2019, will set out companies' price limits, service commitments and the wider incentive framework for six separate binding controls[8]:

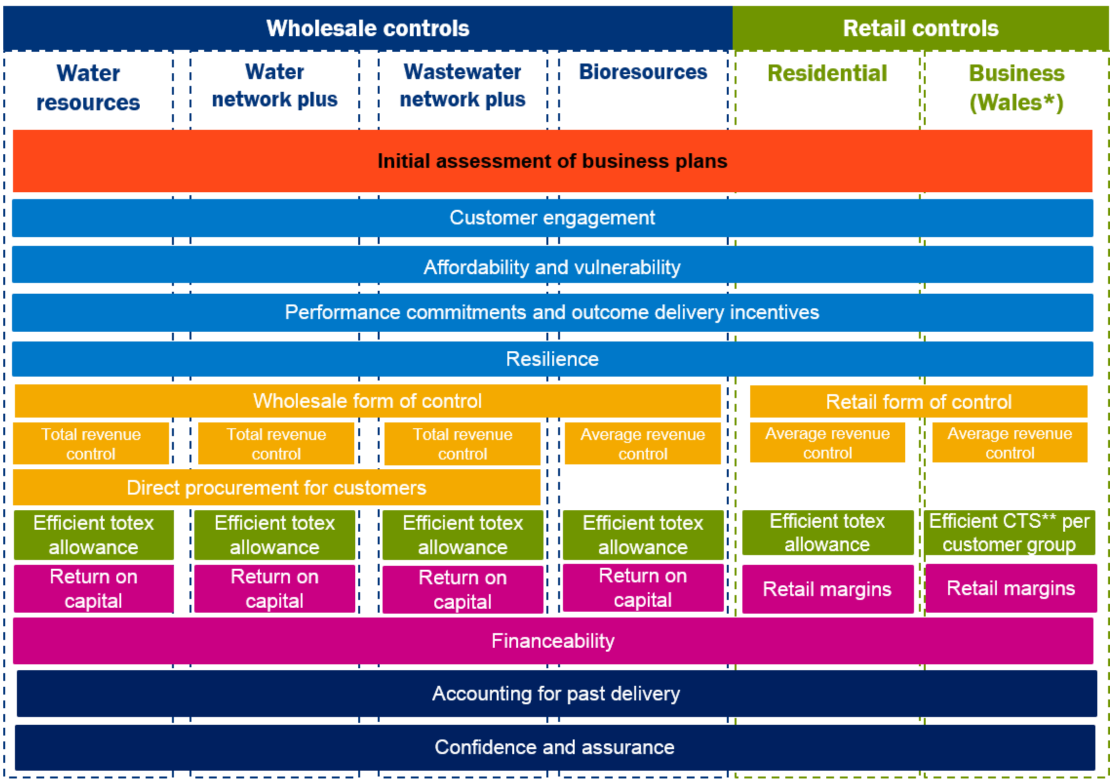
- water resources;
- water network plus[9];
- wastewater network plus[10] (where applicable[11]);
- bioresources (where applicable);
- residential retail; and
- business retail (where applicable)[12].

[8] Note that we are also proposing a separate control for Thames Water's wastewater services interfacing activities for the Thames Tideway Tunnel project.
[9] water treatment and raw and treated water distribution
[10] wastewater collection and treatment
[11] Wastewater network plus and bioresources controls will only apply to water and sewerage companies (WaSCs).
[12] We will set a revenue control for all business retail customers of companies whose areas are wholly or mainly in Wales and for companies whose areas are wholly or mainly in England that have not exited the business retail market.

The number of controls applicable to each company will depend on their particular circumstances. For example, a water only company (WoC) in England, that has exited the business retail market will be subject to only the water resources, water network plus and residential retail controls. In contrast, Dŵr Cymru will be subject to all six of the controls listed above given its wastewater activities and the Welsh Government's policy not to extend business retail competition.

As figure 1.1 shows, there are a number of themes and building blocks that are common across the controls. These include: the assessment of efficient costs and customer engagement, or the specification of the outcomes that will be delivered for customers and the environment. Our PR19 final methodology, and our initial assessment of business plans, is structured to reflect these common themes.

Figure 1.1 Structure of our PR19 final methodology



* We will set an average revenue control for all business retail customers in Wales and business retail customers of non-exited retailers in England.
** Cost-to-serve

On the following page, we summarise the key changes since our draft methodology proposals.

A summary of key changes since our draft methodology proposals

Engaging customers. We have clarified our approach on environmental and business retailer engagement.

Addressing affordability and vulnerability. We have revised our list of common metrics for business plans.

Delivering outcomes for customers. We will challenge companies to achieve forecast upper quartile (UQ) performance each year, rather than 2024-25 UQ performance from 2020-21. We have replaced the common performance commitment on non-infrastructure asset failures leading to pollution incidents with one on treatment works compliance, and amended the definitions of three others.

Securing long-term resilience. We have clarified our approach and expectations.

Wholesale controls. For **network plus**, companies must show how they are implementing integrated drainage solutions. For **water resources**, we have clarified our policy for the long-term risk sharing arrangements for large investment and streamlined the access pricing reporting requirements for English companies. For **bioresources**, we have modified the average revenue control so that when measured volumes vary from forecasts, the adjustments to allowed revenues are based on the increment, rather than the average, to better protect customers from over-recovery of costs and make sure companies bear appropriate volume risk.

Retail controls. We will set five-year price controls for all market segments and encourage water companies to tackle gap sites and voids.

Cost efficiency. A stronger cost sharing incentive and higher cost adjustment claim materiality thresholds.

Aligning risk and return. We have revised the financial incentives for the initial assessment of business plans (IAP) and the totex cost sharing rates. We provide an early view on the cost of capital. For **financeability**, we have clarified how we will treat legacy adjustments and address the impact of DPC.

Accounting for past delivery. We will allow, on request, two extra weeks for companies to publish their proposed reconciliations under the PR14 reconciliation rulebook.

Securing confidence and assurance. We have revised our data requirements, definitions and guidance. We will publish the 2018 CMF assessment with the IAP in January 2019. We have introduced a new IAP test, requiring Board assurance that their plan enables customers' trust and confidence through transparency and engagement on issues such as its corporate and financial structures.

The initial assessment of business plans. Exceptional and fast-track companies will receive an amount equivalent to, respectively, a 20-35 basis points (bp) and 10bp addition to the return on regulated equity (RoRE). For these companies, we will also apply an 'early certainty' principle to specific components of the early draft determination.

1.9 Navigating our PR19 final methodology

Our PR19 final methodology is set out across a number of documents. In this, **the main document**, we set out our PR19 final methodology across the key regulatory building blocks and themes of PR19. Figure 1.2 below shows how each of these areas relates to the chapters of our PR19 final methodology.

Figure 1.2 Mapping of regulatory building blocks to our PR19 final methodology chapters

		Chapter #
Initial assessment of business plans: test areas	Initial assessment of business plans: key test areas, characteristics, categories and incentives	14
Engaging customers	Enhanced customer engagement; customer participation; engaging customers on long-term issues including resilience	2
Addressing affordability and vulnerability	Addressing affordability and vulnerability: affordability for all, now and in the long term, including those struggling to pay and services that are easy to access.	3
Delivering outcomes for customers	Stretching performance commitments, including new customer experience measures; powerful outcome delivery incentives	4
Securing long-term resilience	Resilience 'in the round'; clarified principles; focus through business plan tests and outcomes	5
Targeted controls, markets and innovation	Four separate wholesale revenue controls Encouraging use of markets with clarity on post 2020 investments where markets apply 5 year retail controls for all market segments and measures to address gap sites and voids Direct procurement for customers: focus through principles; tendering models	6, 7, 8
Securing cost efficiencies	Step change in efficiency; Increased efficiency challenge; more symmetric adjustment process; benchmarking with historical and forecast data; cost-sharing incentive; benchmarking retail costs	9
Aligning risk and return	Increased revenue at risk from service performance and sharper cost sharing incentives; cost of debt indexation; tax pass-through mechanism; increased focus on assessment of risk CPIH as a legitimate measure of inflation Financeability	10, 11
Accounting for past delivery	2015-2020 reconciliation; confidence in business plans	12
Securing confidence and assurance	Business plan expectations: data and assurance	13

There are a number of **appendices** to this document, which provide additional detail of our PR19 final methodology, where appropriate. These appendices, which are published as separate documents, are as follows:

- appendix 1: addressing affordability and vulnerability;
- appendix 2: delivering outcomes for customers;
- appendix 3: customer measure of experience (C-MeX) and developer services measure of experience (D-MeX);
- appendix 4: resilience;
- appendix 5: water resources control;
- appendix 6: bioresources control;
- appendix 7: network plus water and wastewater controls;
- appendix 8: company bid assessment frameworks – the principles;

- appendix 9: direct procurement for customers;
- appendix 10: assessment of the duration of retail controls and measures for the appropriate management of voids and gap sites;
- appendix 11: securing cost efficiency;
- appendix 12: aligning risk and return;
- appendix 13: initial assessment of business plans;
- appendix 14: approach to impact assessment; and
- appendix 15: responses to our draft methodology.

The following **additional documents** have also been published to complete the suite of PR19 final methodology documents:

- **Welsh Government priorities** and our 2019 price review final methodology;
- **UK Government priorities** and our 2019 price review final methodology;
- **driving innovation in water**;
- **final guidance on business plan data tables** for companies to provide a consistent set of information, which will allow us to carry out analysis and complete our assessments for each price control;
- the **PR19 financial model and rulebook**[13], which we intend to use to set price controls and test company financeability;
- **PR19 feeder models, true up models and incentive models**; and
- updates to the **PR14 reconciliation rulebook and models**[14].

We are also publishing a number of independent reports, which are referenced by our PR19 final methodology.

Our PR19 final methodology documents, including the independent reports and all of our models can be found on our website.

[13] Model version PR19 08z has been published alongside our PR19 final methodology
[14] PR14 reconciliation water trading model and PR14 reconciliation WRFIM model

2. Engaging customers

Key themes of PR19

Our approach to engaging customers supports the key themes of PR19.

Companies must engage with their customers on how they will address **affordability** and ensure that they have taken account of customers' views in their proposals.

Understanding customers is essential for companies if they are to improve and tailor their **customer service** in line with their customers' preferences.

We are specifically encouraging companies to engage with their customers on longer-term issues, including **resilience.** A greater focus in this area should help companies innovate and invest for the longer term in the best interests of their customers.

We are expecting companies to be much more **innovative** in their approaches to customer engagement. It will also be important for customers to be engaged in the innovative approaches needed to address the challenges facing the sector.

Engaging customers

Companies need to understand their customers' preferences and priorities and deliver the outcomes that matter to them over the long term. This includes all customers, including those in circumstances that might make them vulnerable and those that are hard to reach.

Customer challenge groups (CCGs) will provide independent challenge to companies and provide independent assurance to us on:

- the quality of a company's customer engagement; and
- the degree to which this is reflected in its business plan.

We are expecting a step change in customer engagement at PR19, with companies using a wider range of techniques to address our principles of good customer engagement.

Customer engagement will be central to our assessment of companies' business plans at PR19, as part of the initial assessment of business plans process.

Customer engagement will provide essential evidence for companies' proposals in their business plans, such as their performance commitments to customers.

We are encouraging companies to take forward customer participation. We published our 'Tapped in' report on this topic in March 2017. We expect companies to take into account the themes of customer participation.

Companies need to make better use of data and work with others to share data to drive better outcomes for customers.

We will meet companies during the first three months of 2018 to understand their approaches to customer engagement.

- We set out more detail on our approach to customer engagement in Ofwat's customer engagement policy statement and expectations for PR19 in May 2016.

Applicability to England and Wales

Our final methodology for engaging customers **applies to both** companies whose areas are wholly or mainly in England and whose areas are wholly or mainly in Wales.

Both the UK and Welsh Governments' strategic policy statements set expectations of companies engaging with their customers.

Our methodology requires companies to understand their customers and their particular priorities, which can vary between England and Wales and between regions within England and Wales.

Responses to our draft methodology proposals

There were no consultation questions on customer engagement in our methodology consultation, because we were confirming our existing policy as set out in our customer engagement policy statement in May 2016. Nevertheless, we received a number of responses.

Overall, there was strong support for our emphasis on customer engagement and participation at PR19. Respondents raised three main issues.

1. It is not just customers' views that should inform companies' business plans, but also environmental and social concerns.
2. We and companies need to engage with, and take account of, the views of business retailers.
3. We could provide more support to CCGs.

Our consideration of respondents' views

In relation to the three main points raised on customer engagement, our responses are as follows.

1. Our PR19 model of customer and stakeholder engagement, including CCGs, allows for environmental and social issues to be addressed in companies' business plans. In this methodology we clarify how we take the environment into account.

2. We consider wholesalers should engage with business retailers as part of the customer engagement process to learn about their views and the views of their customers. We will engage actively with retailers as we prepare for and carry out the price review.

3. We have shared with the CCG chairs a draft 'aide memoire' summarising the main points for them to be aware of in the methodology. We will publish the final aide memoire early in 2018. We are holding meetings with all the CCG chairs every two months until July 2018 to provide on-going support.

2.1 Introduction

This chapter sets out our final methodology for PR19 with respect to engaging customers. By customer engagement we mean companies listening to their customers to understand their preferences and priorities and reflecting them in all aspects of their business operations, including their business plans.

We consulted on our approach to customer engagement in Towards Water 2020 in July 2015. We set out our approach to customer engagement in our Customer engagement policy statement for PR19 in May 2016. Since then, we have continued to inform, enable and incentivise the industry to push the frontiers of customer engagement, including exploring customer participation, the use of customer data and communications.

Customer engagement is a vital element of PR19, because companies need to understand their customers' preferences to deliver the outcomes that matter to them over the long term. Customer engagement will provide essential evidence for company proposals in their business plans. In addition, companies need high levels of engagement with their customers to earn their trust and confidence, for example, on issues such as companies' corporate and financial structures as discussed in chapter 13 (securing confidence and assurance).

This remainder of this chapter is structured as follows:

- roles in customer engagement (section 2.2);
- customer engagement principles (section 2.3);
- customer participation (section 2.4);
- longer-term issues, including resilience (section 2.5);
- customer engagement and the business retail market (section 2.6);
- customer data (section 2.7);
- communications (section 2.8); and
- initial assessment of business plans – customer engagement (section 2.9).

There were no consultation questions on customer engagement in our draft methodology proposals because we were confirming our existing policy for engaging customers for PR19. However, in section 1 of appendix 15, we outline respondents' views on customer engagement and provide (or reference) our responses.

2.2 Roles in customer engagement

Our customer engagement policy statement summarised the roles that companies, CCGs and we will play at PR19 in relation to customer engagement.

Table 2.1 Companies', CCGs' and our role in customer engagement

	Role
Companies	Companies will be responsible for carrying out direct local engagement with their customers to understand their priorities, needs and requirements, which should then drive decision making and the development of the company's business plan.
CCGs	CCGs will provide independent challenge to companies and provide independent assurance to us on: the quality of a company's customer engagement; and the degree to which this is reflected in its business plan. In chapter 13 (securing confidence and assurance), we recap the CCGs' assurance role, which we set out in our Customer engagement policy statement for PR19.
Ofwat	We will inform, enable and incentivise good customer engagement and will: • facilitate more CCG collaboration; and • continue to provide information and clarity about our expectations (but not provide detailed or prescriptive guidance on how companies should engage with their customers). We will continue to work with the CCG chairs to ensure they are clear on what we expect their CCG reports to include.

2.3 Customer engagement principles

At PR14, we identified seven principles of good customer engagement (see box below). We reviewed these principles after PR14 when developing our customer engagement policy statement for PR19 and consider them to remain fit for purpose. We developed additional principles of good customer engagement for PR19, which we describe further below.

Box 2.1 - Principles of good customer engagement

Principle 1 – Water companies should deliver outcomes that customers and society value at a price they are willing to pay.

Principle 2 – Customer engagement is essential to achieve the right outcomes at the right time and at the right price.

Principle 3 – Engagement should not simply take place at price reviews. Engagement means understanding what customers want and responding to that in plans and ongoing delivery.

Principle 4 – It is the companies' responsibility to engage with customers and to demonstrate that they have done it well.

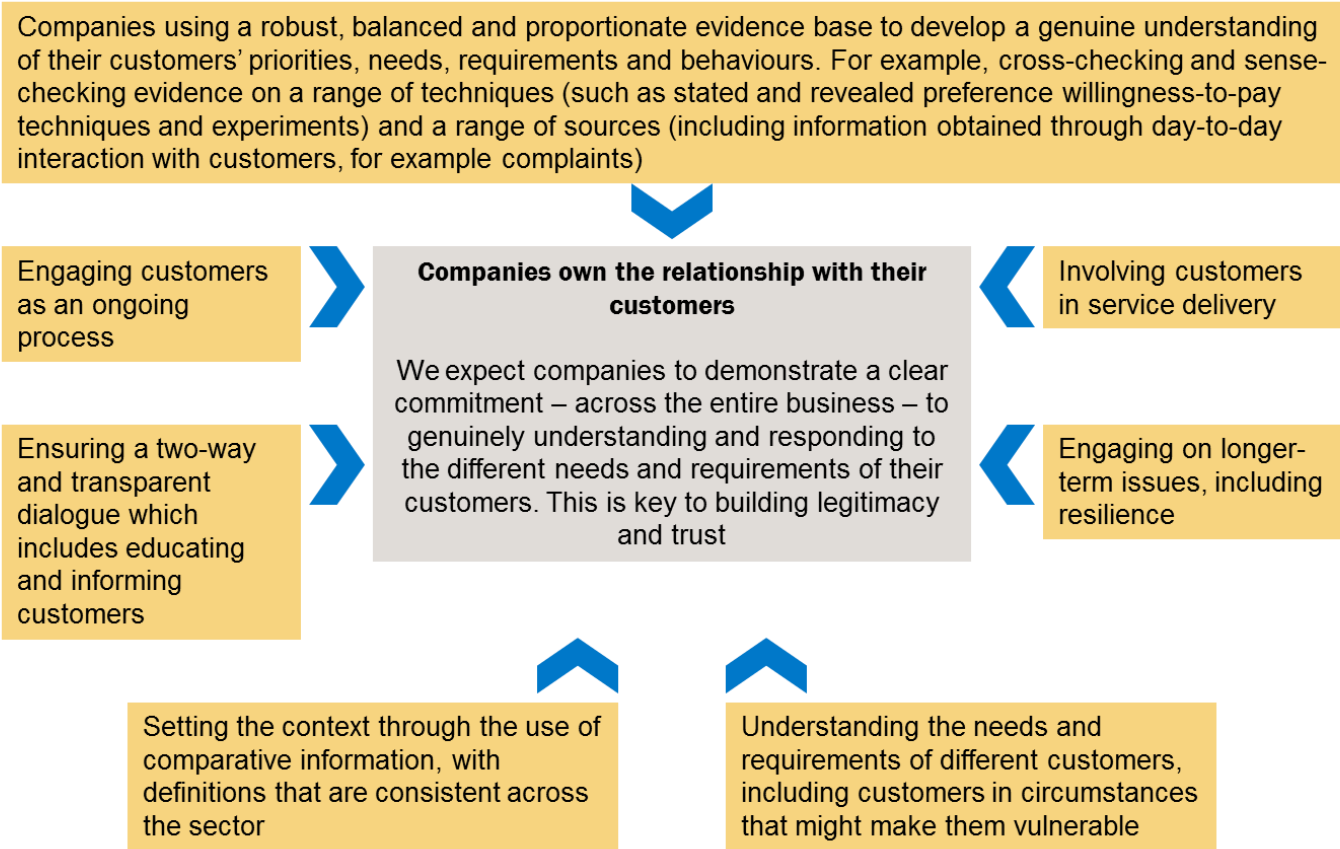
Principle 5 – Customers and their representatives must be able to challenge the companies throughout the process. The engagement process should ensure this challenge happens. If this is not done effectively, we must be able to challenge on customers' behalf. In doing so, we will fulfil our duty to protect customers.

Principle 6 – Engagement is not a 'one-size-fits-all' process, but should reflect the particular circumstances of each company and its various household and non-household customers.

Principle 7 – The final decision on price limits is entrusted to Ofwat. We will use a risk-based approach to challenge company plans if this is necessary to protect customers' interests.

Despite acknowledging the significant improvement in the quality of customer engagement that companies and CCGs achieved at PR14, stakeholders support our view that this is an area in which companies should be striving to make further improvements at PR19. To facilitate this, we set out a number of additional principles for good quality customer engagement (see figure 2.1 below). We provide more detail on each of the additional principles in our Customer engagement policy statement for PR19.

Figure 2.1 Additional principles of good customer engagement



2.4 Customer participation

One of our seven additional principles of good customer engagement is involving customers in service delivery.

Our report Tapped in – from passive customer to active participant, published in March 2017, defined customer participation as the active involvement of customers in the design, production, delivery, consumption, disposal and enjoyment of water, water services and the water environment in the home, at work and in the community.

'Tapped in' suggested some practical ways of carrying out customer participation and gave our stakeholders a better understanding of what they could achieve. It also explained the potential benefits of customer participation such as contributing to great customer service and a resilient supply at a price all of us can afford.

We expect companies to show in their business plans how they have started to take into account the four themes of this report.

- **Futures** – customer participation to improve the current and future sustainability of water services.
- **Action** – customer behaviour change, including saving water and helping to reduce sewer blockages.
- **Community** – community ownership of particular aspects of water as an essential resource.
- **Experience** – increasing customers' control of water in their home and of the service experience.

2.5 Longer-term issues, including resilience

Another of the seven additional principles of good customer engagement is engaging on longer-term issues such as resilience, security of services and the long-term affordability of bills. In chapter 5 (securing long-term resilience), we set out our resilience planning principles.

Resilience planning principle 2 on customer engagement states that:

> "Aspirations on levels of resilience should be informed by engagement with customers, to help companies understand their customers' expectations on levels of service. This will also help companies understand their customers' appetite for risk and how customer behaviour, in matters such as water efficiency, might influence approaches to resilience."

Companies should make sure their plans reflect the needs and requirements of future customers, as well as current ones, to avoid unduly deferring investment into the future and passing the bill onto future generations. We expect companies to be creative about exploring the best ways to engage customers on long-term issues.

2.6 Customer engagement and the business retail market

The introduction of the competitive market for the provision of retail services to eligible business customers in England and Wales means that, in many cases, wholesalers are no longer providing retail services to business customers. As we said in Ofwat's customer engagement policy statement and expectations for PR19, we want wholesalers to continue to engage with business end-customers on the wholesale services they provide to them. We do not want wholesalers to lose this link with their end customers.

In the July 2015 Water 2020 consultation we said that retailers to business customers might be better informed and better resourced than end customers, and might have stronger incentives and more buying power with which to negotiate wholesale service improvements on behalf of their customers. We consider that wholesalers should engage with business retailers as part of the customer engagement process to learn about their views and the views of their customers.

We will engage actively with retailers as we prepare for and carry out the price review. This is not a substitute for wholesaler engagement with business retailers.

We explain in chapter 4 (delivering outcomes for customers) that we will be monitoring the development of the business retail market and will work with Market Operator Services Limited (MOSL), retailers and wholesalers to encourage wholesalers to deliver good quality customer service to retailers.

2.7 Customer data

One of our additional principles of good customer engagement is using a robust, balanced and proportionate evidence base – including customer data – to understand customers' preferences.

We published Unlocking the value in customer data: a report for water companies in England and Wales in June 2017. In the report, we explained that better use of data can be used to drive better customer service and satisfaction, improve efficiency and encourage smarter network management. Companies can also use good customer data to help identify and support customers who are struggling to pay their bills, or who find themselves in vulnerable circumstances. It can also allow companies to reduce levels of bad debt by taking better targeted approaches to different customer groups.

We want to see the water sector putting customers first and lead the way in how it uses customer data. Our report found that there have been large changes in the volume and type of data people create in recent years – and that the water sector is lagging behind other sectors in the ways it uses insights and intelligence from that data to do more for customers.

In October 2017, through the UK Regulators Network (UKRN) and together with Ofgem, the energy regulator, we published a joint report on Making better use of data: identifying customers in vulnerable situations. In the report, we set out expectations for companies across the energy and water sectors to work collaboratively to deliver better outcomes for customers through the better use of data.

We highlighted that data sharing in particular has the potential to enhance the way that customers are supported. For example, more targeted identification of customers in vulnerable situations can help make sure they receive the right support when they need it. The report sets out our expectation that the joint working group, established by Water UK and the Energy Network Association, will report quarterly to Ofwat and Ofgem jointly, as part of UKRN, on progress towards delivering cross-sector data sharing.

We expect to see evidence of how companies plan to make better use of customer data and data sharing over the next price control period, and over the longer term, in their business plans.

2.8 Communications

Good communication with customers is a foundation of effective customer engagement. There is a big opportunity for companies to use all their communication tools to listen and respond to customers and communities. Communications can drive behaviour change: transforming what customers think, feel, believe and do.

Communications can help raise awareness of the value of water among customers and employees, encourage customers to save water and change what people put down sinks and toilets. Communications can also reduce unnecessary calls, help customers take early action to reduce the risk of debt and change the behaviour of stakeholders such as farmers and local authorities. Communication can be a route to collaboration with others to create new social norms or to prompt more water-efficient behaviours.

We launched our expectations for how companies will communicate in PR19 at an event with communications directors on 27 June. We covered the evidence we would be looking for in five areas of communications: channels, messaging, audience, governance and evaluation.

2.9 Initial assessment of business plans – customer engagement

We will test customer engagement in our initial assessment of business plans as follows.

Initial assessment test on customer engagement

What is the quality of the company's customer engagement and participation and how well is it incorporated into the company's business plan and ongoing business operations?

In assessing this test, we will take into account evidence that the company has:

- effectively addressed the principles of good customer engagement including, but not limited to, evidence from its CCG;
- effectively taken forward the themes of customer participation including, but not limited to, evidence from its CCG;
- engaged effectively with customers on longer-term issues such as resilience, and taken into account the needs and requirements of future customers.

3. Addressing affordability and vulnerability

Key themes of PR19

Our approach to affordability and vulnerability supports the key themes of PR19.

Affordability is one of the four key themes of PR19, which will promote affordability for all customers, now and in the long term, including those struggling to pay.

Great **customer service** means that companies really know and understand their customers, and can provide more effective support to customers who are in circumstances that make them vulnerable. Our methodology incentivises companies to provide customer service to match the best in other sectors.

We are encouraging companies to **innovate** to improve their assistance for customers who struggle to pay and who are in circumstances that make them vulnerable.

Greater efficiency and lower financing costs provide scope for companies to improve affordability and to improve **resilience** and service.

Affordability

We are incentivising companies to develop business plans that address:

- overall affordability, providing value for money;
- affordability in the long term; and
- affordability for those struggling, or at risk of struggling, to pay.

We will use five principles to assess the affordability of business plans:

- customer engagement;
- customer support;
- effectiveness;
- efficiency; and
- the accessibility of companies' financial assistance measures.

Our assessment will be supported by evidence provided by companies, the independent reports from CCGs, and evidence from other expert organisations.

Vulnerability

We will assess how companies plan to support customers who are in circumstances that make them vulnerable, based on the challenges set out in our 2016 vulnerability focus report. We will assess:

- how well companies use good-quality available data to understand their customers and identify those who are in circumstances that make them vulnerable;
- how well companies engage with other utilities and third parties to identify vulnerability and support those customers who are in circumstances that make them vulnerable; and
- how targeted, efficient and effective companies' approaches to address vulnerability are.

Companies must have at least one bespoke performance commitment for addressing vulnerability in their business plans following customer engagement and challenge from their CCGs.

Applicability to England and Wales

Our final methodology for affordability and vulnerability **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. Research carried out by the Consumer Council for Water shows that one in eight customers find their water bill unaffordable across England and Wales. As much as half the population, irrespective of where they live, will find themselves at some point in temporary circumstances that may make them vulnerable. Both the UK and Welsh Governments' strategic policy statements for Ofwat recognise the need for fair and affordable bills and support for customers in circumstances that make them vulnerable (see section 3.1).

Responses to our draft methodology proposals

There was general support for us using qualitative and quantitative information in the round to assess how a company **addresses affordability** in its business plan against our five principles. There was also general support for the assessment of companies' business plans against the challenges set out in our 2016 **vulnerability** focus report and for each company to have a **bespoke performance commitment on vulnerability**.

There were mixed views on our proposal to collect **common quantitative metrics** through the business plan tables to assess how companies are addressing affordability and vulnerability. Some respondents considered that affordability and vulnerability were too complex and dynamic to capture in individual metrics, while some respondents disagreed with the particular metrics we proposed. Some stakeholders suggested that we require companies to have **common performance commitments** on affordability and vulnerability to reflect the importance of these issues.

Our consideration of respondents' views

We welcome the overall support for our approach from stakeholders.

We have engaged further with our stakeholders on the **common metrics** of affordability and vulnerability, including through discussion with CCG chairs and a stakeholder workshop, and have revised our list of common metrics as a result. We confirm that we are considering common metrics in the round alongside other qualitative and quantitative information provided by companies. We are not proposing a **common performance commitment** on affordability or vulnerability because no single measure captures the complex and dynamic nature of affordability and vulnerability, and because the challenges vary across companies. We consider that our strong emphasis on affordability and vulnerability in PR19 will incentivise companies to address these issues effectively in their business plans. We will build on experience in PR19 and consider common performance commitments for affordability and vulnerability at PR24.

3.1 Introduction

This chapter sets out our final methodology for PR19 with respect to affordability and vulnerability. This PR19 final methodology has been determined following full consideration of views expressed by respondents to our draft methodology proposals, published in July of this year.

Affordability is the ability of a customer to pay their water bill. It is one of the four key themes of PR19.

Vulnerability relates to customers whose characteristics, situation or circumstances mean that they may need sensitive, well-designed and flexible support and services to access, read or understand information. For example, customers with hearing difficulties may need a home visit to be told about an interruption to their service.

The UK Government's strategic policy statement sets a priority for Ofwat to challenge the water sector to go further to identify and meet the needs of customers who are struggling to afford their charges. It then sets Ofwat an objective to challenge companies to improve the availability, quality, promotion and uptake of support to low income and other residential customers in circumstance that make them vulnerable.

The Welsh Government's strategic policy statement sets Ofwat a customer protection objective for the short term and long term, to challenge companies to take into account variations in the priorities of customers. It then sets Ofwat priorities for customer protection including:

- access to social tariffs for those who struggle to pay;
- support of appropriate efforts by companies to manage customer debt and minimise write-offs; and
- incentivising companies to engage with vulnerable customers and produce business plans which are acceptable and affordable.

Both statements from the English and Welsh Governments emphasise the importance of affordability in the long term.

The remainder of this chapter is structured as follows.

Affordability (section 3.2):

- why affordability is important (section 3.2.1);
- our approach to affordability (section 3.2.2);

- assessing how well companies address affordability (section 3.2.3); and
- the initial assessment of business plans – affordability (section 3.2.4).

Vulnerability (section 3.3):

- why addressing vulnerability is important (section 3.3.1);
- assessing how well companies address vulnerability (section 3.3.2); and
- the initial assessment of business plans – vulnerability (section 3.3.3).

Appendix 1 (addressing affordability and vulnerability) sets out the reasons for, and the detailed explanation of, our approach to addressing affordability and vulnerability. It sets out the background, including full details of our proposals as they appeared in the draft methodology, the responses to our draft methodology proposals, our consideration of those responses and an explanation of any changes we have made in the final approach.

Section 2 of appendix 15 outlines respondents' views to the four questions we posed on affordability and vulnerability in our draft methodology proposals. Appendix 15 also provides (or references) our responses to the issues raised by respondents.

3.2 Affordability

3.2.1 Why affordability is important

Customers must feel confident they are receiving affordable, value for money services, both now and in the long term. Customers' satisfaction with their services and their ability to pay bills underpins trust and confidence in water and wastewater services. Therefore, getting the best deal and service for customers is at the heart of what we do.

Our report, Affordability and debt 2014-15, published in December 2015, identified that:

- for English companies, 23% of households spend more than 3% of their income on water, while 11% of households spend more than 5%; and
- for Welsh companies, 32% of households spend more than 3% of their income on water, while 15% of households spend more than 5%.

According to CCWater's recent report 'Staying afloat: Addressing customer vulnerability in the water sector (2016-17)', one in eight households find their water bill unaffordable. And, according to findings from the Financial Conduct Authority (FCA) survey 'Understanding the financial lives of UK adults', an estimated 4.1 million people are in financial difficulty because they have failed to pay domestic bills or meet credit commitments in three or more of the last six months.

3.2.2 Our approach to affordability

Our approach to affordability is to incentivise companies to develop business plans that address:

- overall affordability – providing value for money;
- affordability in the long term; and
- affordability for those struggling, or at risk of struggling to pay.

We will use five principles to assess the affordability of business plans: customer engagement; customer support; effectiveness; efficiency; and accessibility. The following figure illustrates how the five principles relate to the three areas of affordability we will be testing at PR19.

Figure 3.1 How the five principles interact with the three areas of affordability

1. Overall affordability – providing value for money

2. Affordability in the long term

3. Affordability for those struggling to pay, or at risk of struggling to pay

Principle 1: Customer engagement – how well is the company engaging with its customers on overall affordability and value for money now, in the long term and on assistance for those that struggle to pay?

Principle 2: Customer support – how well does the company understand what affordability looks like for its customers and how is this reflected in its proposals? What do customers think of the company's proposals to address affordability? Are bills acceptable to customers? Do customers support the assistance measures for those that struggle to pay?

Principle 3: Effectiveness – how effectively does the company's business plan improve affordability? What are the benefits of the company's measures?

Principle 4: Efficiency – what difference will the company's proposed measures to address affordability make compared to the costs of its interventions? Are the measures the most cost-effective means of support?

Principle 5: Accessibility – what will the company do to ensure that customers who are struggling to pay have easy access to help and support?

In addition to our assessment of affordability, our other price review assessments will promote affordability in the following ways.

- Our cost efficiency challenge, including on bad debt, and our approach to the cost of capital, will promote **overall affordability and create scope for lower bills**.
- Our stronger challenges on companies' service quality through our outcomes assessment, and through the customer measure of experience (C-MeX) and the developer services measure of experience (D-MeX), will promote value for money – see chapter 4 (delivering outcomes for customers).
- Our financeability test promotes **affordability in the long term** as we will assess how companies' proposed pay as you go (PAYG) rates and regulatory capital value (RCV) run-off rates reflect the levels of proposed expenditure, bill profiles, affordability and customer views (see section 11.6). Our resilience planning principles also require companies to consider customers' expectations and the best value solutions for customers in the long term – see chapter 5 (securing long-term resilience).
- Our challenges to companies to improve how they manage customer debt will improve **affordability for those struggling, or at risk of struggling to pay** – see chapter 9 (securing cost efficiency) – such as making sure customers who are eligible for help, receive it; and tailoring revenue collection and recovery to different customer circumstances using a wide range of communication channels.
- We are also expecting companies' Board assurance statements to include assurance that the companies' business plans address affordability for all customers, including in the long term and including those struggling, or at risk of struggling, to pay – see chapter 13 (securing confidence and assurance).

3.2.3 Assessing how well companies address affordability

Our approach to assessing affordability looks across all aspects of companies' business plans and requires companies to provide evidence of how they will address affordability.

Following the consultation responses and further engagement with stakeholders, we consider that there is benefit from us collecting a set of common metrics of affordability to provide comparative information and transparency for customers and other stakeholders. We will consider the common metrics alongside the quantitative and qualitative evidence provided by companies, and information from the independent CCG reports, when **making our assessment in the round**.

In appendix 1 (addressing affordability and vulnerability) we illustrate the type of qualitative information we could use to assess companies' approaches to affordability, as well as the common metrics we will collect after considering responses to the consultation and following further engagement with our stakeholders.

We will not require companies to have a common performance commitment for affordability because we recognise that no single measure reflects the complexity and dynamism of affordability and that the challenges vary across companies. Companies can propose bespoke performance commitments on affordability that reflect their specific challenges. We are requiring companies to provide data on a number of common metrics of affordability to help us to better understand the nature of affordability issues and the variations between companies, but we are not requiring companies to set commitments on these common metrics. We consider our strong emphasis on affordability at PR19 will sufficiently incentivise companies to address these issues effectively in their business plans. We will build on experience in PR19 and reconsider common performance commitments for affordability at PR24.

The UK and Welsh governments issued guidance in 2012 and 2013 to companies and Ofwat on social tariffs in England and Wales respectively, to which companies and Ofwat must have regard. We will expect to see strong evidence that customers are supportive of social tariffs that go beyond revenue neutral levels of assistance and that this assistance is provided in the most efficient way.

3.2.4 Initial assessment of business plans - affordability

We will test how companies address affordability in our initial assessment of business plans as follows.

Initial assessment test on affordability

1. How well has the company demonstrated that its bills are affordable and value for money for the 2020-25 period?
2. How well has the company demonstrated that its bills will be affordable and value for money beyond 2025?
3. To what extent has the company demonstrated that it has appropriate assistance options in place for those struggling, or at risk of struggling, to pay?

In assessing these tests we will take into account evidence which includes:

- good engagement with customers on affordability;
- customer support for the affordability of the plan;
- the effectiveness of the company's approach;
- the efficiency of the approach; and
- the accessibility of the company's support for those struggling, or at risk of struggling, to pay.

3.3 Vulnerability

3.3.1 Why addressing vulnerability is important

If the sector is to build and maintain trust and confidence, it is essential that water companies thoroughly understand who their customers are and the specific needs of different types of customers. Companies can use this information to ensure that the vital services they provide are inclusive and accessible to those who need them.

This is the first time we will have an explicit test for vulnerability in a price review. This will help incentivise companies to ensure they provide sensitive, well-designed and flexible support and services to customers in circumstances that make them vulnerable. This includes customers who are at risk of being in circumstances that make them vulnerable.

Vulnerability takes many forms and can be a transient state, for example, following a bereavement. It is essential that water companies do not have a one-size-fits-all approach. Instead, they need to understand and actively respond to each customer's specific needs, characteristics and situation.

Alongside the incentives we provide through PR19, we are continuing to promote the key themes in our 2016 vulnerability focus report. For example, our 2017 report: 'Unlocking the value in customer data - a report for companies in England and Wales', highlighted the scope to make better use of customer data to provide support to customers in circumstances that make them vulnerable. We have carried out work through the UK Regulators Network (UKRN) on data sharing, to help make it easier for the water and energy companies to identify and coordinate support for customers in circumstances that make them vulnerable. This is explained in the UKRN's report: 'Making better use of data: identifying customers in vulnerable situations - A report for water and energy companies'.

3.3.2 Assessing how well companies address vulnerability

We will assess how companies plan to support customers who are in, or about to be in, circumstances that make them vulnerable, based on the challenges set out in our 2016 vulnerability focus report. We will assess:

- how well companies use good-quality available data to understand their customers and identify those that are in circumstances that make them vulnerable;
- how well companies engage with other utilities and third parties to identify vulnerability and support those that are in circumstances that make them vulnerable; and
- how targeted, efficient and effective companies' approaches to address vulnerability are.

Following consultation and further engagement with our stakeholders, we still consider that there is benefit from us collecting a set of common metrics of vulnerability to provide comparative information and transparency for customers and other stakeholders. We will consider the common metrics alongside the quantitative and qualitative evidence provided by companies and their CCGs, when **making our assessment in the round**. We set out the revised list of common metrics of vulnerability, following engagement with our stakeholders, in appendix 1 (addressing affordability and vulnerability).

We will not require companies to have a common performance commitment for vulnerability because we recognise that no single measure reflects the complexity and dynamism of vulnerability and the extent to which the challenges vary across companies. We are requiring companies to provide data on a number of common metrics of vulnerability to help us to better understand the nature of vulnerability issues and the variations between companies, but we are not requiring companies to set commitments on these common metrics. We consider that our strong emphasis on vulnerability in PR19 will sufficiently incentivise companies to address these issues effectively in their business plans. We will build on experience in PR19 and reconsider common performance commitments for vulnerability at PR24.

We are requiring companies to include at least one **bespoke performance commitment for addressing vulnerability** in their business plans, after engaging with customers and taking on board challenges from their CCGs. The bespoke performance commitments will require companies to engage with their customers and CCGs on their future commitments to addressing vulnerability.

We are also considering the use of a **third party expert panel** and the **further development of common metrics** to assess and advise companies' approaches to vulnerability across all companies during 2020-25. We will discuss this with the sector after the PR19 final determinations.

3.3.3 Initial assessment of business plans - vulnerability

We will test how companies address vulnerability in our initial assessment of business plans as follows.

Initial assessment test on vulnerability

To what extent does the company identify and provide accessible support for customers in circumstances that make them vulnerable, including proposing a bespoke performance commitment related to vulnerability?

In assessing this test, we will take into account evidence which includes:

- the quality of the company's customer engagement on vulnerability;
- evidence that the company's approach to vulnerability is targeted, efficient and effective, including evidence from the independent CCG report;
- evidence that there will be an improvement in accessibility and support to customers in circumstances that make them vulnerable; and
- evidence of good approaches to using customer data and working with third parties, including other utilities, to better identify, and target support when addressing vulnerability.

4. Delivering outcomes for customers

Key themes of PR19

Our approach to outcomes supports PR19's key themes.

Our approach ensures companies set stretching commitments for all aspects of **customer service**.

We promote long-term operational **resilience** by five common commitments on day-to-day resilience, four common asset health commitments, two new forward-looking common commitments and requiring companies to have bespoke performance commitments on resilience.

We promote **innovation** by encouraging companies to propose enhanced payments for frontier-shifting performance on the common performance commitments. We also expect companies to propose innovative, bespoke performance commitments that reflect customers' preferences.

We address **affordability** by requiring companies to propose performance commitments and ODIs that represent value for money.

Performance commitments

Companies make performance commitments to their customers on the quality of the services they will deliver for them. Companies must support their five-year performance commitments with long-term projections.

Companies must have **14 common performance commitments**, with standard definitions, covering the issues that matter most to all customers. Companies should propose **bespoke performance commitments** to reflect their own customers' preferences.

Companies should use a **broad evidence base** on customer preferences to challenge the degree of stretch in their proposals. For some of the common performance commitments, we expect companies to set commitment levels at least at the **forecast performance level of the best (upper quartile) companies** each year. We are challenging companies to reduce their **leakage** by 15% over 5 years among other challenges.

We will create the customer measure of experience (**C-MeX**) and the developer services measure of experience (**D-MeX**). C-MeX and D-MeX are both financial and reputational incentives to improve the satisfaction of residential and new connections customers, respectively.

Outcome delivery incentives (ODIs)

At PR19, our approach to ODIs will better align the interests of company management and investors with those of customers. **ODIs should be financial** rather than reputational as the default. Companies' ODIs should also be **in-period** as the default. Any end-of-period ODIs should impact companies' revenue as the default. Companies can deviate from the default if they provide good reasons supported by evidence.

Companies can propose **enhanced outperformance payments** for frontier-shifting performance improvements, which must be accompanied by **underperformance penalties** for very poor performance.

We will not cap the total amount a company can earn from ODIs. We are setting an indicative range of **±1% to ±3% of RoRE** for financial ODIs.

Applicability to England and Wales

Our final methodology for outcomes **applies both to** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. The 14 common performance commitments apply to all companies, as they reflect issues that customers in England and Wales value highly. We expect all companies in England and Wales to develop bespoke performance commitments to reflect their customers' particular preferences and their respective government's policy.

Responses to our draft methodology proposals

There was broad support for the overall outcomes framework, including the balance between common and bespoke performance commitments, strengthening ODIs, and introducing C-MeX and D-MeX.

There were mixed views on our proposals for the common performance commitments, including their definitions. There was disagreement with our proposal that companies should be challenged or expected to achieve performance at forecast upper quartile levels for 2024-25 from 2020-21 onwards.

There were comments about the design of C-MeX and D-MeX, including incentives on reducing complaints.

Our consideration of respondents' views

We have changed one of the common performance commitments from non-infrastructure asset failures leading to pollution incidents to treatment works compliance. We have amended the definitions of three of the common performance commitments: pollution incidents and the two resilience metrics on drought risk and wastewater flooding risk. We will be working with Water UK to improve the consistency of the definitions and reporting of seven common performance commitments, completing in early 2018.

We have modified our approach to performance commitments so that we challenge companies to achieve the forecast upper quartile performance level for each year of the price control period, rather than applying 2024-25 upper quartile performance from 2020-21 onwards. For supply interruptions, internal sewer flooding and pollution incidents, we expect companies to propose performance commitment levels that are at least the forecast upper quartile performance level for each year.

We have held working groups on C-MeX and D-MeX since the methodology consultation and will continue to work with our stakeholders. We have changed C-MeX to make the higher financial payments conditional on a company's performance on complaints. For D-MeX we will include an element based on performance metrics. We will run pilots for both incentives in 2018-19 and run them in shadow form in 2019-20.

4.1 Introduction

Outcomes are the high-level objectives valued by customers and society. This chapter sets out our final methodology for outcomes for PR19. Our PR19 final methodology has been determined after considering the views expressed by respondents on our draft methodology proposals published in July of this year. We had previously consulted on our approach to outcomes in November 2016.

Our vision for the water sector is one in which customers and wider society in England and Wales have trust and confidence in vital public water and wastewater services. The aim of the outcomes framework is to help realise this vision by focusing companies on delivering the high-level objectives that matter to today's customers, future customers and the environment.

The remainder of this chapter is structured as follows:

- approach to performance commitments (section 4.2);
    - common performance commitments (section 4.2.1);
    - asset health performance commitments (section 4.2.2)
    - bespoke performance commitments (section 4.2.3);
    - stretching performance commitment service levels (section 4.2.4);
    - transparency of performance commitments (section 4.2.5);
- approach to ODIs (section 4.3);
    - reputational ODIs (section 4.3.1);
    - financial ODIs (section 4.3.2);
- two new customer experience measures: C-MeX and D-MeX (section 4.4); and
- the initial assessment of business plans – outcomes (section 4.5).

In appendix 2 we provide further detail on, and reasons for, our PR19 final methodology for outcomes and how we have taken account of respondents' views.

In appendix 3 we provide further detail on, and reasons for, our approach to C-MeX and D-MeX and how we have taken account of respondents' views.

Section 3 of appendix 15 outlines respondents' views to the five questions we posed on outcomes in our draft methodology proposals. In appendix 15, we provide (or reference) our response to the issues raised by respondents that are not covered by appendices 2 or 3.

4.2 Approach to performance commitments

We are expecting companies to propose stretching performance commitments so that customers benefit from better service. This section covers our approach to:

- **common performance commitments**, including the new common resilience performance commitments;
- **asset health**, including discussion of the four common asset health performance commitments;
- **bespoke performance commitments** (that is, ones that are specific to each company) including the requirement to cover certain areas, such as the environment, with bespoke performance commitments;
- our expectations around using additional information and methods for setting **stretching performance commitment levels** for both bespoke and common performance commitments, including leakage; and
- the **transparency** of performance commitments.

4.2.1 Common performance commitments

The outcomes approach is rooted in customer engagement. Companies engage with their customers on their high-level objectives, their performance commitments, their associated service levels and their ODIs. At PR14, companies set their own performance commitments, which led to a number of similar, but not identical, definitions. As a result, it was more difficult to compare companies' performance than it would have been using measures with common definitions.

It became clear at PR14 that there were core performance commitments, valued highly by all customers across Wales and England. It also became clear that it would be beneficial for these core performance commitments to be common for all companies, with common definitions. This would allow customers, customer challenge groups (CCGs), other stakeholders and us to compare performance and to challenge companies on their proposed performance commitment levels more effectively.

The common performance commitments ensure that our framework focuses on the issues that matter to customers. The list includes the quality and reliability of the water and wastewater supply, resilience, asset health and customer service. By measuring and incentivising companies against service failures, these performance commitments motivate water companies' management to identify and mitigate risks to their services.

We have taken into account responses to the 14 common performance commitments we proposed in our draft methodology proposals. We have decided on the **14 common performance commitments** shown in figure 4.1 below. All companies in England and Wales will have these performance commitments at PR19[15].

Figure 4.1 The 14 common performance commitments for PR19

1 to 6 and 9, 11 and 12 apply to WoCs and WaSCs
7, 8 and 10, 13 and 14 apply to WaSCs only

We have changed one of the common performance commitments since our draft methodology proposals from ‘non-infrastructure asset failures leading to pollution incidents’ to ‘treatment works compliance’. This was following feedback from stakeholders that our proposed metric was too similar to the other common performance commitment on pollution incidents. We consulted a group of industry asset health experts about using treatment works compliance as the replacement, as a number of respondents to the consultation had proposed. The group supported our approach. Therefore we have made the change.

Our approach to common and bespoke performance commitments requires companies to address their environmental challenges. Our list of common performance commitments includes leakage, per capita consumption, pollution incidents and treatment works compliance. The two forward-looking resilience metrics also relate to the environment by encouraging companies to plan for the long term and mitigate drought and flooding risk. As explained below, and in appendix 2 (delivering outcomes for customers), we are requiring companies to have comprehensive coverage of their environmental challenges in their bespoke

[15] The wastewater common performance commitments do not apply to water-only companies.

performance commitments and to take into account customer preferences and, where appropriate, impacts on the environment, biodiversity and natural capital when setting their performance commitment levels and ODIs.

The common performance commitments rely on consistent definitions and reporting. Companies and other stakeholders have worked together, co-ordinated by Water UK and with our support, to agree common definitions of leakage, supply interruptions and sewer flooding. For seven[16] of the common performance commitments, including these three, we are taking forward a joint project with Water UK, completing early in 2018, to further improve the consistency of the definitions and reporting against them. We provide more details in appendix 2 and on our definitions webpage, where we will publish status updates on the detailed definitions and the final versions.

We expect companies to implement the common definitions and consistent reporting so that they can use them in their business plans. We will take into account companies' progress in the initial assessment of business plans. We recognise that it is more difficult to set performance commitments for new metrics and metrics with new data. In appendix 2 we provide guidance on how to set performance commitment levels in such cases.

Resilience and the common performance commitments

Our overall approach to resilience in the round, including our seven resilience principles, is set out in chapter 5 (securing long-term resilience).

In the outcomes framework, we are promoting operational resilience through: two forward-looking common performance commitments, one on reducing drought risk and one on reducing flooding risk; common performance commitments covering day-to-day resilience issues such as supply interruptions and sewer flooding; requiring companies to have bespoke performance commitments relating to their particular resilience challenges; and four common performance commitments on asset health, such as mains bursts and sewer collapses.

We have worked to embed resilience in the common performance commitments. For example, we have worked with the sector to make sure that the common

[16] The seven common performance commitments the project will look at are: leakage, supply interruptions, internal sewer flooding, per capita consumption, unplanned outage, mains bursts and sewer collapses. External sewer flooding will also be covered. The other common performance commitments have established definitions or there are separate projects to define them.

performance commitments do not include any exemptions for extreme weather, which are precisely the events we want the sector to be resilient to. We also consider that C-MeX will incentivise companies to avoid system failures and improve the quality of their responses to, and recovery from, disruption, including street works. C-MeX will do this by capturing customers’ views on their wider experience of water companies’ performance.

We have decided that companies’ performance commitments for 2020-25 should be supported by long-term projections for at least another ten years. These projections will encourage companies to consider their long-term ambitions and help them to engage their customers and stakeholders on longer-term issues.

Companies should also expect us to continue to incentivise the outcomes that are reflected in the 14 common performance commitments in the long term. This will incentivise companies to plan to improve their performance on these outcomes to ensure they can deliver good-quality services to customers over the long term.

Two of the common performance commitments particularly focus on forward-looking resilience:

- the risk of severe water supply restrictions in a (1-in-200 year) drought; and
- the percentage of the population at risk of sewer flooding in a severe (1-in-50 year) storm.

Two working groups have been progressing development of the relevant metrics since our draft methodology proposals. On the basis of the work done to date we consider that we can include both forward-looking resilience metrics in the list of 14 common performance commitments. We will be looking to the industry to carry out more work over the price control period to further develop infrastructure and environmental resilience metrics. Companies will need to propose stretching performance commitment levels on these metrics, following engagement with their customers and stakeholders. A company’s performance commitment level for the drought resilience metric should be consistent with its water resources management plan.

We are, however, cautious about requiring companies to have financial ODIs related to the two forward-looking resilience metrics, because they are at relatively early stages of development and so lack historical and comparative performance data. Companies should only propose financial ODIs related to these two common performance commitments if they reflect the particular resilience challenges facing them, are supported by evidence and by their customers and do not involve ODI outperformance payments that overlap with funding received through the cost allowances.

The two new resilience metrics, alongside the existing ones, will enable customers and other stakeholders to better understand the resilience of the water and wastewater services provided by their water companies.

As we explain in section 4.2.3, we also expect companies to propose metrics on resilience as bespoke performance commitments that reflect their own specific resilience challenges. Companies can draw on the continuing work of the different groups that have been working on resilience metrics[17], as well as other sources of information. Companies should consider whether to propose financial ODIs for their bespoke resilience performance commitments based on engagement with their customers and the particular resilience challenges facing the company. We will not allow the inclusion of ODI outperformance payments for performance commitments related to increasing a company's resilience if customers are already paying for this through cost allowances, as this would mean customers paying twice for the same improvements.

4.2.2 Asset health performance commitments

Companies need to make sure that their assets are being maintained appropriately for the benefit of current and future generations. This is a key area of network and service resilience.

At PR14, we encouraged companies to develop bespoke approaches to asset health. While this has produced some innovation, such as the use of different indicators and different methods of assessing performance, it has also led to inconsistency in approaches across companies and reduced comparability and transparency.

Our proposals on asset health were generally supported by consultation respondents, whose comments focused on their definitions. We address these comments in appendix 2 (delivering outcomes for customers) and appendix 15 (responses to our draft methodology). Following comments from respondents, we

[17] These are the Water and Wastewater Resilience Action Group (WWRAG) and UK Water Industry Research (UKWIR).

changed one asset health common performance commitment as we describe in section 4.2.1 above.

We expect companies to:

- have four common performance commitments on asset health: mains bursts, unplanned outages, sewer collapses and treatment works compliance[18]. This will enable customers, CCGs and us to compare performance and challenge companies about their proposed levels for these commitments;
- select metrics for bespoke performance commitments from our long list of asset health metrics with standard definitions (see appendix 2), enabling customers, CCGs and us to compare performance and challenge companies about those selected;
- choose, where appropriate, their own asset health performance commitments outside of the common performance commitments and the long list, to enable companies to innovate in their approach to asset health and reflect any asset health issues specific to the company;
- use individual performance commitments for asset health – that is, not to aggregate a number of metrics into more complex performance commitments on asset health. This will promote transparency on asset health both in companies' customer engagement and in the reporting of their asset health performance during the price control period; and
- fulfil our expectations about how companies communicate asset health outcomes (see appendix 2). Our expectations include that companies: (i) clearly present their approach to asset health outcomes in their business plans; (ii) engage with their customers on how their asset health performance commitments protect current customers, future customers and the environment; and (iii) ensure their asset health performance commitments are easy to understand.

Transparency around asset health and resilience performance commitments is particularly important in the context of companies potentially proposing additional resilience expenditure at PR19. This improved transparency will give customers, CCGs and us greater clarity on companies' asset health and resilience proposals, making it easier to challenge and scrutinise companies' proposals.

[18] Only water and sewerage companies must have sewer collapses and treatment works compliance.

The initial assessment of business plans will involve us assessing companies' assurance around the resilience of their systems and services, including their asset health – see also chapter 13 (securing confidence and assurance).

4.2.3 Bespoke performance commitments

In addition to the common performance commitments, we expect companies to propose **bespoke performance commitments**, so that they can reflect their customers' preferences and develop innovative performance commitments. For example, this allows companies operating in Wales to reflect Welsh customers' priorities and government policy in Wales. Companies should engage with their customers and local stakeholders on their bespoke performance commitments.

Companies should make sure that the definitions of their bespoke performance commitments are clear. There should be no, or very few, exemptions included in the definitions. Any exemptions need to be well justified and supported by the company's customers.

If companies do not intend to continue with any of their PR14 performance commitments, they will need to justify why. We will expect evidence and reasoning for removing a performance commitment, particularly if the company was performing poorly against the performance commitment during the last control period.

We are requiring companies to propose bespoke performance commitments to cover the five areas listed below:

- the different price controls – for companies whose areas are wholly or mainly in Wales this includes the business retail price control;
- vulnerability;
- the environment;
- resilience; and
- the abstraction incentive mechanism (AIM) – see appendix 2.

We consider these areas matter to customers and society, but we want to give companies the ability to develop bespoke performance commitments that reflect their customers' preferences, their particular challenges and to allow for innovation.

We expect companies' common and bespoke performance commitments together to provide comprehensive coverage of their environmental challenges. Appendix 2 (delivering outcomes for customers) provides a list of environmental metrics suggested by environmental organisations, which companies can choose from, although companies can also propose their own metrics.

As explained in chapter 8 (targeted controls, markets and innovation: retail controls), we have concerns about the incentives for water companies to manage gap sites and voids[19] appropriately. In this context, we are requiring water companies to come forward with bespoke performance commitments on gap sites and voids or justify why this is not appropriate.

We encourage companies to consider ways of making their performance commitments more challenging at PR19. This could include making bespoke performance commitments to their customers based on innovative metrics that genuinely challenge the company and lead to significant changes in operating practices or culture for the benefit of customers or the environment. It could also include performance commitments that involve working together with others, such as new approaches to catchment management.

4.2.4 Stretching performance commitment service levels

We expect companies to set stretching levels for their performance commitments for the five years from 2020-21 to 2024-25, and to support these with long-term projections for at least another ten years. Our approach to setting stretching performance commitment levels covers the following areas:

1. setting the initial service level – the performance level in the year, usually 2019-20, before the performance commitment levels start, which acts as the baseline for future improvements;
2. setting out the approaches companies should use when challenging the level of stretch in their performance commitments and engaging with customers;
3. setting performance commitment levels for common performance commitments; and
4. setting performance commitment levels for reducing leakage and water usage.

The first element of setting performance commitments is **setting the initial service level**. At PR19, we expect companies to forecast appropriate initial service levels

[19] A gap site is a property where water and/or wastewater services are being consumed, but the property is not on a water company's system and is therefore not billed. Voids are properties classed by water companies as being vacant.

(usually for the year 2019-20). We will scrutinise the initial service levels closely at PR19, including with reference to any PR14 commitments companies made for that year. We will intervene when assessing business plans if the initial service levels are insufficiently demanding. Where the data for a performance commitment is new, a company could make its commitment in the form of a percentage improvement from a base level.

The second element of setting stretching performance commitments is what **approaches companies should take to set performance commitment levels**. Our approach to setting stretching performance commitment levels for PR19 is that companies should:

- engage with their customers on their performance commitment levels; and
- challenge the level of stretch in their performance commitments with their customers, CCGs and other stakeholders against a range of approaches including, but not limited to, the following:

  - cost–benefit analysis – taking a wide range of information on customer preferences into account as set out in our customer engagement policy statement for PR19 and taking account of forecast cost efficiencies;
  - comparative information – companies should use a forecast upper quartile level for each year of the price control;
  - historical information;
  - minimum improvement;
  - maximum level attainable; and
  - expert knowledge.

We provide more detail on these approaches in appendix 2 (delivering outcomes for customers). We want companies to challenge themselves against the approaches above so that when engaging with customers they are not using their current performance as the starting point, but starting from what excellent performance looks like. CCGs will challenge companies on their approaches to setting performance commitments including how well they reflect customers' views and how stretching they are.

During our initial assessment of business plans, we will review how well companies' proposed performance commitment levels meet our expectations. We will intervene if we consider there is not sufficient customer engagement or challenge when setting the performance commitment levels.

We discuss the practicalities of setting performance commitment levels for performance commitments that have new or amended definitions in appendix 2.

The third element of setting stretching performance commitments is the approach to the **common performance commitments**. The approach for common performance commitments is the same as for the other performance commitments. The one exception is that for three of the common performance commitments, which have particularly good-quality data and where there is no clear reason why companies should not be achieving the same stretching level of performance, we expect companies to set their commitment levels to at least the forecast upper quartile level in each year of the price control. These three are:

- water supply interruptions;
- internal sewer flooding; and
- pollution incidents.

There should be no transition period for currently poor performing companies to move from 2019-20 performance to achieve the forecast upper quartile efficient performance level in 2020-21.

The fourth element of setting stretching performance commitments is that we have developed specific approaches for **leakage and water usage.** These remain a top priority for customers and the UK and Welsh Governments. Managing leakage and water usage is important for delivering a resilient network in the long term and reducing over abstraction of our water resources.

The industry achieved large reductions in **leakage** in the late 1990s, but since 1999-00 leakage levels have remained relatively static. We therefore expect to see a renewed vigour in companies reducing leakage.

We are challenging companies to set stretching leakage performance commitment levels to:

- achieve forecast upper quartile performance (in relation to leakage per property per day and leakage per kilometre of main per day) where this is not being achieved – or justify why this is not appropriate;
- achieve at least a 15% reduction in leakage (one percentage point more than the largest reduction commitment at PR14) – or justify why this is not appropriate; and
- achieve the largest actual percentage reduction achieved by a company since PR14 – or justify why this is not appropriate.

Companies should also justify their leakage performance commitments relative to the minimum level of leakage achievable.

Companies should consider how to innovate to reduce leakage. For example, they could include an enhanced outperformance payment in their ODI to incentivise a major improvement in leakage performance (see section 4.3.2 for more details about enhanced outperformance payments).

Companies can make the case for leakage reductions that do not achieve our challenges above where they can provide robust evidence and a strong rationale for this. For example, a rationale could be that a company is already a frontier performer or has strong customer support not to reduce leakage to this extent.

We expect companies to report leakage levels on a consistent basis[20] using a three-year average. Companies must justify why they have adopted a company-wide commitment level or sub-company regional commitment levels for leakage.

We expect companies to explain how their five-year performance commitment levels and long-term projections for leakage:

- take into account the views of their customers (with CCG assurance on how those views have been taken into account) and local stakeholders;
- relate to their water resources management plans (WRMPs);
- relate to their sustainable economic level of leakage (SELL)[21], including the upper and lower limits;
- take into account the future value of water, water trading and resilience;
- take into account the additional benefit that reducing leakage can have, of encouraging customers to reduce their water usage; and
- take into account expected improvements and innovation in the efficiency of reducing leakage.

There are more details about our approach to setting leakage performance commitment levels in appendix 2 (delivering outcomes for customers).

For **water usage**, we expect to see companies propose more ambitious reductions relative to previous years and to support their proposals using the approaches to

[20] We are aware that some companies need to change how they collect performance data to align to the new leakage definition and that in some cases, it will take some time to obtain robust data. We expect companies to implement and report against the common definition, so it can be used in final determinations. We will take into account companies' progress in the initial assessment of business plans.
[21] SELL requires companies to repair leaks where the cost of doing so is less than the cost of not doing so – for example, the cost of developing new water resources to compensate for the water lost through leaks.

setting performance commitments outlined above and in appendix 2. Companies should challenge themselves against the levels and reductions achieved by other water companies, including in other countries.

We clarify that setting more stretching performance commitment levels does not cost customers more money in itself. We have a separate test for cost efficiency, which challenges companies to have efficient levels of cost, and we do not allow companies a higher cost allowance for a more stretching performance commitment. Indeed, doing so would undermine the benefit of more stretching performance commitments for customers. Companies need to make their case separately for additional costs – see chapter 9 (securing cost efficiency). If a company incurs expenditure to improve its service performance customers will bear a share of that expenditure through totex efficiency sharing, but companies have strong incentives to keep their costs down.

4.2.5 Transparency of performance commitments

We confirm our proposals to promote more transparent performance commitments at PR19.

- Company performance commitments should be clear, unambiguous, complete and concise.
- Companies should not aggregate their performance commitments. This is to increase the transparency of all performance commitments so that they will be easier for customers to engage with, CCGs to challenge and us to evaluate.
- Companies should explain in their business plans how they will publicise their performance information during the 2020-25 period to make sure it is visible to customers, CCGs and other stakeholders.
- Companies should commit to keeping the definitions of their performance commitments unchanged during 2020-25 and to follow our procedures for any changes.
- Companies should commit that their ODI payments will only relate to real performance changes and not definitional, methodological or data changes in the performance commitment.

We expect companies to submit the definitions of their performance commitments to us on 3 May 2018, four months ahead of their business plans in September 2018. This will enable us to review the definitions to check, for example, that companies are using the standard definitions for the common performance commitments and that there are no inappropriate exemptions in the definitions of their bespoke performance commitments. We will provide companies with feedback about their performance commitment definitions before they submit their business plans, where it is appropriate to do so.

4.3 Approach to outcome delivery incentives

In section 4.2, we set out an approach that should lead to companies committing to more stretching service levels for their customers. ODIs can help ensure that companies deliver for their customers. These incentives can be reputational or financial. Financial ODIs include underperformance penalties if companies do not deliver their performance commitments for their customers and, where appropriate, outperformance payments for going beyond the stretching performance commitment level and delivering additional value for customers.

We consider outperformance and underperformance payments to be important elements of the outcomes framework. Outperformance and underperformance payments, where supported by customer engagement, align customer, management and shareholder interests by increasing the focus on improving the services that customers care about. They also give shareholders a return for the additional effort and risk-taking needed to deliver stretching performance improvements.

A company with average current performance that maintains the same absolute level of performance into the next price control period would incur underperformance penalties on its ODIs. This is because we are expecting companies to improve and are setting challenges for performance commitments, including a forward-looking, upper-quartile challenge. Average performance now will not equate to efficient performance in the future. It is possible, if unlikely, for all companies to outperform their performance commitments and earn net ODI outperformance payments in the next price control period.

We note that early evidence from PR14 shows that companies that expected ODI underperformance penalties have been able to offset this by outperforming on their performance commitments. While our approach means that companies that do not deliver stretching levels of service for customers will incur net ODI underperformance penalties, this risk is within companies' control as those companies that deliver for their customers will avoid penalties.

Some companies might respond strongly to the increased incentives and significantly improve their service performance, beyond stretching expectations. In these cases, customers might see higher bills than otherwise, in return for which, these customers will benefit from considerable improvements in service in areas that are important to them. We expect companies to propose approaches to protecting customers in case their ODI payments turn out to be much higher than their expected RoRE ranges for ODIs (see below).

There could be concern that linking a higher proportion of revenue to in-period ODIs could potentially increase bill volatility. As we explain below in section 4.3.2 companies must set out how they propose to limit undue bill volatility over the period in their business plans. We also note that the move from RPI to CPIH inflation indexation of prices is expected to significantly reduce the volatility of bills because RPI is a more volatile measure of inflation than CPIH. If required, we can intervene at PR19 and subsequent in-period ODI determinations to make sure companies adopt appropriate bill smoothing.

The rest of this section covers in more detail:

- our approach to strengthening **reputational ODIs**; and
- our approach to strengthening **financial ODIs.**

We discuss our detailed approach to **ODI design**, including averaging, deadbands and gates, in appendix 2 (delivering outcomes for customers).

4.3.1 Reputational ODIs

All performance commitments are accompanied by reputational ODIs. By reporting their performance to customers and CCGs, companies have an incentive to fulfil their performance commitments to customers.

Companies submit their annual performance reports (APRs) to us in July and also publish them. We, and the sector, are already increasing the existing ODIs' impact on reputation through the increased transparency and discussion around the publication of APRs, as well as through improvements to Discover Water. We would welcome any further work to increase the impact and reach of Discover Water to the general public.

There are three main ways in which we will enhance the reputational impact of ODIs at PR19.

- **Initial assessment of business plans test** – we expect companies to propose how they will approach their reputational ODIs in their business plans. We will assess the quality and ambition of companies' reporting on ODIs, including how they plan to increase their effect on reputation, as part of the 'delivering outcomes for customers' tests for the initial assessment of plans.

- **Context** – companies should provide contextual information to increase the impact of their ODIs on reputation. For common performance commitments, we will work with Discover Water to look at including forecasts of upper quartile performance to show the stretch companies can achieve.
- **Link to financial ODIs** – our approach to increasing the financial strength and timeliness of ODIs will increase stakeholders' and the media's focus on ODIs, increasing their impact on a company's reputation.

4.3.2 Financial ODIs

Investors in the water sector earn their return from various elements of the price control, including the allowed return on capital, cost efficiency and improvements in performance on the outcomes that matter to customers.

Based on experience so far this price control period, we can see the power of financial ODIs to improve service performance. We see scope to sharpen the incentives for service performance and we consider this should be reflected in the range of returns for outperformance or underperformance in 2020-25. We also consider there is scope to further incentivise companies to innovate to deliver improved service performance, where customers support this.

We set out our approach to financial ODIs at PR19 in the following sections:

- linking a higher proportion of revenue to service performance;
- bringing ODI payments closer in time to the service performance that generated them;
- encouraging companies to propose enhanced outperformance payments; and
- our expectations for ODIs for asset health performance commitments.

Linking a higher proportion of revenue to service performance

Our approach to linking a higher proportion of revenue to service performance is as follows.

- **A greater onus on financial ODIs.** Companies should justify, with supporting evidence, whenever a performance commitment is not supported by a financial

ODI[22]. This will help ensure that companies are suitably incentivised to meet their performance commitments to customers.

- **Removing the aggregate RoRE[23] cap and collar on ODIs.** At PR14, we specified an overall range for ODI outperformance and underperformance payments of between ±1% and ±2% of RoRE, with an aggregate cap and collar set at ±2%. We are removing the aggregate RoRE cap and collar to give companies an opportunity to propose higher outperformance and underperformance payments in their business plans, where customers support this.
- **Setting an indicative RoRE range for ODIs.** We are suggesting an indicative range for the size of companies' ODI outperformance and underperformance payments of ±1% to ±3% of RoRE at PR19. This indicative range excludes C-MeX and D-MeX, which have an additional impact on RoRE. The upper end of the outperformance payments range will only be achievable in extremely stretching circumstances, where companies deliver step changes in performance across all their performance commitments. We expect companies to develop their ODIs in consultation with their customers, and obtain customer support for the overall RoRE range proposed in their business plan.

In practice, the RoRE range companies propose may not be symmetrical. This is because the availability of outperformance and underperformance payments will be informed by customer engagement and some ODIs will likely have underperformance penalties only. Additionally, commitment levels set at forecast upper quartile levels will require companies to deliver stretching performance to achieve outperformance payments.

We expect companies to propose approaches to protecting customers in case their ODI payments turn out to be much higher than their expected RoRE ranges for ODIs. These could involve companies' demonstrating their understanding of the 'tail' of the distribution of potential returns and proposing protections for customers from extreme outcomes such as through the use of caps and collars on individual ODIs or other measures to manage actual returns exceeding the expected RoRE range. We set out further information on setting caps and collars for individual ODIs in appendix 2.

[22] We explain the approach companies should take to proposing financial ODIs for the two new forward-looking resilience common performance commitments in section 4.2.1.
[23] RoRE is calculated as the incentive impact divided by regulated equity, where regulated equity = RCV x (1 – notional gearing).

We will consider capping, including down to zero, the ODI outperformance payments on bespoke performance commitments for a company categorised as being under significant scrutiny in the initial assessment of business plans. This is because for bespoke performance commitments data quality will depend on information provided in the significant scrutiny company's business plan, in which we are likely to have identified significant issues. We will also consider capping the ODI outperformance payments for the common performance commitments for a company categorised as being under significant scrutiny. However, a cap is less likely to be appropriate for these ODIs, given our ability to test the degree of stretch in the performance commitment levels across companies' plans.

Bringing the financial impact of an ODI closer in time to the performance that generated it

Bringing the financial impact of an ODI closer in time to the performance that generated it focuses management on service delivery and improves companies' accountability to their customers. It also reduces the extent to which outperformance and underperformance payments related to current performance are paid for, or received by, future customers.

We consulted in July about achieving this through further use of in-period ODIs and linking end-of-period ODIs to revenue rather than the RCV. We describe our approach for PR19 below.

In-period ODIs are reconciled each year rather than at the following price review. All companies have now accepted a change to their licence to allow in-period ODIs. We want companies to strengthen the incentives for improving service performance by increasing the number of in-period ODIs. We set out our decisions on in-period ODIs for PR19 in appendix 2. In summary, we expect companies to adopt in-period ODIs as the default for all their ODIs unless they can justify why an in-period ODI is not appropriate. Companies must also set out how they propose to limit undue bill volatility over the price control period.

End-of-period ODIs linked to revenue, rather than the RCV, to bring outperformance and underperformance payments closer in time to the performance that generated them and strengthen the incentive for companies to fulfil their service commitments to customers. Our decision is that end-of-period ODIs, by default, should be linked to revenue unless companies can justify, and provide strong evidence, why this should not be the case. We provide more detail on our approach in appendix 2.

Encouraging enhanced outperformance and underperformance payments

We want to encourage companies to improve performance beyond the best level currently achieved by any company to deliver benefits for all customers over the long term. This is likely to involve innovation and risk-taking by companies as they seek to significantly improve their performance.

Calculating outperformance and underperformance payments based purely on customer valuations does not take into account the wider benefits that customers would obtain from the kind of significant shifts in performance that would set a new benchmark for industry performance. We are therefore encouraging companies to propose higher outperformance payments for very high levels of performance against the common performance commitments – high enough, that is, to shift the industry frontier. We can then set new improved performance levels in future price controls to benefit the customers of all companies.

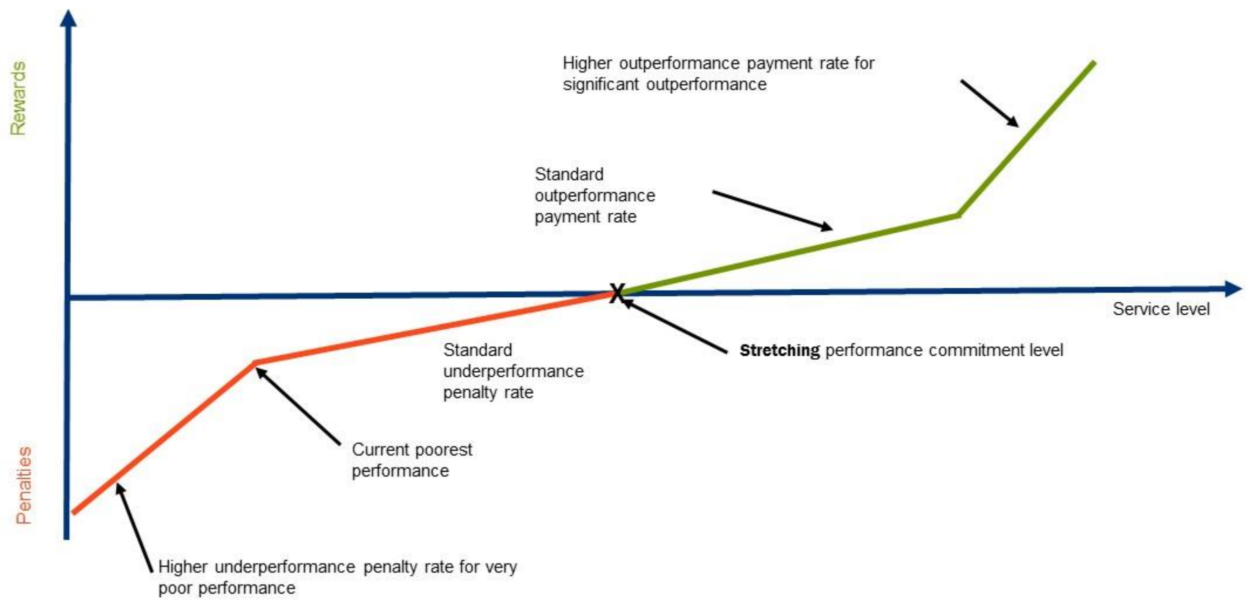
Our approach to enhanced outperformance and underperformance payments is set out in appendix 2, but the key points are as follows.

- Enhanced outperformance and underperformance payments are only appropriate for the **common performance commitments**, which are based on comparable data so that customers, CCGs and Ofwat can be more certain that the enhanced outperformance threshold truly represents frontier-shifting performance.
- The **enhanced outperformance payment rate** will be accompanied by an **enhanced underperformance penalty rate** for below-standard, poor and unacceptable performance[24], to provide balanced incentives and to protect customers in case companies take unreasonable risks to achieve high performance and end up with very poor performance.
- A company should propose its **threshold** for the enhanced outperformance payments at **the performance level of the current leading company, or preferably higher**. We expect that enhanced underperformance penalties would apply at least at the current lower quartile company performance.
- Companies proposing enhanced outperformance and underperformance payments should explain in their business plans how they will **share the knowledge** behind their success with companies across the sector by the end of the 2020-25 price review period or soon after. Receiving the enhanced

[24] This approach only relates to ODI policy. Very poor performance could be a licence or statutory duty breach with attendant enforcement consequences including, where appropriate, financial penalties.

outperformance payments will depend on whether the company has a credible plan for sharing its approach with the sector.

Figure 4.2 Enhanced outperformance payments and underperformance penalties at PR19



ODIs for asset health performance commitments

Our approach to ODIs for asset health performance commitments aims to improve transparency and enable stakeholders to compare different companies' performance on asset health. Our approach is as follows.

- As with other performance commitments, companies should set their asset health underperformance penalties using a **wide variety of customer research** so that they can strengthen their incentives in line with customer preferences.
- Companies should explain to their customers, CCGs and Ofwat how their asset health outperformance and underperformance payments **relate to their past performance and the asset health challenges they face**. If companies are delivering below the levels of asset health customers have funded them for in the past they should be incurring underperformance penalties.
- Companies should **report their proposed asset health underperformance penalties as a percentage of RoRE** so that they are comparable across companies. We will intervene to increase the asset health underperformance penalties at PR19 if we consider the proposed underperformance penalties to be too low when compared across companies and compared to the level needed to incentivise a company to deliver asset health.

- Companies can only propose **outperformance payments for asset health performance commitments** if they can show there are benefits for customers and their proposals reflect evidence of customer preferences.

4.4 Two new customer experience measures

The customer measure of experience (C-MeX) is our new incentive to improve the customer experience of residential customers in England and Wales.

The developer services measure of experience (D-MeX) is our new incentive to improve the customer experience of developer services customers in England and Wales.

We are making final decisions on the high-level features of C-MeX and D-MeX in our PR19 final methodology. However, we are not making final decisions on all aspects of the design of C-MeX and D-MeX. This is because we plan to pilot both of these incentive mechanisms in 2018-19 and the final design decisions will be informed by the pilots. The pilots will inform our decisions on methodological issues such as survey sample sizes, the frequency of the surveys and the channels we will use. We will judge the methodology that results from the pilots for each incentive mechanism on the extent to which it:

- encourages companies to improve customer experiences and innovate;
- is simple and meaningful for companies and customers;
- is proportionate;
- is practical to implement; and
- measures performance across companies consistently, reliably and fairly.

We will produce final guidance for both the incentive mechanisms by March 2020. We provide more detail on the timetable for C-MeX and D-MeX in appendix 3.

4.4.1 The customer measure of experience (C-MeX)

We are replacing the existing service incentive mechanism (SIM) with C-MeX. We have decided that the financial incentive for C-MeX will be based on:

- a customer service satisfaction survey of customers who have contacted their companies – this will incentivise companies to improve their handling of customer contacts and complaints; and

- a customer experience satisfaction survey of customers selected at random (which may include those who have contacted their company) – this will incentivise companies to improve the overall customer experience for all their customers, for example in relation to street works, and not just those who have made direct contact with their companies.

Each year we will combine the results of the two surveys into a single C-MeX score. Our preference is for the C-MeX score to be based on an equal weighting of the two surveys, but we will decide the precise weighting after the results of the pilot. Our preference is also to conduct both surveys ourselves to ensure they are consistent across companies. However, we are still exploring the possibility of companies administering the contact survey, under clear guidance from us, if it will reduce the time gap between the contact being made and the survey taking place.

We will test the use of the net promoter score (NPS) in the C-MeX pilot. NPS is a measure of the customer's likelihood to recommend their company. We will decide after the pilot whether to incorporate NPS into C-MeX in some form.

The financial incentives for C-MeX will be up to 6% of residential retail revenues for high performing companies, with higher performance payments of up to 12% of residential retail revenues (over the five years of the control period) available to the best performing companies. The collar on performance penalties will remain at 12% of residential retail revenues.

The higher performance payments (between 6% and 12% of allowed residential retail revenues) will only be available if a company meets all three of the following conditions.

- If a company performs at or above a threshold based on cross-sector performance. This threshold could be the upper quartile all-sector performance on the UK customer satisfaction index (UKCSI) converted to a C-MeX equivalent, to ensure higher performance payments are only available for truly stretching levels of performance. However, we will decide this during PR19 when we have new information on how stretching this threshold looks and after the design of C-MeX has been confirmed following the pilot.
- If a company is demonstrating satisfactory complaints performance, as measured for example by the number of complaints received per household. This approach will avoid the (perhaps unlikely) situation in which we award a performance payment to a company that is achieving strong satisfaction scores on C-MeX by serving most of its customers very well, but which is serving a small proportion of customers poorly and receiving a high number of complaints per household, relative to other companies. We are not defining satisfactory performance on

complaints in detail in our PR19 final methodology, but we intend to work with stakeholders to do this as part of the C-MeX piloting process.
- If a company is one of the top three companies, by highest C-MeX score, if more than three companies meet the first two criteria.

We are working with the Consumer Council for Water (CCWater) to modify the definition of "complaint" to include complaints made via social media, where they can be attributed to a customer. The annual publication of industry complaints data by CCWater, will continue to provide a strong reputational incentive on companies to manage complaints effectively.

We are also requiring companies to offer at least five communications channels, including at least three online channels, for receiving customer contacts and complaints. We propose to apply a downwards adjustment to a company's C-MeX score if it does not adhere to this.

We will apply the C-MeX financial incentives in-period (reconciled for each year individually) to strengthen the incentive for companies to improve their customers' overall experience more quickly. The annual financial incentives are capped at 2.4% of residential retail revenues for high and low performance payments (12% of residential revenues divided by five years). We are putting a cap and collar on C-MeX because it is an incentive mechanism we design and we consider customers and companies need some certainty over the potential scale of payments in advance.

Retailers

We will continue to monitor the development of the business retail market and work with Market Operator Services Limited (MOSL), retailers and wholesalers to ensure that wholesalers are encouraged to deliver good-quality customer service to retailers. Within the retail market review, we will continue to explore if and how wholesalers are incentivised in relation to the services they provide to retailers. If it is appropriate to introduce an incentive mechanism we expect to do this in the draft determinations.

C-MeX for business customers served by companies whose areas are wholly or mainly in Wales

In Wales, most business customers cannot choose their retail provider. We consulted on a C-MeX for business customers who are served by companies whose areas are wholly or mainly in Wales and who cannot choose their supplier. Based on the consultation responses and subsequent stakeholder engagement, we have decided that it would be more appropriate for companies whose areas are wholly or mainly in Wales to use their bespoke performance commitments to commit to providing excellent quality services to their business customers rather than having a C-MeX for this group of business customers. We provide our reasoning for this approach in appendix 3 (customer measure of experience and developer services measure of experience).

4.4.2 The developer services measure of experience (D-MeX)

We have decided that the financial incentive for D-MeX will be based on:

- feedback from a regular qualitative satisfaction survey; and
- a quantitative measure of water company performance against a set of key metrics based on Water UK's existing metrics of service levels for developer services customers.

We have decided to rank company performance annually on D-MeX, and apply financial performance payments of up to 2.5% of annual developer services revenue, and performance penalties of up to 5% of annual developer services revenue for the best and worst performers, respectively. We will apply these performance payments and penalties annually, in keeping with the approach for the other common performance commitments.

We will continue to work with the D-MeX working group of developer services customers, water companies and other stakeholders to further explore issues including:

- how best to design and implement the survey(s);
- the precise metrics to be used for the quantitative measure;
- whether different approaches are needed for different types of developer services customers;
- the weightings to be applied to the two elements of the financial incentive;
- the design of the D-MeX pilot in 2018-19; and
- how to adapt D-MeX, if necessary, based on the results of the D-MeX pilot.

4.5 Initial assessment of business plans – outcomes

We will test outcomes, performance commitments, ODIs and the focus on service performance in our initial assessment of business plans as follows.

Initial assessment test on delivering outcomes for customers

1. How appropriate, well-evidenced and stretching are the company's proposed performance commitments and service levels?

2. How appropriate and well-evidenced is the company's package of outcome delivery incentives?

3. How appropriate is the company's focus on service performance in its risk/return package?

Our assessment will focus on the following:

- the link between a company's proposed bespoke performance commitments and its customer engagement;
- the evidence and justification for a company's performance commitment levels for its common and bespoke performance commitments;
- the evidence and justification for a company's ODIs;
- the proposed use of enhanced outperformance and underperformance payments, as well as how the company will share information about how it achieved the performance improvement that earned it an enhanced outperformance payment;
- a company's plans for reporting and assurance in relation to its performance commitments and ODIs;
- the overall acceptability of the package of performance commitments and ODIs to customers; and
- the CCG's independent report.

As explained in chapter 13 (securing confidence and assurance), the Board assurance statement should cover:

- assurance that the business plan will deliver – and that the Board will monitor delivery of – its outcomes and performance commitments;
- assurance that the company's proposed outcomes, performance commitments and outcome delivery incentives (ODIs) reflect customer preferences and are stretching; and
- assurance that the company's proposed approach to reporting on its performance commitments, ODIs and projections of outcomes is robust.

5. Securing long-term resilience

Key themes of PR19

Resilience is one of the key themes of PR19. Our final methodology includes a package of measures designed to drive long-term resilience.

Our approach to resilience supports the other key themes of PR19:

- Resilience is a key element of **customer service** and our approach to resilience emphasises that customers should be at the heart of resilience proposals.
- Our approach emphasises that companies should consider the full range of resilience management options to provide the best long-term value for money for customers, helping to ensure **affordable** bills now and in the long term.
- Finally, our approach encourages companies to consider **innovative** approaches to resilience.

Resilience

Resilience is the ability to cope with, and recover from, disruption and anticipate trends and variability, in order to maintain services for people and protect the natural environment now and in the future.

Our PR19 final methodology will drive the overall long-term resilience of water networks. This is supported by our resilience in the round approach. Resilience in the round is achieved by having strong operational resilience as well as strong corporate and financial resilience. This means having robust infrastructure and services underpinned by the right skills, leadership and systems. For example, a company needs strong board leadership and governance, and an appropriate capital structure, to ensure it delivers an excellent service and plans effectively for long-term challenges.

We have developed seven resilience principles, which set out our expectations for resilience planning in PR19 business plans.

Our outcomes framework will play an important role in ensuring operational resilience by ensuring that companies address current and future resilience challenges through a range of common performance commitments, including: day-to-day performance, asset heath and forward-looking metrics on resilience to drought and flooding. Companies will be required to provide projections to at least 2035 to provide a long-term resilience focus.

We have set out two specific initial assessment of business plans tests on resilience.

- How well has the company used the best available evidence to objectively assess and prioritise the diverse range of risks and consequences of disruptions to its systems and services, and engaged effectively with customers on its assessment of these risks and consequences?
- How well has the company objectively assessed the full range of mitigation options and selected the solutions that represent the best value for money over the long-term and have support from customers?

Applicability to England and Wales

Our final methodology for securing long-term resilience **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. The UK and Welsh Governments' strategic policy statements for Ofwat both emphasise the importance of securing long-term resilience of water and wastewater services and the ecoystems that underpin these services.

Responses to our draft methodology proposals

Respondents were broadly positive about our proposals. Key issues raised were:

- we should rebalance our assessment to give more weight to the **natural environment,** and draw more on approaches such as the natural capital approach;
- the need to consider a range of solutions to deliver resilience, including socially and economically optimal approaches to achieve **smart resilience**;
- potential changes to our metrics for **measuring resilience,** to better take account of past investment and good ecological status;
- the need for increased and **systems thinking** and collaboration across company and sector borders; and
- that we should make a clearer distinction between risk management and resilience.

Our consideration of respondents' views

Following consideration of respondents' views, our PR19 final methodology takes the following approach.

- We have amended our resilience principles to make the treatment of the natural environment more explicit and make it clear that companies can use natural capital approaches where appropriate.
- We have added text to make it clear that we expect companies to consider water efficiency and recovery and response as smart resilience options.
- We consider the resilience metrics already adequately reflect the long term and past investment. We have amended the definition of several of the common performance commitments to better reflect resilience such as removing exclusions for extreme weather in the sewer flooding metric (see appendix 2).
- We have added text to make explicit reference to the need for companies to adopt systems thinking and consider the interdependencies between different parts of their business and the wider system in which these businesses operate.
- We have added text to make it clear that resilience is broader than risk management.

5.1 Introduction

This chapter sets out our final methodology for PR19 with respect to securing long-term resilience. This PR19 final methodology has been developed following full consideration of views expressed by respondents to our draft methodology proposals, published in July of this year.

Resilience is also covered by other chapters in this document. Chapter 4 (delivering outcomes for customers) sets out how the outcomes framework will enable and help to hold companies to account to improve their operational resilience through performance commitments and outcome delivery incentives. Chapter 11 (aligning risk and return: financeability) sets out measures relating to financeability which is one factor we consider in relation to financial resilience and chapter 13 (securing confidence and assurance) contains measures relating to corporate resilience.

The remainder of this chapter is structured as follows:

- why resilience is important (section 5.2);
- how we see resilience (section 5.3);
- resilience planning principles (section 5.4); and
- initial assessment of business plans – resilience (section 5.5).

In appendix 4 (resilience), we set out our overall approach to resilience, our consideration of the responses to our draft methodology proposals and an explanation of our reasons and any changes to the final methodology and our progress against the recommendations of the sector 'task and finish' group.

Section 4 of appendix 15 outlines respondents' views to the two questions we posed on resilience in our draft methodology proposals. In appendix 15, we provide our response to the issues raised by respondents.

5.2 Why resilience is important

Resilience is important to current and future customers. The operational, financial and corporate resilience of companies affect all customers. Customers expect continuous water and wastewater services, and the impact of disruptions on customers can be significant.[25] Disruptions to clean and wastewater services may also have negative effects on wider society, for example, through the impact on the environment, on the economy and on communities. It is therefore vital that companies provide resilient services for customers today and over the long term.

Companies need to address the challenges to resilience from climate change and population growth, such as pressures on surface water drainage and drought resilience. There is significant potential to address these challenges using new and innovative approaches and working with customers. Companies need to consider not only steps that improve their ability to withstand those pressures, but also steps that improve their response to and recovery from any resulting service disruption.

Companies are already taking steps to address these external challenges, but more needs to be done. For example, a Water UK led study, published in 2016, acknowledged the significant and growing risk of drought, looking ahead to 2040 and 2065. It suggested that extensive measures to manage demand and enhance supplies of water are needed to address the implications of drought risk.[26]

The Water Act 2014 added an additional duty for Ofwat to further the resilience objective, alongside our other duties[27]. This focuses on the long-term resilience of water supply and sewerage systems as regards environmental pressures, population growth and changes in consumer behaviour to meet the needs of consumers in the long term. This includes appropriate long-term planning and investment and using a range of measures to manage water resources in sustainable ways, increase water efficiency and reduce demand.

The UK Government's strategic policy statement sets a priority for Ofwat to challenge the water sector to plan, invest and operate to meet the needs of current and future customers, in a way which offers best value for money in the long term. It then sets Ofwat objectives for resilience concerning water supply, wastewater, the full range of potential hazards and threats and the resilience of ecosystems.

The Welsh Government strategic policy statement sets a resilience objective for short-term and long-term challenges, including:

[25] See, for example, Consultation on the outcomes framework for PR19, Ofwat, November 2016, page 15.
[26] 'Water resources long-term planning framework (2015-2065)', July 2016, Water UK
[27] s2(2A)(e) and s2(2DA) Water Industry Act 1991.

- companies ensuring their assets and services are resilient against, for example, natural hazards, asset failure and other threats including cyber security; and
- Ofwat encouraging and incentivising companies to maintain and enhance the resilience of ecosystems.

Alongside resilience considerations, both statements from the English and Welsh Governments also emphasise the importance of affordability considerations.

Resilience has always been part of our regulation of the water sector. Water companies have a duty to maintain a water supply system and provide a wastewater system, so that they continue to meet their statutory security of supply and service obligations.[28] These are legal obligations, which water companies must fulfil and their business plans at this and previous price reviews must take account of these obligations. We allow companies to recover efficient costs through regulated revenues. But if a company subsequently finds itself having to spend more than this in order to fulfil these obligations, the company must do that with additional funds from investors as necessary.

Further aspects of how we conduct our price reviews encourage resilience. The regulatory framework provides long-term certainty for company decision making and investment. The 2014 price review (PR14) incentivised better customer engagement and a focus on outcomes, including outcomes which related to resilience and asset health. We also required company Boards to provide assurance that companies are meeting their statutory and licence obligations.

Following PR14, we established an independent Task and Finish Group to consider what resilience means for the water sector.[29] We set out our response to the recommendations of the Task and Finish Group in 'Towards resilience', published in December 2015, and subsequently consulted on how to better incentivise resilience through our outcomes framework. Appendix 4 sets out our progress against the Task and Finish Group recommendations.

We have recently undertaken a targeted review of asset health looking at how water and wastewater companies in England and Wales are approaching the measurement and management of asset health and how this contributes to their wider approach to resilience. The study highlights several issues of concern to Ofwat

[28] Section 37 and 94 Water Industry Act 1991.
[29] Ofwat, 'Resilience task and finish group', 2015

for companies and their Boards to focus on[30] including: engaging effectively with customers; driving greater innovation; ensuring a long-term mind-set; and developing a stronger understanding of how asset health affects service, especially for high impact, low probability events. We expect companies to have identified and, if necessary, addressed any existing issues in the current price control period. Their business plans for PR19 should not seek funding from customers to address any shortcomings of the past.

Our approach, as set out in this chapter, now embeds the UK Government's and Welsh Government's strategic policy statements. We want companies to carefully identify risks to their resilience and consider a full range of measures to manage these risks over the long term. Companies should engage and work with customers on their approach to resilience, and be innovative in how they manage and address risks to resilience. We want companies to focus on the long term, as well as the next five years. This will help secure better value for customers. Companies should also exploit opportunities to collaborate with partners and other water companies, and to better integrate water and wastewater resources. Further details of good practice are set out in our 'resilience in the round' document, published in September.

5.3 How we see resilience

The 'Task and Finish Group' defined resilience as: the ability to cope with, and recover from, disruption, and anticipate trends and variability in order to maintain services for people and protect the natural environment, now and in the future.

The Cabinet Office stated that the resilience of critical infrastructure and essential services could be secured through four key strategic components, also known as the 4R's.

- Resistance: preventing damage or disruption by providing the strength or protection to resist the hazard or its primary impact.
- Reliability: ensuring that the infrastructure components are inherently designed to operate under a range of conditions, and hence mitigate damage or loss from an event.
- Redundancy: this is concerned with the design and capacity of the network or system. The availability of backup installations or spare capacity will enable

[30] https://www.ofwat.gov.uk/publication-targeted-review-asset-health/

operations to be switched or diverted to alternative parts of the network in the event of disruptions to ensure continuity of services.
- Response and recovery: enabling a fast and effective response to, and recovery from, disruptive events. The effectiveness of this element is determined by the thoroughness of efforts to plan, prepare and exercise in advance of events.

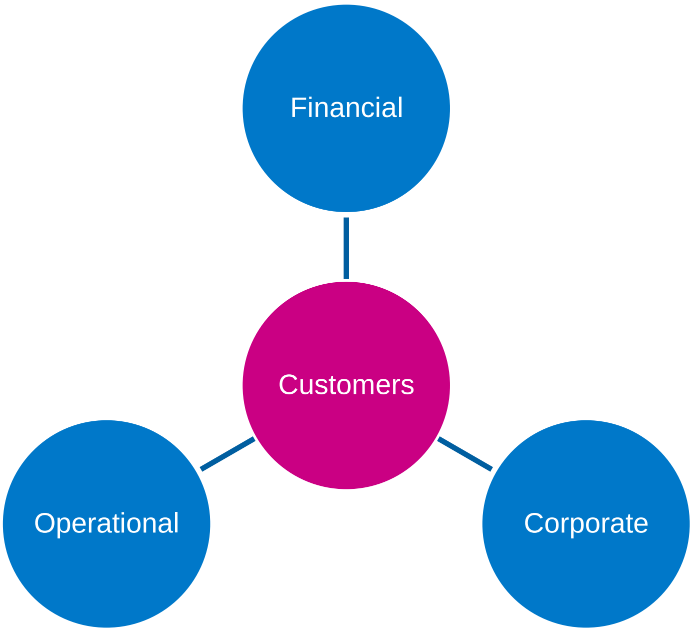
These components of resilience need to be considered across all aspects of an organisation. This means having the right skills, the right leadership and the right systems, as well as having a robust infrastructure. We term this ‘resilience in the round’. It includes, but is not limited to, the following:

- operational resilience - the ability of an organisation’s infrastructure, and the skills to run that infrastructure, to avoid, cope with and recover from disruption in its performance;
- financial resilience - the extent to which an organisation’s financial arrangements enable it to avoid, cope with and recover from disruption; and
- corporate resilience - the ability of an organisation’s governance, accountability and assurance processes to help avoid, cope with and recover from disruption and to anticipate trends and variability in all aspects of risk to delivery of services.

These factors are interdependent, so effective resilience requires companies to consider their systems as a whole, taking into account the relationship between different aspects of their business (as well as external factors). The delivery of the services on which customers depend is not only a function of operational resilience. For example, companies will not be able to invest for the long term, if they have insufficient financial resilience and may be tempted to cut corners. Similarly, companies will not be able to make effective decisions about the management of risk to services if they do not have the information, systems, process, governance and capability to enable them to do so. Each element of resilience, be that operational, financial or corporate resilience, will reinforce overall resilience. It will not be possible for companies to have good operational resilience, if they do not have good corporate and financial resilience.

Effective resilience also means not only considering the next five-year period, but looking well beyond that and considering resilience in the long term. If delivery of reliable services today increases the risk to service delivery in the future, the company is not securing long-term resilience.

Figure 5.1 Resilience in the round



5.4 Our overall approach to resilience

Our PR19 approach, in combination with wider regulatory tools, provide a comprehensive and strongly incentivised approach to manage resilience in the round, including operational, financial and corporate resilience. It should be emphasised that these areas overlap and feed into each other.

Figure 5.2 Illustration of our overall approach to resilience

The following sections set out our resilience planning principles and our initial assessment of business plan tests. These build on, and link to, other parts of the PR19 methodology and the wider regulatory tools. Key elements of the PR19 methodology for resilience are set out below.

- Operational resilience: our outcomes framework, with its performance commitments and financial and reputational incentives, encourages companies' management teams to identify and mitigate risks to operational resilience. The framework ensures that companies address current and future resilience challenges through the following.

  - Day-to-day performance commitments, such as an expectation of achieving forward-looking upper quartile performance for supply interruptions, sewer flooding and pollution incidents for all companies. We have set a challenge to companies of a 15% reduction in leakage over five years.
  - Asset health performance commitments: challenging companies on mains bursts, unplanned outage, sewer collapses and treatment works compliance.

  - Risk-based resilience metrics: introducing new forward-looking resilience common performance commitments for resilience to drought and flooding.
  - Longer-term performance commitments and planning: we are requiring companies to provide projections for their performance commitments beyond the price control period out to at least 2035 to support a longer-term focus.

- Financial resilience: We expect companies to provide evidence of their financial resilience. In making this assessment, we expect companies to take into account the overall assessment of the risks that the company faces. This includes risks relating to their actual capital structure and financing arrangements as well as the impact of potential cost shocks arising from, for example, underperformance against their plans or from additional financial liabilities which are not funded by customers. In confirming that they are financially resilient, companies will need to be open and transparent about their ownership and financial structures. And we are asking companies to provide specific Board assurance on their notional and actual financeability (chapter 11)
- Corporate resilience: we expect companies' plans to demonstrate that they have the necessary capability, systems and processes. Alongside operational and financial resilience, this is essential for an effective plan which will deliver resilience.

We emphasise the importance of companies taking an integrated systems approach to these elements and assessing each of the above in the round. Appendix 4 (resilience) provides further details of our overall approach to resilience and the links to the PR19 methodology and wider regulatory tools.

5.5 Resilience planning principles

We have developed a set of principles, which clarify our view on good practice for resilience planning in PR19 business plans. These build on the principles proposed in our outcomes consultation (included in appendix 4).[31]

We have updated the resilience principles to reflect the consultation responses. In particular, the updated principles clarify that:

- the natural environment is at the core of water and wastewater service provision;

[31] Consultation on the outcomes framework for PR19 consultation on the outcomes framework for PR19, Ofwat, November 2016

- aspirations of levels of resilience should be informed by customer expectations; and
- companies should consider smart solutions, such as water efficiency.

Our final resilience planning principles are set out below.

Resilience planning principles

Principle 1: Considering resilience in the round for the long term
The assessment of resilience should show a systematic and integrated understanding of service and systems risk across the entire business. Companies should assess resilience of their systems, and the services they provide, in the round. They should show a clear understanding of the interdependencies across operational, financial and corporate aspects of their business. This assessment should consider short, medium and long-term risks.

Principle 2: A naturally resilient water sector
Resilient ecosystems and biodiversity underpin many of the key services provided by companies. Promoting ecosystem resilience and biodiversity is a key part of the decision-making process for ensuring resilient services (where this is consistent with companies' role as providers of water and wastewater services).

Principle 3: Customer engagement
Aspirations on levels of resilience should be informed by engagement with customers, to help companies understand their customers' expectations on levels of service. This will also help companies understand their customers' appetite for risk and how customer behaviour, in matters such as water efficiency, might influence approaches to resilience.

Principle 4: Broad consideration of intervention options
Companies' plans to manage resilience should consider a full set of mitigating actions and interventions that consider all of the components of resilience, including response and recovery. They should also explicitly consider options that involve cooperation and collaboration with other companies at a regional or even national level (where they offer best value). For example, transfers and cross border planning.

Principle 5: Delivering best value solutions for customers
Companies' plans to manage resilience should consider the best value solutions for customers in the long term, which may involve long-run solutions.

Principle 6: Outcomes and customer-focused approach
Companies' plans to manage resilience should inform the outcomes they propose. The proposed outcomes on resilience, and the associated stretching performance commitments they set, should also take into account future risks and customer preferences.

Principle 7: Board assurance and sign-off
Companies' Boards will need to assure us that companies' business plans have been informed by:

- a robust and systematic assessment of the resilience of the company's systems and services;
- customer views on managing resilience; and
- comprehensive and objective assessment of interventions to manage resilience in customers' long-term interests.

5.6 Initial assessment of business plans – resilience

Our initial assessment of business plans will look specifically at companies' operational, financial and corporate resilience. In line with the framework set out in chapter 14 (the initial assessment of business plans: securing high quality, ambition and innovation), companies' resilience will contribute to our decision on the categorisation of companies' plans.

We will consider companies' approach to resilience planning by applying the following two tests. We have clarified the first test to be explicit that we will be considering all risks. This includes risks to operational, financial and corporate resilience. We have also revised the text describing how we apply the tests to provide more clarity over our expectations, for example, on the consideration of the environment.

Initial assessment tests on securing long-term resilience

1. How well has the company used the best available evidence to objectively assess and prioritise the diverse range of risks and consequences of disruptions to its systems and services, and engaged effectively with customers on its assessment of these risks and consequences?

2. How well has the company objectively assessed the full range of mitigation options and selected the solutions that represent the best value for money over the long term, and have support from customers?

When assessing how well companies meet these tests, we will consider the extent to which companies follow the resilience planning principles set out above. We explain how, below. We also highlight key issues that we will consider when assessing against the test. Our 'resilience in the round' document provides examples of good practice around the delivery of resilience.

5.7 Initial assessment of business plans test 1: evidence to assess and prioritise the range of risks to resilience

In line with principle 1, we expect companies to look at resilience in the round, including the risks to operational, financial and corporate resilience. Their appraisals should include a robust, objective, comprehensive and quantitative assessment of the principal risks they see to the resilience and delivery of the services on which their customers depend, over the next five years and over the longer term. This must include the consideration of possible failure points across the organisation (and through the supply chain), covering operational, corporate and financial resilience. This should include:

- the risks of a failure occurring in each area;
- the impact on customers if that risk transpires; and
- the extent to which this risk has already been mitigated.

These appraisals should be wide-ranging, covering risks associated with infrastructure and assets to those associated with systems, processes and people. They should consider the full range of potential hazards and threats that could impact on service provision, including natural hazards like flooding of water and wastewater infrastructure, burst water mains or other infrastructure failures or physical or cyber-attacks. These appraisals should also consider longer-term risks created by factors, such as population growth and climate change, as well as social, economic and environmental challenges. It should also consider threats to delivery of its plans and how its corporate and financial arrangements ensure that it will cope with these.

The appraisal of the principal risks will require the company to look at the challenges holistically. We have drawn out some examples to illustrate the need to look at issues in the round.

- When looking at asset health and, in particular as highlighted by the targeted review of asset health, high impact, low probability events, companies need to consider how the health of their assets impacts services and how capital maintenance impacts asset health.
- Companies should also explicitly consider their relationships with suppliers in the context of resilience. This, for example, includes considering requirements for assurance before new assets are taken into service. It also includes ensuring that relationships through the supply chain support, and do not undermine, corporate resilience by ensuring clear accountabilities, good governance and the flow of information between supply chain partners and the company, including its Board, to enable effective and timely decision making.
- When considering financial resilience in their business plans, companies have to consider how their financial arrangements will ensure they can deliver resilient services even in the face of challenges. Building on the long-term viability statements that companies are required to include in their annual performance reports, we expect companies to explain how the assumptions that underpin their plan relate to the forward-looking assumptions that underpin their long-term viability statements. Companies should set out the reasons for any changes in the assumptions made or scenarios considered by their Boards in reaching their conclusions on financial resilience.

We encourage companies to publish the results of their resilience assessments in their business plans to provide greater transparency to stakeholders. We will consider the extent to which the appraisals are supported by global best practice techniques, understand and appraise risk and uncertainty and the extent to which there is Board and third-party assurance.

In line with principle 2, the environment underpins so much of the services water companies deliver. The ‘water industry strategic environmental requirements’ (WISER) from the Environment Agency and Natural England, and the PR19 ‘expectations and obligations’ from Natural Resources Wales provide a framework for protecting and enhancing the environment. Companies will need to deliver environmental schemes where they have a legal duty to do so. And where, consistent with the company’s role as providers of water and wastewater services, it is the best value way of delivering an outcome in line with customers’ preferences and priorities and is affordable. Taking account of the impact on ecosystem resilience and biodiversity will be particularly important where companies’ operations depend on ecosystems and the natural environment, for example, abstraction, treatment and discharges.

Companies should also have regard to the wider costs and benefits of the resilience of their services to the economy and society. The natural capital approach provides an opportunity for the value of ecosystems to be better incorporated within the evaluation of resilience and, where appropriate, could be incorporated into the assessment of the impact of company activities.

As highlighted in our 'resilience in the round' document, it will be important for companies to take a systems-based approach to their assessment of pressures and risks. The interconnectivity across systems, and the knock-on impacts from one system to another, will likely form an essential component of a company's assessment of prioritised risks to resilience of services. Resilience is different from simply managing risk exposure. It requires a much broader range of options, often systems based ones, which not only reduce risk, but enhance the ability to cope with, and recover from, pressures and shocks.

In assessing risks, we expect companies to take a long-term approach in the context of wider water and wastewater planning. Planning for clean water services, including statutory water resource management plans and drought plans, has a well-developed framework. This enables companies to assess pressures and risks objectively and effectively engage with customers. We also expect companies to take account of regional work, such as Water Resources South East and Water Resources East. This can provide essential assessments for resource sharing and collaborative approaches. Where appropriate, companies should consider a reduction in the long-term risk to water supply resilience from drought and other factors.

For wastewater, we expect companies to base their assessment of risks to resilience on the principles of the drainage strategy framework. The drainage strategy framework should form the basis of wastewater planning in the short to long term. We also expect companies to take a risk based approach to wastewater planning and go beyond the drainage strategy framework. For example, using outputs from the 21st Century Drainage Board, where appropriate. We expect companies to take a system-wide approach to understanding, planning and managing risks to the delivery of wastewater services. As set out in the drainage strategy framework, this may well see companies using partnership working with other organisations such as councils, canals and rivers trusts, developers, the Environment Agency and Natural Resources Wales, who have responsibility for different aspects of wastewater, drainage and flooding.

In line with principle 3, we will assess the extent to which customers are at the heart of the process, throughout. This includes the extent to which accurate and high-quality comparative data has informed customers' choices and how these choices have been taken into account in companies' plans. Our customer engagement policy statement for PR19 sets out the principles of good customer engagement. This includes the principle that companies should engage with their customers on long-term issues, such as resilience. It also said that companies will need to work with customers to co-create and co-deliver some aspects of resilience. We consider these issues in more detail in chapter 2 (engaging customers).

5.8 Initial assessment of business plans test 2: mitigating and managing risk to provide the best value for money over the long term

We expect companies to ensure long-term resilience in the round. That is, including operational resilience, financial resilience and corporate resilience. We will assess whether companies have developed a business plan which will mitigate and manage risks to resilience in the round in a way that delivers best value now and in the long term.

In line with principles 4 and 5, we expect companies to provide clear evidence that they have objectively considered the full range of resilience management options, with a view to providing the best value for customers over the long term. This includes:

- **infrastructure** - such as treatment, network, storage and transfers;
- **soft infrastructure** - such as ecoservices markets and catchment schemes;
- **behaviours** - for example from improving customer use of water; and
- **response and recovery** – for example from improving contingency planning.

We also expect companies to take advantage of and work with natural processes, where appropriate, such as sustainable urban drainage systems (SuDs) and catchment management approaches, which can provide long-term, sustainable and best-value options in many situations. A wider variety of such approaches is now well established and so we expect companies' plans to build on the evidence that is available regarding when and how these approaches work best.

Long-term, best value solutions are likely require a range of options, operating together, for example supply side solutions such as additional supply or leakage reduction, and demand side options such as reducing water use. Our 'resilience in the round' document sets out good practice with regards to smart resilience interventions and the essential role of innovation. It will be important that proposed mitigations have the ability to adapt and flex over time and take account of the option value of learning further information about risks and challenges over time. Companies will also need to demonstrate how they have ensured that they are not prioritising short-term fixes over a long-term approach because of any constraints imposed by their own choices of financial arrangements, for example.

We will take account of companies' approach to collaboration in their business plans. We expect companies to work together with other companies and stakeholders (such as local councils, other utilities and highways agencies) to identify the most efficient and cost effective resilience solutions through groups like Water Resources South East, Water Resources East and the 21st Century Drainage Board. Companies should consider whether, and how, resilience risks could be best managed across company boundaries, at a regional level, or even national level. For example, through public campaigns to promote water conservation and lower per capita consumption.

We also expect companies to work more effectively to integrate water resources and drainage management. We see scope for considerable innovation in respect of integrated water resource planning. Such approaches may well also involve collaboration across company boundaries, or between water companies and other organisations such as councils and developers.

In order to be corporately resilient, companies must ensure that they have the capability within their workforce to provide the services their customers expect not only today but over the long term, in the face of potentially significant changes in how they do this and in the wider employment landscape. A focus on long-term resilience should therefore also include companies identifying and addressing possible skills gaps in the future. The Energy and Utilities Skills Partnership 'workplace renewal and skills strategy' (2017), which includes the water and wastewater sector, estimates that a third of vacancies are "hard to fill". It also suggests that over 220,000 new recruits will be required by 2027. Companies therefore need to ensure that they have plans in place to secure access to the workforce they need, including transferring knowledge and increasing diversity.

We expect companies to work effectively across sectors to address issues with resilience. This includes the recommendations of the national flooding resilience review that utilities work together with Government to improve mechanisms for cooperation and information sharing, identify interdependences between different sectors and in an emergency, make the link between different industry sectors and the relevant local resilience forums and central Government.

In line with principles 3 and 6, when mitigating risks, it is critical that companies actively involve their customers. Customer action may well prove a cost-effective way of managing risk to service delivery, so companies should consider how best to work with customers to secure their participation in co-creation and co-delivery of resilience solutions. It is also crucial that companies work with customers to understand the impact of service disruption, so that this can best inform the steps they take on response and recovery. And, overall, it is critical that companies' work on resilience is aimed at delivering outcomes in line with customers' preferences and priorities, at a price that is affordable for all.

In line with principle 6, company management and mitigation of operational risks should be reflected in the stretching outcome performance commitments they set. We expect to see strong links between company mitigation and management of operational resilience risks and their outcome performance commitments. These commitments should also reflect future risks and customer preferences.

When companies put forward their plans for resilience, they should also bear in mind that previous price controls funded firms for the efficient cost of meeting their legal obligations and maintaining serviceable assets. Where companies' actual costs of meeting their obligations exceeded their funding, investors bore this risk and should have ensured the company was funded to deliver its obligations. In PR19 we only expect to allow companies to recover from their customers the efficient costs of activities which are additional to the investment they should have undertaken in previous periods, so that customers are not paying for the same activity twice.

Where the need for investment arises because of historical issues in a company's approach to resilience, we will also consider the extent to which those issues relate to evolution in best practice or simply result from companies not having done what they should have done in earlier periods. We will also consider whether companies have provided credible assurance that processes, structures and governance would avoid similar situations reoccurring in future.

6. Targeted controls, markets and innovation: wholesale controls

Key themes of PR19

Our approach to wholesale controls supports the key themes of PR19.

Our methodology for PR19 will promote long-term **resilience** and help secure **affordable** bills and great **customer service** through separate controls.

Separate controls enable targeted regulation of monopolistic activities, which helps companies to identify and deliver efficiency gains and investment needs to support a more resilient service. This ensures customers are protected and get secure, sustainable, and affordable water and wastewater services.

Separate controls also promote wholesale markets, by revealing improved information that will incentivise companies to **deliver better value for customers, the environment and wider society**.

Promoting wholesale markets will encourage greater **innovation, resilience** and efficiency across the sector as companies make better use of water resources and bioresources and improve connectivity between companies.

Overall approach to wholesale revenue controls

We will set the following wholesale revenue controls at PR19:

- network plus water;
- network plus wastewater;
- water resources;
- bioresources; and
- Thames Water's Tideway Tunnel activities (TTT).

Network plus controls will take the form of total revenue controls which:

- include an adjustment mechanism for developer services;
- include a revenue forecasting incentive with in-period adjustment; and
- support a robust long-term strategy for drainage and wastewater planning, which meets customer and environmental needs.

Water resources controls will take the form of total revenue controls which include:

- a revenue forecasting incentive with in-period adjustments;
- water trading incentives;
- additional mechanisms for English companies to facilitate the bilateral market (in-period adjustment and reporting requirements);
- long-term risk-sharing arrangements for large investment in new water resources; and
- a water resources bid assessment framework, to create more clarity and confidence for third party bidders to supply water resources, leakage or demand management services.

Bioresources controls will:

- take the form of average revenue controls (volume: tonnes of dry solids) with an adjustment to protect customers and companies from over or under-recovery of fixed costs;
- include in-period reconciliation for collected/allowed revenue variance; and
- include a sludge volume forecasting accuracy incentive.

Applicability to England and Wales

Our final methodology for wholesale controls **applies to both** companies whose areas are wholly or mainly in England and those whose areas are wholly or mainly in Wales.

However, our proposals for additional mechanisms to facilitate the bilateral market will **apply only** to companies whose areas are wholly or mainly in England.

Responses to our draft methodology proposals

There was strong support for our overall approach to setting wholesale controls. For **network plus**, there was general support for our proposals, but some respondents questioned the inclusion of developer services in the controls. In response to the methodology, several stakeholders said that companies should show that they have designed and agreed **integrated drainage solutions** as part of their plan. For **water resources**, there was support for our approach, but mixed views on our proposals for **securing legitimacy around large investment in new water resources** and **data requirements for access pricing**.

For **bioresources**, comments about certain aspects were mixed but there was general support for the bioresources control. Some respondents were concerned that the proposals added complexity and introduced volume risk. While all companies supported the need to protect customers, many raised concerns about our proposal for the **revenue forecasting incentive**; namely, our asymmetric approach. They raised issues of forecasting inaccuracy that may be due to areas outside management control. Others commented on aspects of the **allowed average revenue**.

Our consideration of respondents' views

For **network plus**, we will continue to include developer services within the scope of the network plus revenue controls, as proposed in our draft methodology proposals. We also agree that companies need to show evidence of how they are implementing **integrated drainage solutions**.

For **water resources**, we have clarified our policy intent for the **long-term risk sharing arrangements for large investment in new water resources** and **revised our access pricing reporting requirements**.

For **bioresources**, we have refined our approach by formulating a **modified average revenue control** which more closely aligns the incremental changes in revenues to the incremental changes in costs, rather than average costs. This will protect customers by removing the incentives for companies to under-forecast volumes. It also addresses concerns raised by companies that significant over-forecasting would result in an under-recovery of fixed costs under our previous proposals. Our revised approach ensures that incumbents bear an appropriate level of volume risk. We will provide some protection for companies that see step changes in volumes due to improving measurement. The sludge quantities and the forecasting incentive do not account for traded volumes – neither exporting, nor importing sludge or other organic material. Companies will need to explain their intended approaches to trading in their business plans to provide context to their total expenditure (totex) requirements for bioresources over the period 2020-25.

6.1 Introduction

This chapter sets out our final methodology for PR19 with respect to the wholesale controls. This PR19 final methodology has been determined following full consideration of views expressed by respondents to our draft methodology proposals published in July of this year.

The remainder of this chapter is structured as follows:

- background to setting wholesale revenue controls (section 6.2);
- network plus water and wastewater (section 6.3);
- water resources (section 6.4);
- bioresources (section 6.5);
- additional wholesale controls: Thames Tideway Tunnel (TTT) (section 6.6); and
- initial assessment of business plans – wholesale (section 6.7).

Appendices 4 to 8 inclusive are referenced within the relevant parts of this section.

The appendices set out the background, including full details of our proposals as they appeared in the draft methodology, the responses to our draft methodology proposals, our consideration of those responses and an explanation of any changes to the final methodology.

Section 5 of appendix 15 outlines respondents' views to the five questions we posed on wholesale controls in our draft methodology proposals. In appendix 15, we provide our response to the issues raised by respondents.

6.2 Background to setting wholesale revenue controls

Wholesale activities account for around 90% of the water and wastewater value chain. Our approach to the price control framework reflects our statutory duties (including our duty to further the resilience objective) and aligns with our strategy, our enduring price control principles, the UK Government's strategic policy statement and the Welsh Government's strategic policy statement.

Our revenue controls remain a key part of the way we regulate to make sure customers are protected and get secure, sustainable and affordable water and wastewater services. They are an important regulatory tool, providing incentives that encourage companies to deliver better value for customers, the environment and wider society.

6.2.1 Targeted regulation of wholesale services

For PR19, we will set separate binding wholesale revenue controls covering the following sets of activities:

- water resources;
- network plus water;
- network plus wastewater; and
- bioresources (sludge treatment, transport, recycling and disposal).

In PR14, we set only two wholesale controls for water and wastewater.

Network plus activities, which represent the majority of the wholesale value chain, will remain monopolies and will continue to be regulated during 2020-25. However, water resources and bioresources have the scope to become more competitive. We have therefore introduced separate binding controls as a targeted and proportionate response to the challenges facing the sector. This will help us to set better targeted incentives, which will support company decision-making. The separate controls help us:

- protect customers, through better targeted regulation; and
- adapt the regulatory framework to create value by: increasing the scope for innovation, efficiency and new ways to promote resilience, through wholesale markets (where appropriate).

We will set total revenue controls for network plus water, network plus wastewater and water resources. For bioresources, we will set a modified average revenue control, to help reveal more information about the volumetric unit costs of delivering bioresources services. Each of the wholesale revenue controls will be set for five years using a 'building block' approach (set out in section 6.3 below).

6.2.2 Promoting wholesale markets

In PR19, we aim to facilitate a greater role for markets in England and, where it aligns with Welsh Government policy, in Wales to encourage greater efficiency and innovation as well as to promote resilience.

Innovation is at the centre of PR19. When we refer to innovation, we not only mean technology, but also companies developing a culture of innovation where every process is geared towards innovation, and customers are engaged as active participants, and companies collaborate within and outside of their sector. Without innovating, companies will not and cannot deliver enough of what matters to customers and the environment or play a leading part in helping the sector face a range of significant challenges. We will publish a paper alongside the final methodology, 'Driving innovation in water'.

New markets – places where buyers meet sellers – create opportunities for companies to look beyond traditional company boundaries and their own in-house solutions to meet the long-term needs of customers. This can promote choice of wholesale services, which also helps facilitate resilience, as alternative sources of supply are available, if an existing source fails.

Markets can also encourage:

- sharing of existing capability to improve efficiency and maximise the value of existing resources;
- the collaborative and co-ordinated development of new resources, to meet the long-term needs of customers, the environment and wider society; and
- third party involvement in developing innovative approaches and solutions to deliver new services that create value for customers, the environment and wider society.

We consider that the water resources market, in particular, can benefit from significantly more trading. There is also scope for participation from third parties to sell water into the public water supply and, looking further ahead, for third parties in England to sell water directly to water retailers as the retail business market develops in line with changes introduced by the Water Act 2014 (the bilateral market).

In relation to bioresources, evidence shows there is scope for increased optimisation of activities across the companies and greater participation from firms operating in wider waste markets. This will help realise benefits deriving from greater efficiency. For companies in both England and Wales, there may be cross-boundary opportunities which could lead to more efficient operations and lower costs. There are also other organic waste (OOW) facilities that may be able to offer bioresources treatment services to companies in both England and Wales. The realisation of these opportunities could enhance the economic, social and environmental wellbeing of people and communities.

We have introduced market information requirements to increase transparency in bioresources and water resources. These requirements will enable others to identify opportunities to offer services, if they can provide them at a lower cost and/or a higher quality.

For water resources, we have introduced a requirement for companies to produce a bid assessment framework to give third parties more clarity and confidence that their bids to supply water resources, leakage or demand management services will be assessed fairly, in particular, against the company supplying its own in-house solution. These principles are set out in appendix 8 (company bid assessment frameworks – the principles).

6.3 Network plus water and wastewater

Applicability to England and Wales

Our final methodology for network plus water and wastewater controls **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

The network plus water and wastewater controls will apply to the parts of the wholesale water and wastewater businesses that remain, once designated water resources and bioresources activities are excluded. These parts of the water value chain will remain as monopolistic activities during 2020-25. By retaining our incentive-based approach during this period, we can align companies' interests with those of customers and the environment.

We have set the network plus controls using a building block approach to determine the total revenue each company can earn. Figure 6.1, below, illustrates these building blocks, which incorporate:

- returns on, and depreciation of, the RCV;
- an assessment of:
  - efficient totex during the 2020-25 period;
  - funding expenditure to be recovered within the period (determined by the pay as you go (PAYG) ratio); and
  - expenditure added to the RCV and recovered in future periods (through future returns and depreciation); and
- a tax allowance.

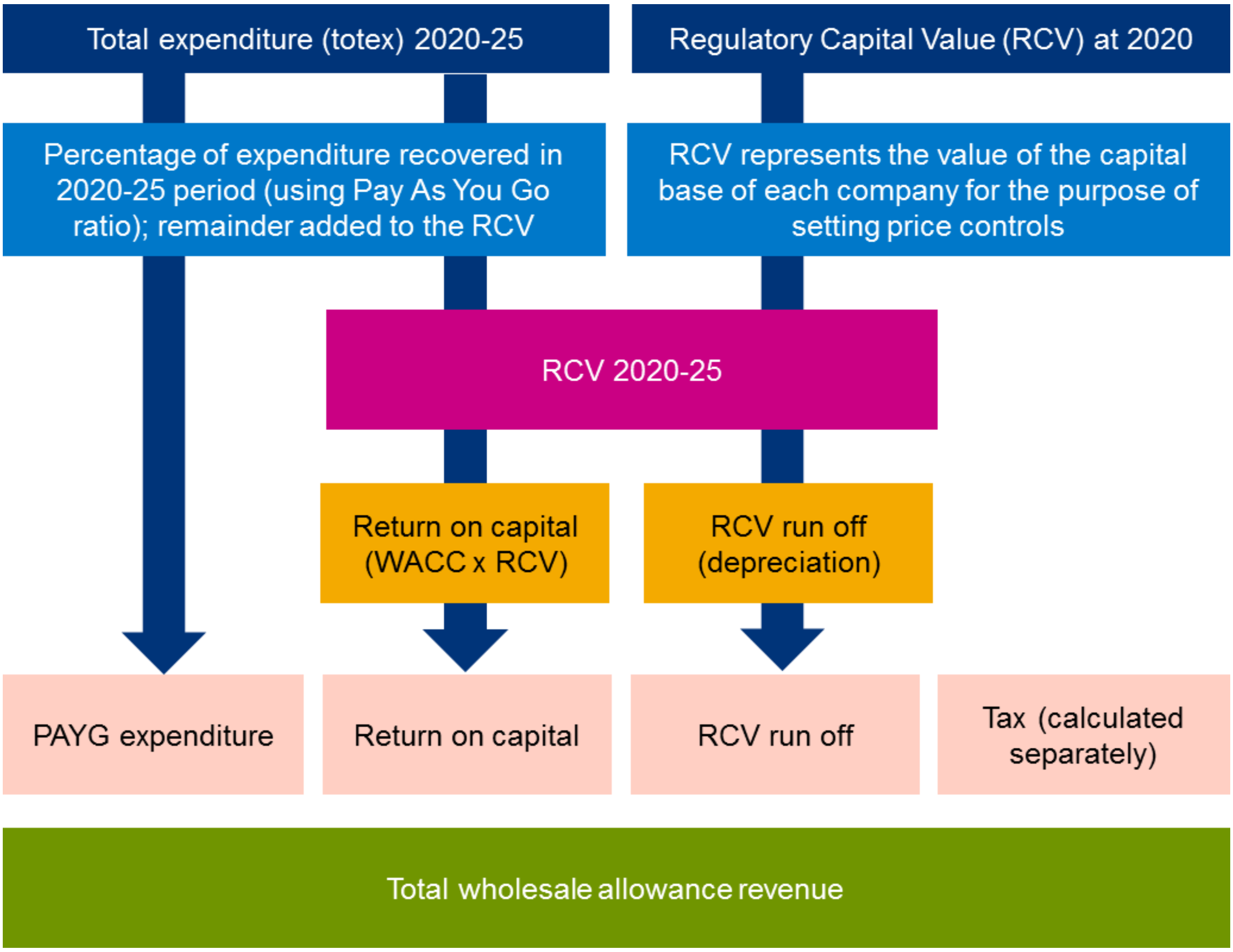
We will extend our protection of past efficiently-incurred investments included in the RCV up to 31 March 2020, to make sure that all elements of the wholesale controls (including water resources, bioresources and network plus) will have the same type and degree of regulatory protection as at present.

Beyond 31 March 2020, we are not providing a further explicit commitment to protect investments added to the RCV over and above our existing commitments. We expect companies to be able to recover efficiently incurred costs over the 2020-25 period. This approach is consistent across the network plus controls. At PR24, we will consider the design of controls, including any further separation of network plus activities, such as the treatment of raw water, and the role of any further extension of the RCV protection, consistent with our approach at previous price reviews.

You can find our approach to determining each of these building blocks in the following chapters.

- Chapter 9 (securing cost efficiency) sets out our approach to assessing the efficient costs for the wholesale controls.
- Chapter 10 (aligning risk and return) discusses how we will set an appropriate return for the wholesale controls, and our approach to tax.
- Chapter 11 (aligning risk and return: financeability) sets out our approach to recovering costs, which determines the PAYG rates and RCV run-off for the wholesale controls.

Figure 6.1 The building blocks of the wholesale revenue controls



For PR14, we set the wholesale revenue forecasting incentive mechanism to encourage companies to accurately set charges to recover allowed revenues. The application of this across our wholesale controls is discussed in section 6.3.2.

6.3.1 Developer services

For PR14, the wholesale water and wastewater controls included income from developer services provided by the wholesale business (including infrastructure charges and payments for the requisition of new infrastructure) as well as income from wholesale charges. This was to provide flexibility to rebalance connection and infrastructure charges with other wholesale charges in response to possible changes to the UK or Welsh Government charging guidance provided under the provisions of the Water Act 2014.

For PR19, we will continue to include developer services within the scope of the network plus revenue controls, as proposed in our draft methodology proposals.

However for PR19, we will make an adjustment at the end of the price control period for changes in the volume of developer services provided by the company, recognising that the demand for new connections and other developer services is closely linked to the health of the local economy. The UK Government's strategic policy statement emphasises the importance of company planning and delivery keeping pace with housebuilding, making a revenue control less appropriate. Our approach will cover both non-contestable services, which can only be provided by the incumbent and activities which are open to competition, meaning they could be provided by a third party. Some respondents considered that growing competition and the charging rules for new connections provided adequate protection for new connection customers meant some or all of the developer services should be excluded from the network plus price control. Another respondent noted that variation between developer services contributions and those forecast had not caused volatility in wholesale charges, so there was little need for regulatory intervention.

We have considered these responses and acknowledge that competitive markets can enable and encourage greater efficiency, higher quality and innovation in the provision of services and deliver long-term benefits to developers and customers more generally. Nevertheless, where the market is not effective, or where services are not contestable, then targeted price regulation has an important role in protecting the interests of customers and developers.

There are regional variations in the extent and nature of competition for the provision of new connections and other developer services. Therefore, it appears some incumbents may face no or limited competitive constraint from other providers of developer services. There are also variations in the extent and nature of competition across different elements of developer services.

We need to ensure that the interests of customers are adequately protected. Removing developer services from the scope of the controls will dilute regulatory protection for developers, particularly in areas where incumbents face limited competitive pressure, meaning relying on the effectiveness of competition and ex-post regulatory tools (such as licence enforcement and Competition Act powers) to protect their interests. Alternatively, the inclusion of the contestable element of developer services within the scope of the network plus price controls may protect the incumbent from competition risk and may reduce incentives for incumbents to respond to competition or serve developers efficiently. We have sought to balance these considerations.

In light of these considerations, for the 2020-25 period, our approach is to:

- include developer services and connection charges within the scope of the network plus revenue controls;
- introduce a symmetrical volume based revenue correction mechanism to encourage companies to respond to changing demand for developer services (as their revenues will increase, if they serve more developers), and to make sure costs are recovered appropriately from customers and developers – this mechanism will adjust revenues for changes in new connection volumes, based on assumptions about the average revenues of providing developer services for different development sizes and types;
- apply no adjustment for changes in the average cost of delivering developer services to preserve the incentives for cost efficiency in the delivery of these services;
- apply the revenue correction mechanism at the end of the control period, given that developer services are a relatively small proportion of wholesale activities and that the volume of new connections and developer services may shift within the period without affecting overall costs and volumes; and
- encourage companies to forecast the overall volume of new connections and other developer services, within reasonable limits, through the interest rates applied to large volume differences.

We will monitor the market during the price control period and revisit our approach to the treatment of developer services for PR24. To support this, we will require incumbents to report upon their contestable and non-contestable developer services activity, by volume, as part of their annual performance report.

Full details of the background, our proposal in the draft methodology, responses to our draft methodology proposals, our consideration of those responses and an explanation of the changes to our approach are set out in appendix 7 (network plus water and wastewater controls).

6.3.2 Revenue forecasting incentive (water resources and network plus controls)

Companies set charges in advance of the start of the year, based on the best information available, to ensure that their expected revenues from charges are aligned with the revenues allowed under their controls. Nevertheless, revenues they earn from charges may still vary from the revenue allowance.

There are many factors that may cause collected revenues to vary from the limits set by the revenue controls. These include risks that are controllable by companies, such as forecast accuracy, and other factors that management cannot fully control, such as the impact of weather on demand and metering uptake. At a sector level, we estimate that a 2% revenue over-recovery, without correction, would be equivalent to an impact of around 0.9% on RoRE[32] in companies' favour. Moreover, large systematic over- or under-recoveries may drive end of period movement in customer bills. It may also mean future customers may pay more or benefit at the expense of current customers.

Specifically, for water resources, network plus water and network plus wastewater controls, which limit total revenues, it is necessary to allow companies to 'true-up' for under or over-recovered revenues in any year of the control period, rather than at the end of the review period, to help smooth variation in customer bills. We want companies to take responsibility for accurately forecasting revenues they will collect, to align their interests with those of customers. As companies cannot entirely control demand risks, we envisage that a small but meaningful financial incentive applied to each year's revenue would be enough to achieve this aim. We do not consider an additional revenue forecasting incentive to be appropriate for bioresources as the modified average revenue control does not limit companies' ability to earn more revenue for greater sludge volumes.

We will propose a licence modification to make sure that such in-period adjustments are allowed in 2020-25 and future price review periods. This will be equivalent to the licence modification we made for most companies in 2016 to implement the wholesale revenue forecasting incentive mechanism in the current price review period.

Further detail on our approach, responses to our draft methodology proposals and an explanation of where we have modified our approach in response are set out in appendix 7 (network plus water and wastewater controls).

[32] The impact on RoRE is calculated as the average of total revenues over five years divided by the average regulated equity. It is based on sector figures that underpinned the 2014 final determinations, it hasn't been adjusted for bioresources, and will vary between companies depending on the relationship between revenue and RCV.

6.3.3 Resilience in the round and long-term planning

Resilience is a key focus of PR19, and we will assess how companies have considered and planned for resilience in our initial assessment of company business plans for their wholesale controls. As set out in the resilience chapter, section 5.6 above, we expect incumbents to demonstrate improved risk assessment, planning and investment by producing robust long-term strategies for managing drainage and wastewater in an integrated and sustainable way. This is in addition to following statutory processes in planning for clean water services.

6.4 Water resources

Applicability to England and Wales

All of our PR19 final methodology for water resources **applies to** companies whose areas are wholly or mainly in England. For companies whose areas are wholly or mainly in Wales all elements apply apart from those linked to the bilateral market, consistent with the Welsh Government policy not to introduce this market.

PR19 will be the first time we set a total revenue control for water resources which is separate from network plus water. Our control will provide a framework to protect the interests of customers through better targeted regulation and increased management focus. It will also enable greater collaboration between companies and other water resources service providers, to maximise the value of existing resources and incentivise the efficient development of new water resources options, including:

- more trading of existing water resources between water companies;
- water companies to more actively procure water resources and innovative demand-side solutions from third party service providers; and
- a co-ordinated collaborative approach to developing new water resources solutions.

In the future, business retailers may also procure water resources from third parties directly when the relevant provisions of the Water Act 2014 are fully in force. Our control is designed to facilitate the development of this bilateral market in 2020-25. The Welsh Government has decided not to extend business retail competition in Wales. For England, we recognise that the UK Government has not yet decided when to bring the relevant provisions into force.

Appendix 5 (water resources control) sets out the full detail of the decisions set out below. This includes the background, including full details of our proposals as they appeared in the draft methodology, the responses to our draft methodology proposals, our consideration of those responses and an explanation of any changes to the final methodology.

6.4.1 Total revenue control

Applicability to England and Wales

The form of the bioresources control **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

We will set the total revenue control for water resources using a building block approach which incorporates:

- returns on, and depreciation of, the pre-2020 water resources RCV;
- an assessment of:
  - efficient totex during the 2020-25 period;
  - funding expenditure to be recovered within the period (determined by the PAYG ratio); and
  - expenditure recovered in future periods (return and depreciation on post-2020 RCV); and
- a tax allowance.

For companies whose areas are wholly or mainly in England, we will include an in-period revenue adjustment mechanism to accommodate the development of the bilateral market in 2020-25. Our approach to this is set out in section 6.4.3 below.

Companies will need to set separate charges for water resources and network plus water to demonstrate compliance with the separate controls.

Our approach ensures that water companies can fully recover efficiently incurred investments in existing water resources up to 31 March 2020 and enables greater use of water resource markets where appropriate.

Maintaining our building block approach to pre- and post-2020 investment provides greater certainty about revenues in the longer term. The wholesale water RCV at 31

March 2020 will be allocated on an unfocused basis between water resources and network plus water controls. RCV allocated to water resources at 31 March 2020 will receive the same type and degree of regulatory protection as it would have received under the wholesale water revenue controls.

From 1 April 2020, expenditure added to the post-2020 RCV will not receive additional regulatory protection; revenues will need to be recovered on a standalone basis from water resource activities. This is consistent with the position we set out in in May 2016 in Water 2020: Our regulatory approach for water and wastewater in England and Wales ('May 2016 decision document').

We will use capacity as the measure to distinguish between pre- and post-2020 investment. Drawing this distinction means we can retain our approach to protect efficiently incurred pre-2020 RCV and limit the change in regulatory protection to post-2020 investment in new water resources capacity.

Our capacity measure is water resources yield. This captures the average volume of water available from the environment, dependent on the service level and planning period, and constrained by water resources control assets. This is a component of the standard supply-demand balance calculation water companies use for water resources planning.

Our total revenue form of control, will provide companies with a high level of regulatory certainty. This form of control exposes companies to limited volume risk compared to the historical approach to controls before PR14 where allowed revenues were directly linked to customer volumes.

Appendix 8 of our draft methodology proposals (published in July) sets out our requirements for companies to submit their proposed allocation of the legacy RCV to the water resources control. We received no substantive comments on this appendix. This remains unchanged and our guidance on the approach that companies should follow remains as set out in appendix 8 of our draft methodology proposals. We have not republished them with the final methodology documents. We require companies to submit their proposed allocation in January 2018.

6.4.2 Water trading incentives

Applicability to England and Wales

Water trading incentives for new water exports and imports **apply to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. These recognise the wider benefits of trading and are designed to encourage more companies to participate in water trading, which will benefit both exporters and importers of water.

Water trading incentives for new water exports and imports were introduced in PR14 in order to boost water trading, the levels of which had changed little since privatisation. Water trading is where a company that is responsible for supplying water in an area buys it from either another water company or a third party, rather than developing new resources or demand-side measures. It is a part of the mix of solutions to the long-term challenges the sector faces and can have significant benefits for customers and the environment.

We will adopt water trading incentives at the same level as PR14. We will allow exporters to retain 50% of the lifetime economic profits (that is, the profits over and above the normal return on capital invested) for all new qualifying trades in 2020-25. Importers will benefit from an import incentive of 5% of the costs of water imported under new agreements during 2020-25.

To protect customers, we will cap both incentives. The export incentive is capped at 100% of the economic profit for the years the export operates in 2020-25. The import incentive is capped at 0.1% of the importer’s wholesale water revenue in each year of the control period. We will also maintain the requirement for incumbents to show that the trade complies with an Ofwat-approved trading and procurement code. This code ensures that only economically and environmentally beneficial trades will receive an incentive payment. This is assessed as part of our price review, and reflecting this, the payments would be made in subsequent review periods.

A key advantage of maintaining the incentives is that it is consistent with the long-term nature of water trading as a solution to promote resilience. We have already seen a number of new small scale water trades and approved five company trading and procurement codes, a requirement for receiving PR14 water trading incentives. We are aware from our pre-consultation meetings on the 2019 water resources management plans (WRMP19) that a number of potential water trades are being considered, which suggests the existing incentives are promoting water trades. We welcome evidence of increasing trading and will retain incentives for PR19 to promote further trades.

6.4.3 Additional mechanisms to facilitate bilateral market entry

Applicability to England only

Additional mechanisms to facilitate the bilateral market in England **apply to only** companies whose areas are wholly or mainly in **England**, consistent with the Welsh Government policy not to introduce this market. These include the in-period revenue adjustment to accommodate bilateral entry and access pricing reporting requirements.

For companies whose areas are wholly or mainly in England, a bilateral market would allow business retailers to procure water resources directly from third parties and to seek ways to meet customers' demand for water more efficiently. Bilateral market entry may, therefore, decrease the investment a company needs to make to provide enough capacity to meet future demand.

To reflect this, where bilateral market entry displaces the need for the incumbent's capacity, it will trigger an in-period revenue adjustment. Otherwise, customers would be funding duplicate investment in water resources and we would be protecting companies from exposure to the bilateral market. The size of this in-period revenue adjustment mechanism will depend on the scale of bilateral market entry. We anticipate that the bilateral market is likely to be small and nascent in the period before 2025, but significant within the context of long-term water resources development. Our working assumption is that 2022 is a likely implementation date for bilateral markets.

Our adjustment mechanism is based on the water resources yield displaced by unanticipated bilateral market entry. The revenue adjustment evaluates the ratio between forecast additional capacity needed and the additional capacity that was actually provided (including capacity provided by third parties). The adjustment only accounts for bilateral entry risk and not the risks associated with the company having to make significant investment in new water resources. The financial value of the adjustment reflects the costs of the post-2020 capacity funded through the control.

Our approach to the adjustment mechanism is compatible with our approach to access pricing, which is designed to ensure that the control will facilitate the future bilateral market. Companies whose areas are wholly or mainly in England must submit information as part of their business plans to ensure that the control is robust to future market development. This includes a revised focus, based on stakeholders' feedback, on ensuring that the cost of post-2020 capacity is properly estimated.

The architecture of the bilateral market and the detailed design of access pricing are outside the scope of the PR19 methodology. We plan to hold a consultation on how to take forward wholesale markets in early 2018.

6.4.4 Securing the legitimacy of large investments in new water resources

Applicability to England and Wales

Our focus on securing the legitimacy of significant investments in new water resources **applies principally to** companies whose areas are wholly or mainly in England. This is because the higher levels of available water in Wales mean it is less relevant at this time for companies whose areas are wholly or mainly in Wales.

Large water resources assets typically have a long lead time to deliver, are very long lasting and are built to provide secure supplies to customers. New large water resources investment will be added to the post-2020 RCV, which means that customers and not companies bear the majority of the risk of over-investment. This issue is particularly acute for schemes which include a large fixed capital expenditure (capex) requirement, which may mean that companies do not face an appropriate incentive to choose between options with large fixed cost and more flexible options which could reduce future risk to customers.

For PR19, we want companies to take a long-term approach to significant investments in new water resources; one that considers the real option value of any decisions and the long-term uncertainty associated with them. Securing the legitimacy of large investments in new water resources means sustaining long-term investor confidence in the sector, while protecting the interests of both current and future customers. This in turn means making sure companies manage uncertainty effectively over the long term and bear an appropriate share of risk around the delivery of future outcomes.

Having a long-term approach to significant investments in new water resources should ensure that companies face a strong incentive for robust decision making and that companies remain accountable for their decisions. This applies in the context of the need to plan for droughts and increased resilience, rather than of the company's day-to-day optimisation decisions.

We expect water companies proposing significant investment in new water resources to set out how they will share the risk around the delivery of future outcomes with their customers, guided by a set of principles. This approach gives companies the flexibility to develop risk sharing arrangements that apply to the outcomes they propose to deliver from their proposed investments, including the appropriate use of mechanisms such as deadbands. We will review the arrangements to assess their suitability and alignment with customers' interests using the guiding set of principles set out in appendix 5 (water resources control) as part of the initial assessment of business plans

This approach will safeguard the legitimacy underpinning significant post-2020 investments in new water resources and complement our outcomes framework, which provides clear incentives around leakage, water efficiency and long-term resilience. It is also an important addition to the overall set of incentives that aim to make sure companies' interests are aligned with the interest of their customers.

This is a targeted and proportionate approach and one that allows the risk sharing arrangements to be tied to the nature of the investment over the long term. Where companies are not proposing any significant investment in water resources – for example, if their areas have surplus water, we would not expect them to propose risk sharing arrangements at this time.

6.5 Bioresources

Applicability to England and Wales

Our final methodology for bioresources **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. The UK Government recognises that promoting effective competition to treat and sell on energy and nutrient-rich bioresources will help to achieve innovation and efficiency. The Welsh Government considers that companies should be incentivised to seek solutions which deliver wider benefits to society and the environment, where this is justified by sound evidence.

PR19 will be the first time we set a separate revenue control for bioresources. Introducing a separate revenue control for bioresources will enable and encourage effective markets by revealing improved information.

Our revenue control will provide a framework to protect the interests of customers. It will enable greater participation from companies and other firms operating in wider waste markets, maximising the value of existing capability to treat, transport and recycle organic waste. This will help realise benefits deriving from greater efficiency and broader environmental benefits. We expect our approach to encourage:

- more trading between water and wastewater companies for the treatment, transport, recycling and disposal of sewage sludge;
- water and wastewater companies to explore opportunities to trade with firms operating in other waste markets; and
- greater collaboration to develop new capability to treat sewage sludge, maximising potential economies of scale to create value for customers and the environment.

For PR19, we will expect each company to set out a long-term bioresources strategy. The strategy should explain how companies will obtain and deliver bioresources services for their customers, making effective use of markets where appropriate. We expect companies to adopt a mix of solutions to ensure that they provide bioresources services in a sustainable and efficient way. Companies should show the value that in-house solutions and market based approaches contribute to meeting their future needs.

A market based approach is likely to improve efficiency and create value for money over the long term, taking into account the wider costs and benefits to the economy, society and the environment. In England and Wales, careful treatment and recycling of bioresources will enhance the economic, social and environmental wellbeing of people and communities.

Our controls will encourage companies to take a long-term perspective on how best to obtain and deliver bioresources services for their customers, including how to maximise the opportunities to create value through the use of markets. Adopting a separate revenue control encourages companies to improve their understanding of the costs and service performance of their activities, encouraging a commercial culture and greater focus from management.

The form of control provides an incentive to optimise activities around treatment sites that deliver the greatest value (or deliver services at the lowest cost). It is neutral about the distinction between services procured from third parties and those provided in-house.

We stated that, from 1 April 2020, investment would not receive the same regulatory protection as pre-2020 investment and, that revenues would need to be recovered on a standalone basis from bioresources activities to promote efficient decision making, provide a level playing field and minimise risk of cross-subsidy. We recognise that there might be a greater risk of stranding once the market has developed, if the regulatory framework changes.

In future, if we move to setting more ‘gate fee’ type charges derived from evidence of efficient costs (including post-2020 investment), then an efficient company should be able to recover past efficiently incurred expenditure, subject to volume changes.

One consultation respondent expressed concern that our approach would not alleviate the potential risk of stranding efficiently incurred pre-2020 investments. Others were concerned about the level of volume risk and the asymmetry of the revenue forecasting incentive by providing some protection from under-recovery of sunk costs.

Having considered the responses to our draft methodology proposals, and how best to protect both customers and companies, we have refined our approach to the average revenue control set out in our draft methodology proposals.

We have developed our PR19 final methodology to better protect customers and in doing so we have minimised the potential risk of stranding efficiently incurred investments in the 2020-2025 period. We have formulated a modified average revenue control which better aligns the incremental changes in revenues to the incremental changes in costs. Our approach is consistent with the way bioresources and organic waste processing services are contracted, so supports a level playing field for third party providers.

Our refined approach will protect customers from paying too much for bioresources services where a company has under-forecast its sludge production, limiting the scope for windfall profits due to forecasting error. Our approach will also provide some protection for companies against the risk of under-recovery of fixed costs where volumes are much lower than anticipated. This should provide a better alignment of incentives for companies to forecast sludge production accurately, ensuring that customer bills better reflect the cost of providing bioresources services. Our refined approach will also make sure that incumbents bear an appropriate level of volume risk, minimise the risk of potentially stranding efficiently incurred pre-2020 investments and continue to provide some protection for companies that see step changes in volumes due to improving measurement.

The modified average revenue control means that:

- companies will have an allowed revenue per tonne of dry solid (TDS), expressed as £/TDS;
- if volumes do not vary from forecast volumes, the total revenues companies can collect from customers will equal the measured volume of bioresources they

produce by treating wastewater (in TDS) multiplied by the average revenue allowance; and

- where volumes vary from the forecast we will use a revenue adjustment factor to adjust allowed revenues.

The revenue adjustment factor substantially reduces the risk of companies significantly under or over estimating sludge volumes (which could lead to over or under recovery of revenues). To further protect customers from excessive bill variation driven by differences between forecast and measured sludge volumes, we have introduced a forecasting accuracy incentive. This is discussed further in section 6.5.3 below. Appendix 6 (bioresources control) sets out the full detail of the decisions set out below. This includes the background, including full details of our proposals as they appeared in the draft methodology, the responses to our draft methodology proposals, our consideration of those responses and an explanation of any changes to the final methodology.

6.5.1 Modified average revenue control

We will set a modified average revenue control using a building block approach to calculate bioresources revenues. This will be expressed as a standard average revenue allowance in £/ TDS with a revenue adjustment factor. The revenue adjustment factor ensures that the average revenue control better aligns incremental allowed revenues to incremental costs of providing bioresources services. The revenue adjustment factor will only apply when outturn sludge volumes differ from the forecast volumes.

Our approach removes the incentives for companies to under forecast sludge production. This incentive occurs because there are economies of scale in sludge treatment. Economies of scale mean that incremental costs are relatively low and average costs will fall as volumes increase. Under a pure average control, we would allow the same average cost to be funded through revenues regardless of actual sludge production. Companies would earn windfall profits, under a pure average revenue control, if volumes are greater than forecast. Similarly, companies would face financial losses if volumes outturn lower than expected.

This approach is consistent with our principles for bioresources transfer pricing for short term contracts, which can be found in RAG 5.07. The adjustment will only be required if measured volumes are different to forecast volumes. There is more information about the calculation of the revenue adjustment factor in appendix 6 (bioresources control).

Where a company exports its own sludge to neighbouring companies or other waste operators, costs will be recovered in the bioresources control and treated the same as a company's own cost of processing.

Where companies offer services to neighbouring wastewater companies and other waste operators, thus import sludge or organic waste, this will be considered non-appointed activity. Companies will be free to negotiate their charges for these services, subject to compliance with competition law and transfer pricing rules. The volumes of sludge treated through non-appointed activities will not be subject to the modified average revenue control and companies will assume the volume risk.

6.5.2 Bioresources volume forecasting accuracy incentive

Our calculation of the average revenue control relies on accurate company volume forecasts. This is the first time we have asked companies to forecast volume for bioresources.

The revenue adjustment factor (discussed above) substantially reduces the risk of significant under or overestimation of sludge volumes (which could lead to under- or over-recovery of revenues). However, to protect customers from excessive bill variation driven by differences between forecast and measured sludge volumes, we have introduced a forecasting accuracy incentive.

A number of companies responded to our draft methodology proposals with specific comments on the calibration of the forecasting accuracy incentive. We held a workshop with companies to discuss the incentive on 4 October. In the light of the consultation responses and taking into account the additional customer protection afforded by the adjustment to the average revenue control, we have increased the level of the deadband from 3% to 6% and changed the penalty rate. This penalty will apply when outturn volumes over the five year period are outside the deadband around the five year total forecast. No penalty will apply to measured volumes that fall within the ±6% deadband over the five year period.

We have set a fixed financial penalty rate of 10% of the revenue generated by the difference between actual and forecast sludge volumes. We will apply the penalty symmetrically to differences between forecast and measured volumes which fall outside the 6% deadband. We will apply the forecasting accuracy incentive as part of the reconciliation of 2020-25 performance.

6.5.3 Managing in-period revenue variations for the bioresources control

We expect that companies will set charges based on the best information available at the time and make sure that the revenues they earn are consistent with the limits determined by the bioresources modified average revenue control.

Companies set wastewater charges in advance of the start of the year, based on the best information available, to make sure that their expected average revenues from charges are aligned with their average revenue allowance from the control. Nevertheless, actual average revenues that wastewater companies earn from bioresources may still vary from the average revenue allowance, depending on the design of company charges. For example, charges may be based on rateable value for properties that do not have meters, but rateable value does not change with occupancy whereas bioresources quantities do. In this case, a mechanism may be required to correct for under or over-recovery in average revenues.

We expect companies to adjust the allowed average revenue, in £/TDS, in subsequent years to correct for any under or over-recovery of average revenue in an earlier year. This is similar to the PR14 wholesale revenue correction mechanism and more detail is provided in appendix 6 (bioresources control). For other wholesale controls, which limit total revenues, there are arrangements (such as the revenue forecasting incentive mechanism) both to correct revenues in-period and to incentivise accurate revenue forecasting (see section 6.3.2). We are not applying a revenue forecasting incentive to the bioresources control, as the modified average revenue control does not limit companies' ability to earn more revenue for greater sludge volumes. Additional wholesale controls: Thames Tideway Tunnel (TTT)

Thames Water's wastewater services interfacing activities for the TTT project during the period 2015-2020 have been delivered through a separate wholesale control (the 'TTT control'). This was made possible by an amendment to Thames Water's licence during the PR14 process.

When we set the TTT control in PR14, we anticipated keeping a separate control in place for the 2020-25 period, because of Thames Water's continuing interfacing activities. We have therefore decided once again to set a separate TTT control for Thames Water in 2019, to cover the 2020-25 period.

We have discussed this approach with Thames Water and intend to consult on a licence modification, which will allow us to set a separate TTT control as part of the PR19 process. We intend the TTT control to operate in the same way as a wholesale network plus control, as summarised in table 6.7.

Table 6.7 Approach for the TTT control

Component	Approach
Form of control	RCV-based building block approach to calculating revenues
Length of control	Five years
RCV indexation	Index 50% of the RCV at 1 April 2020 to the retail price index (RPI) Index the remainder of the 1 April 2020 RCV and all future RCV additions to CPIH
Indexation of revenues (these are discussed in chapter 10 (aligning risk and return)	Annual adjustment to reflect any percentage change in CPIH, plus or minus an adjustment factor

Because of its separate project licence, the main TTT works, which are being delivered by Bazalgette Tunnel Limited ('Tideway'), will not be considered as part of the PR19 process.

6.6 Initial assessment of business plans – wholesale

A number of our initial assessment of business plans tests on the use of targeted controls, markets and innovation relate to the form of the wholesale revenue controls, while also touching on other areas of our PR19 approach. All the questions covered under the targeted controls, markets and innovation test areas are shown below; some of these are covered in subsequent chapters. Chapter 14 provides an overview of our approach to the initial assessment of business plans.

Initial assessment tests for targeted controls, markets and innovation: wholesale controls

1. How well does the company's business plan demonstrate that it has the right culture for innovation which enables it, through its systems, processes and people, to deliver results for customers and the environment from innovation?

2. How well does the company use and engage with markets to deliver greater efficiency and innovation and to enhance resilience in the provision of water and wastewater services to secure value for customers, the environment and the wider economy; and to support ambitious performance for the 2020-25 period and over the longer term?

3. To what extent has the company set out a well evidenced long-term strategy for securing resilient and sustainable water resources, considering a twin track

approach of supply-side and demand-side options and integrating third party options where appropriate, to meet the needs of customers and the environment in the 2020-25 period and over the longer term?

4. To what extent does the company have a well-evidenced long-term strategy for delivering bioresources services, integrating an assessment of the value from the delivery of bioresources services by third parties for the 2020-25 period and over the longer term?

5. How appropriate is the company's proposed pre-2020 RCV allocation between water resources and water network plus – and, if relevant, between bioresources and wastewater network plus – taking into account the guidance and/or feedback we have provided?

6. To what extent has the company produced a bid assessment framework for water resources, demand management and leakage services that demonstrates a clear commitment to the key procurement principles of transparency, equality/non-discrimination and proportionality, and the best practice recommendations?

In assessing these tests, we will take into account evidence of:

- the company's ability to use innovation to deliver for customers, the environment and wider society – including details of plans, systems, processes and people needed to support innovation;
- the company's long-term strategy for managing drainage and wastewater in an integrated and sustainable way, including how partnership working is supporting effective delivery;
- effective use of markets to harness innovation and reveal information about efficient cost of service, for companies whose areas are wholly or mainly in England;
- a robust strategy for meeting water resources and bioresources needs now and in the future, having assessed the opportunities for third party providers to help deliver outcomes in a resilient and affordable manner;
- the robustness of the company's WRMP which sets out the company's long-term plan to ensure a secure supply of water;
- active and effective consideration of third party delivery options for water resources and bioresources for both this review period and the longer term – strong evidence to support this should include details of third party engagements, a strategy for maximising the use of third party resources where it is economic to do so, and (for companies in England) a demonstrable understanding of how the future bilateral market for water resources will affect future supply requirements;

- how well the company has set out the bioresources volumes it expects to treat on behalf of other wastewater companies – strong evidence to support this should include information about how costs vary with volumes and how the company will determine the appropriate share of benefit between the appointed and non-appointed businesses;
- the company’s governance and management being aligned to implement separate controls and facilitate the development of new resource markets;
- transparent, well evidenced and acceptable proposals on pre-2020 RCV allocation; and
- a company bid assessment framework for water resources, demand management and leakage services that provides clarity and confidence to third party bidders about the procurement process and that their bid will be assessed fairly against the company’s own in-house solution (for companies in England and Wales). The framework must show a clear commitment to the key procurement principles of transparency, equality/non-discrimination and proportionality and the best practice recommendations.

7. Targeted controls, markets and innovation: direct procurement for customers

Key themes of PR19

Our approach to direct procurement for customers supports the key themes of PR19.

Our proposals will promote **innovation** and **resilience** by allowing new players to bring new ideas and approaches to the delivery of key projects.

Our proposals will ensure companies consider using direct procurement to deliver large-scale projects efficiently, contributing to **affordable** bills for customers. Our proposals will improve the delivery of projects, which in turn will improve the **customer experience**.

Direct procurement for customers

Direct procurement for customers (DPC) means arrangements where a water company competitively tenders for a third party (a competitively appointed provider, or CAP) to design, build, finance, operate and maintain infrastructure that would otherwise have been delivered by the incumbent water company.

We want companies to use DPC where this is **likely to deliver the greatest value for customers**. We are providing companies with guidance on identifying the most suitable projects. Companies should consider DPC for discrete, large-scale enhancement projects expected to cost over £100 million, based on whole-life totex.

Our initial assessment of business plans will include **tests to assess whether companies have considered DPC** for relevant projects and how well business plans have considered potential DPC projects.

We are not mandating which tender model is used for DPC such as whether to use an ‘early’ or ‘late’ tender model.

Companies will be the purchaser and run the procurement process. They will then manage the CAP. We expect companies to run a **fair and open procurement process** for DPC. Companies may not award a DPC contract to an associated company.

We expect companies to enter into a long-term contract with the CAP for a revenue stream to be paid to the CAP for the provision of infrastructure. We will **amend companies’ licences to allow them to recover the CAP’s revenue** from their customers. We will allow companies to **recover the efficient cost of tendering a project and on-going cost of managing the contract with the CAP**.

Applicability to England and Wales

Our final methodology for direct procurement for customers **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. DPC has the potential to benefit customers through providing an option for lower cost delivery of the most expensive new assets and allowing scope for greater innovation, with new providers able to bring new ideas. Our policy reflects the UK Government's strategic policy statement that states we should challenge the sector to plan, invest and operate to meet the needs of current and future customers, in a way which offers best value for money over the long term. We should also promote markets to drive innovation and achieve efficiencies in a way that takes account of the need to further the long-term resilience of water and wastewater systems and services and / or the protection of vulnerable customers. We have also designed the policy to ensure that, where DPC is used, the consumer interest is protected, value for money is achieved and that we receive appropriate assurances from water companies that their duties will be met to an equivalent or better standard.

Our policy also reflects the Welsh Government's strategic policy statement. We are incentivising companies to continuously seek efficiency gains to deliver more for less in order to improve the value for money of water and wastewater services, having regard to resilience and service over the long term, and seek new ways of delivering services for customers and the environment more efficiently. Our policy is designed to be consistent with the Welsh Government's view that the activity of new entrants should not reduce water companies' accountability for the delivery of excellent services to customers and the environment, or threaten the integrity and efficiency of the management of the network systems as a whole.

Responses to our draft methodology proposals

Respondents generally welcomed the introduction of DPC. However, some respondents suggested the threshold for projects which should be considered for DPC was too low and that companies should be able to bid to provide their own projects. Respondents generally agreed that we do not need to specify a tender model. A range of detailed points were raised for us to address, in relation to both the scope of the principles and their content, as well as around the treatment of costs associated with DPC.

Our consideration of respondents' views

We note respondents' views that we do not need to specify a tender model and we confirm that we do not intend to do so for PR19. We have not seen any persuasive arguments that would justify allowing associated companies to compete for DPC projects. Our policy design has appropriate safeguards to ensure that an appointee can deliver a project where this can provide the best value for money for customers. We note respondents' views about the threshold for projects, but consider that our emphasis that appointees should focus on using DPC where it has the potential to drive the greatest possible value for customers provides an appropriate safeguard against projects being inefficiently tendered.

7.1 Introduction

This chapter sets out our final methodology for PR19 with respect to direct procurement for customers (DPC). This PR19 final methodology has been developed following full consideration of the views expressed by respondents to our draft methodology proposals, published in July of this year.

By DPC, we mean arrangements where a water company competitively tenders for a third party (a competitively appointed provider, or CAP) to design, build, finance, operate and maintain large scale infrastructure that would otherwise have been delivered by the incumbent water company.

DPC is different to other tendering and contracting arrangements that appointees[33] currently use, for example, outsourcing agreements or market testing. DPC involves companies tendering to deliver more aspects of a service, including most importantly, the financing for the project. We consider that this makes DPC a different process to appointees' existing commercial arrangements. We do not intend for DPC to replace the provisions companies currently make for outsourcing services to third party providers to deliver ongoing operations and maintenance. We still expect companies to consider the most efficient delivery model for all their activities. We view DPC as a complementary approach that will provide an alternative delivery route for large-scale enhancements at PR19. We consider that DPC has the potential to realise significant customer benefits by:

- reducing the direct costs that customers pay for the largest / most expensive new assets;
- lowering project costs by focusing competitive pressure on capital and operational expenditure (capex and opex);
- involving the market, rather than the regulator, in setting the cost of capital for a specific project – we consider that the evidence from the water and other sectors (for example, electricity transmission) shows that this has the potential to lower financing costs for projects;
- promoting innovation by encouraging new providers to deliver and operate infrastructure – we note the evidence from other sectors, where tendering has led to more technical and commercial innovation and greater scope for supply chain participation; and

[33] We use the term 'appointee' in this chapter and appendix 9 (direct procurement for customers) in relation to appointed water and wastewater companies in England and Wales who are monopoly providers of water and wastewater services.

- providing both us and appointees with benchmarks for efficient costs, which we can reflect in future price controls.

The details set out in this chapter and appendix 9 (direct procurement for customers) will help appointees appraise the potential projects they plan to bring forward at PR19, to see whether or not DPC is a suitable delivery route.

The remainder of this chapter is structured as follows:

- projects appointees should consider for DPC at PR19 (section 7.2);
- assessing value for money (section 7.3);
- DPC tender models (section 7.4);
- DPC commercial model (section 7.5);
- assurance (section 7.6); and
- initial assessment of business plans (section 7.7).

In appendix 9 we set out further details of, and reasons for, our DPC methodology. This appendix is structured as follows:

- guidance for companies on identifying suitable projects for DPC;
- further details on the commercial model, including our principles for procurement and contracting;
- our proposed changes to appointees' licence conditions in relation to DPC;
- our approach to cost assessment;
- contingency arrangements where a tender process is unsuccessful; and
- an updated cost benefit assessment.

Section 6 of appendix 15 outlines respondents' views to the three questions we posed on direct procurement for customers in our draft methodology proposals. In appendix 15, we provide our response to the issues raised by respondents or note where we have addressed the issue in this chapter or in appendix 9.

7.2 Projects appointees should consider for DPC at PR19

Appointees should consider DPC for discrete, large-scale enhancement projects expected to cost over £100 million, based on whole-life totex. We note that not all projects that meet this threshold will necessarily be suitable for DPC, however we expect companies to use this threshold as a trigger for exploring DPC as an option. To maximise benefits to customers from DPC, appointees should focus on using this approach where it has the potential to drive the greatest possible value for customers. This is particularly important at PR19, given that DPC will be a new process for us, appointees and the potential bidding market.

Below we provide appointees with high-level guidance (table 7.1) to help identify projects that are suitable for DPC. We provide fuller details in appendix 9 (direct procurement for customers). Appointees should also consider the findings of an independent technical review (commissioned from KPMG), which expands further on the technical characteristics that are likely to make a project suitable for DPC.

Table 7.1 Guidance on potential DPC projects for PR19

Area	Guidance
Definition of a 'project'	A project should be an efficient package of works, or multiple packages of works to be delivered together, which meet a common need. A project should not include a range of different asset types, addressing different needs, grouped together without the justification of synergies that can be achieved.
Types of project suitable for DPC	DPC projects could come from any part of the water and wastewater value chain and services appointees provide, except bioresources (we have separate proposals to develop markets in bioresources). We do not expect one type of project to be more suitable than another, subject to the other parameters we set out here (such as costs).
Technical guidance	Appointees should consider technically discrete projects which are most likely to deliver the greatest value for customers. A project is more likely to be technically discrete and suitable for DPC where, among other factors: • there are limited economies of scale and scope with the rest of the appointees' network system or where economies of scale or scope could be maintained through contracts; • there are simple or limited, well understood and manageable physical and operational interactions with the appointees' network; • assets have capacity that is shared by multiple appointed companies; and • assets are more 'passive' and are not actively managed as part of the overall system.
Identifying projects with greatest customer benefits	Appointees should use DPC for projects where it maximises customer benefits to the greatest extent. Such benefits are likely to be associated with larger projects and come from financing, innovation or a more integrated approach between the design and maintenance and operation of assets over their lifetime. These benefits must outweigh the costs of the procurement and ongoing administering of the DPC contract. A high proportion of capex, relative to opex, increases the scope for financing benefits. We expect that competitive pressure could help realise significant customer benefits.

Area	Guidance
Project delivery	We consider that, in general, tendering should not delay delivery, as the early pre-construction works could be progressed alongside a tender for a provider. However, for projects where pre-construction works are nearing completion, we expect appointees to consider any impact the tender process may have on delivery timings.

We have developed this guidance alongside our proposals for other aspects of DPC, including specifically our procurement and contracting principles. We will review our approach at future price reviews, incorporating any lessons learned from PR19.

7.3 Assessing value for money

In order to ensure that companies put forward projects for DPC which deliver the greatest value for customers, we expect them to assess the value for money of delivering a project through DPC against a baseline delivery approach. Our assumption will be that projects that meet the £100m totex threshold and that are consistent with our technical guidance should proceed through a DPC procurement process, unless the value for money assessment provides robust evidence that a baseline delivery approach (that is, delivery by the appointee) provides better value for customers. We will test the value for money assessment in our initial assessment of business plans. It is for appointees to decide how they will undertake a value for money assessment, but we expect them to be well-evidenced and well-reasoned.

We expect each large project that might be suitable for DPC to be explored through a robust and iterative business case, using a best-practice approach. This could be the HM Treasury Five Case Model (‘five case’) approach, or another proven approach. Evidence suggests that taking the five case approach improves transparency of decisions on selecting the procurement and delivery approach to deliver value for money public services. We expect appointees’ analysis to include strategic, economic and commercial evaluations of the DPC delivery option, versus a baseline delivery approach.

Using a business case approach should enable appointees in their value for money assessments to document key assumptions and set out:

- a transparent risk-allocation process;
- a procurement approach justification;
- an exploration of opportunities for innovation; and
- a consideration of the management capability needed to deliver value for money, over the life-time of the contract.

In common with other areas of the business plan, we expect to see evidence that customers have been involved in discussions about delivery. We provide further details about the value for money assessment in appendix 9 (direct procurement for customers).

7.4 DPC tender models

There is a range of possible tender models, in terms of scope, to tender at different stages in the project lifecycle. We outline these models in appendix 9 (direct procurement for customers). We consider all models have the potential to drive significant customer benefits, albeit by focusing competitive pressure in different areas. 'Early' models, for example, offer greater scope for innovation in design and delivery method, while 'late' models offer a lower delivery risk and will focus competitive pressure on financing.

As different project types may lend themselves to different tender models, we are not prescribing the tender model that appointees must use. They have the flexibility to select the model which best suits their requirements. However, we expect to see companies explain in their business plans why the tender model they propose using for each project will deliver the greatest customer benefits.

7.5 DPC commercial model

7.5.1 Our overall approach to developing DPC

Consistent with our overall approach for PR19, we see appointees and their customers at the heart of developing arrangements for DPC, not ourselves. We will not be running tenders, nor will we regulate CAPs directly. Instead, we will regulate the appointee, which will procure the project on behalf of its customers. Therefore, we expect appointees to take responsibility for developing their DPC proposals and to act as buyers on behalf of customers. We do not expect that projects would be tendered prior to our final determinations for PR19.

However, we still have a role to ensure that the interests of customers are protected. We will do this through:

- requiring appointees to follow our principles for procurement and contracting when undertaking DPC projects;
- seeking a level of assurance during the procurement process; and

- where appropriate, collecting and reviewing information in relation to the management and termination of a DPC contract.

In appendix 9 (direct procurement for customers), we set out more detail on our contract and procurement principles for DPC and proposed licence changes.

7.5.2 Delivery through contract or through licence

The core element of the DPC model is a long-term (for example, a 15-25 year) contract between the appointee and the CAP. The terms of this contract would set out the scope of the services the CAP is required to provide, including any performance commitments, in return for an entitlement to a revenue stream. Over the contract life, the appointee would be responsible for managing the CAP's performance. We outline further details of the principles we expect appointees to follow in setting contract terms in appendix 9.

In certain circumstances, we may be able to award an infrastructure provider project licence to a CAP. This could be the case if a project meets the criteria to be specified under the Water Industry (Specified Infrastructure Projects) (English Undertakers) Regulations 2013 (SIPR)[34]. A current example of a SIPR project is the Thames Tideway Tunnel. Under a project licence model, some of the arrangements that would otherwise be included in a contract may be specified in, or supplemented by, licence conditions for the CAP and the appointee.

7.5.3 Compliance with statutory and licence obligations

DPC will not change an appointee's existing responsibility for ensuring compliance with the requirements and standards that apply to it as a water and/or sewerage undertaker. These include, but are not limited to, requirements and standards enforced by Ofwat, the Environment Agency, the Drinking Water Inspectorate or Natural Resources Wales. We expect that appointees would make sure, for example through their contract with the CAP, that they can meet all their statutory duties as water or sewerage undertakers and their licence obligations. We expect DPC projects to be able to deliver the highest level of compliance with statutory and licence obligations and a high quality of service. We also expect appointees, as part of their DPC proposals, to provide clarity and appropriate assurances about how

[34] Ofwat, 'Criteria for selecting specified infrastructure projects – Ofwat guidance', May 2015

these arrangements will be managed to ensure compliance with their legal obligations.

7.5.4 Who can compete to provide services under DPC

Appointees may not award DPC contracts to an associated company.[35] However, appointees (and their associated companies) can compete for the DPC projects of other water companies as part of their non-appointed (unregulated) business.

This restriction is needed in order to maximise competition (and therefore benefits to customers in terms of innovation, financing and other costs). Potential bidders must not be deterred on the basis that they perceive that competition is subject to distortion through a perception of incumbents having an advantage that would dis-incentivise other bidders. Appointees must also be in a position to effectively manage their relationship with the CAP over the duration and at the end of the contract, in the interests of customers. It must:

- have ongoing oversight of the performance of the CAP;
- take steps to remedy poor performance; and
- take action to enforce compliance under the contract, where appropriate.

It is still possible that, after careful consideration, the company will conclude that it is best placed to provide the infrastructure and will not proceed with external procurement.

7.6 Assurance

After we have made licence changes at final determinations to enable them to do so, companies can proceed with DPC procurement processes. The nature and the length of the process will vary by project. While we expect appointees to take ownership of this process, to ensure customers' interests are protected we will seek assurance throughout the process that it is being run effectively. For the projects run

[35] By 'associated company' we mean an 'Associated Company' as defined in Condition A (Interpretation and Construction) of an appointee's licence. DPC contracts will be used where it has already been decided that a third party (a CAP) will design, build, finance, operate and maintain infrastructure that would otherwise have been delivered by the appointee. The appointee itself will therefore never be its own CAP. It will be the procurer, and therefore a counterparty to the DPC contract.

during the PR19 price control period we expect to engage with appointees throughout the procurement process. Where necessary, we will be able to discuss any remedial action required during the process to ensure a good outcome is achieved for customers. Appointees should be guided through their procurement, development and management of contracts with CAPs by the principles we have set out in this methodology. We set out further guidance in appendix 9 (direct procurement for customers) on the range of contingency actions we may take to minimise the possibility of a failed procurement process and to ensure that customers' interests are protected.

7.7 Initial assessment of business plans – direct procurement for customers

We will test appointees' approach to direct procurement for customers in our initial assessment of business plans as follows:

Initial assessment tests on direct procurement for customers

To what extent has the company clearly demonstrated that it has considered whether all relevant projects are technically suitable for direct procurement for customers? Where it has one or more such projects, to what extent has the company provided a well-reasoned and well-evidenced value for money assessment supporting its decision on whether or not to take forward each technically suitable project using direct procurement for customers?

In assessing these tests, we will take into account evidence that all relevant projects above the £100m totex threshold have been considered for DPC. We will assess how well the suitability of projects has been assessed against our technical guidance. We will also assess how well a best practice business case assessment framework has been applied to undertake a value for money assessment in support of decisions whether or not to take forward each suitable project by DPC. We expect the value for money assessment to be consistent with our guidance in appendix 9 (direct procurement for customers) and to:

- document key assumptions;
- clearly explain and quantify risks, and consider how these can be best allocated;
- clearly explain and quantify benefits;
- assess possible procurement approaches, including different DPC tender models;

- assess opportunities for innovation; and
- consider the management capability needed to deliver value for money, over the lifetime of the contract.

8. Targeted controls, markets and innovation: retail controls

Key themes of PR19

Our approach to retail controls supports the key themes of PR19.

Our methodology will promote **affordability** by encouraging companies to increase efficiency. It does this by limiting how much revenue companies can collect per customer and encouraging them to create great business plans for their retail activities and manage their gap sites and voids effectively.

Our methodology will promote **innovation** and **great customer service** by facilitating competition for all eligible customers and setting five-year price controls that will protect the interests of customers.

Residential retail controls in England and Wales

We will set a **weighted average revenue control**, taking account of any difference in costs by customer type.

Business retail controls in Wales

We will set an **average revenue control** for all business retail customers in Wales. For customers using up to 50 megalitres of water a year and wastewater customers, this will be based on a cost to serve and net margin approach. For other customers this will be based on a gross margin cap.

Business retail controls in England

We will set an **average revenue control** for all eligible business retail customers of non-exited retailers in England. For customers using up to five megalitres a year, this will be based on a cost to serve and net margin approach. For other customers we will use a gross margin cap.

Duration of retail controls

We will set average revenues for a **five-year period** for all these controls.

Gaps sites and voids

We have put in place a range of measures to encourage water companies to tackle gap sites and voids more effectively, as reducing gaps and voids will benefit all customers.

Applicability to England and Wales

Our PR19 final methodology for **residential retail controls and the duration of all retail controls applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Our PR19 methodology for **business retail controls is different** for companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. The difference in our approach is driven by the different policies of the UK and Welsh Governments regarding the scope of retail competition – all eligible business retail customers of companies whose areas are wholly or mainly in England can switch supplier, whereas for customers of companies whose areas are wholly or mainly in Wales this is limited to water supplies for those using more than 50 megalitres of water a year.

Responses to our draft methodology proposals

There was support for the use of:

- a weighted average revenue control for residential retail activities;
- an average revenue control for English water companies that have not exited the market; and
- an average revenue control for Welsh companies not subject to competition.

There were mixed views regarding:

- whether price controls were needed for customers of Welsh companies who can switch supplier (that is, using more than 50 megalitres a year); and
- whether a three-year duration of retail price controls was more appropriate than a five-year duration.

Some stakeholders said we should create a financial incentive to ensure gap sites and occupied voids are charged.

Our consideration of respondents’ views

After considering stakeholders’ views, we have:

- decided to set price controls for **all** market segments;
- decided to set a five-year duration for all controls (and updated our assessment of options – see appendix 10); and
- put in place a range of measures to encourage water companies to tackle gap sites and voids (and provided an assessment of options – see appendix 10).

8.1 Introduction

This chapter sets out our final methodology for PR19 with respect to retail controls. This PR19 final methodology has been determined following full consideration of views expressed by respondents to our draft methodology proposals.

The approach we take to retail activities is important. Our retail controls directly impact customers' bills and the incentives on water companies to improve customer service.

The remainder of this chapter is structured as follows:

- residential retail controls (section 8.2);
- business retail controls (section 8.3);
- duration of controls (section 8.4);
- gap sites and voids (section 8.5); and
- initial assessment of business plans – retail controls (section 8.6).

Section 7 of appendix 15 outlines respondents' views to the five questions we posed on retail controls in our draft methodology proposals. In appendix 15, we provide (or reference) our response to the issues raised by respondents.

Appendix 10 assesses in more detail points concerning the duration of the retail controls and measures to encourage appropriate management of voids and gap sites and the reasons for our decision. These are significant issues where we have changed our position from our draft methodology proposals.

8.2 Residential retail controls

Applicability to England and Wales

Our PR19 methodology for residential retail controls **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Residential retail customers do not have access to competition in England or Wales. We will therefore set price controls for residential retail activities to protect the interests of customers.

In PR14, we used a weighted average revenue control. This was expressed as a total revenue control with annual adjustments for the outturn number of customers by customer type. To reflect differences in the cost to serve, we used adjustment factors for five different customer types:

- single service (water or wastewater) unmeasured (that is, unmetered);
- dual service (water and wastewater) unmeasured;
- water only measured (that is, metered);
- wastewater only measured; and
- dual service measured.

The revenue allowance is made up of the retail cost to serve plus an allowance for a net margin on wholesale and retail activities. This form of control allows companies to manage residential retail revenues at an aggregate level, but ensures that companies receive an allowance that reflects the costs they face.

In PR19 we will examine differences in retail costs by customer type. If there are differences in retail costs by customer type, we will continue to use a weighted average revenue control, so that these differences can continue to be reflected in revenue allowances. If there are no differences in retail costs across customers, then we will set an average revenue control to reflect the variation in retail costs by customer numbers.

8.3 Business retail controls

We set a safeguard price control in PR14 to take account of the planned opening of the business retail market. This was an average revenue control by customer group (these groups were proposed by companies), with a reopening of controls to align with market opening in 2017.

The revenue allowance comprised a retail cost per customer and a net retail margin on total wholesale and retail cost allowances. These business retail price controls provide backstop protection for customers in the competitive market and a comparison point for these customers against market offers.

In PR16 we reviewed the form of business retail controls to make sure they were still appropriate for the retail market opening in England. PR16 reset business retail price controls in both England and Wales. In PR16 we introduced two simplifications to the controls:

- reducing the number of controls by allowing companies to decrease the number of customer groupings, which would enable the simplification of the tariff structure; and
- gross margin controls for customers using at least five megalitres of water a year for companies whose areas are wholly or mainly in England and 50 megalitres a year for companies whose areas are wholly or mainly in Wales. This replaced the retail cost to serve and net margin approach, which was retained for all other customers.

8.3.1 Business retail controls in Wales

Applicability to England and Wales

Our PR19 methodology for business retail controls below **applies to only** companies whose areas are wholly or mainly in **Wales**.

Wastewater business retail customers of companies whose areas are wholly or mainly in Wales – and water business retail customers of companies whose areas are wholly or mainly in Wales using less than 50 megalitres a year – do not have access to competition. This reflects the policy position of the Welsh Government. These customers will require price and service level protection in a similar way to residential customers. So for these customers we will continue to set average revenue controls, using a cost to serve and net margin approach.

Business customers of companies whose areas are wholly or mainly in Wales who use at least 50 megalitres of water a year can switch from their existing water supplier. Although these customers are well placed to take advantage of the freedom provided by competition to drive a better deal on retail services, we will not remove all protection from these customers until we are confident the retail market is working well for these customers. Therefore, for these customers we will set an average revenue control based on a gross margin cap.

8.3.2 Business retail controls in England

Applicability to England and Wales

Our PR19 methodology for business retail controls below **applies to only** companies whose areas are wholly or mainly in **England**.

The opening of the business retail market in England has created new opportunities. New water supply and/or wastewater licensees can enter the business retail market and compete for eligible customers. It has also allowed appointed companies to exit the business retail market – and most did so in the lead-up to the opening of the business retail market. Customers of an exited company were transferred to an acquiring licensee who is either an associated company, as defined in the exited company's licence (for example, a separate retail licence holder in the same group of companies) or an entirely separate retail licensee.

As these water companies have exited the market, they will not have a business retail operation that could be subject to a price control. Instead, former customers of these companies are protected in relation to the charges they pay by the retail exit code and, where relevant, competition law. The retail exit code requires the retail licensees that have acquired business retail businesses to offer default tariffs that are no higher than would have been available if the water company had remained in the market. We will review the price requirements in the retail exit code by the end of the current control period, to ensure they remain appropriate.

A small number of water companies in England have not exited the business retail market. The retail exit code does not apply to these water companies, so does not protect the customers of these companies. While competition is evolving, customers of non-exited companies require protection at least to the same extent that customers of exited companies do. Indeed, the need for protection may be greater, because the wholesaler in that area may have a greater incentive to inhibit competition in order to favour its vertically-integrated downstream-arm. Therefore, we have decided to keep a price control in place for these companies.

The form of control will be an average revenue control based on a cost to serve and net margin approach for customers using less than five megalitres a year, and a gross margin cap for other customers.

8.4 Duration of controls

Applicability to England and Wales

Our PR19 final methodology for the duration of retail controls **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Apart from the business retail controls in PR14 and PR16, water and wastewater sector price controls have been set for five-year cycles. This reflects the longer-term approach that is important for infrastructure businesses and the time required to realise efficiency gains within a price review period. A disadvantage of longer-term controls is that they allow less flexibility to adjust to changing circumstances over time and expose incumbents and customers to risks that controls are no longer appropriate as new information becomes available. For retail activities, our price determination powers allow us to set price controls for up to five years. In PR14, we set business retail controls for a two-year period (followed by a three year period in PR16), while for residential controls we set controls for a five-year period.

We considered the argument for having price controls that were shorter than five years for all retail controls. However, we consider that a five-year control is the most appropriate for PR19. Although a three-year control could allow us to reflect new information revealed following the introduction of competition in the business sector in England (on 1 April 2017), we consider that the benefits would not be sufficiently large in comparison to the costs.

A three-year control would impose a greater regulatory burden on water companies and other stakeholders, as we would need to set new controls to take effect by 2023. Even if the subsequent control was a relatively light touch process, it would still require evidence from companies and other stakeholders and assessment.

We also considered a five-year control with the option of a reopener, to reflect any new cost information from the retail business market. However, reliance on a reopener would present similar challenges to a three-year control. It would also be more difficult to implement. For example, it would require a licence change, which would need agreement by each company. The circumstances for a reopener would also need to be clearly defined to give certainty on when controls could be reopened.

8.5 Gap sites and voids

Applicability to England and Wales

Our PR19 final methodology for gap sites and voids **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Voids are properties classed by water companies as being vacant. However, some voids are actually occupied, so they may be erroneously billed, that is, either too little or nothing at all. A gap site[36] is a property where water and/or wastewater services are being consumed, but the property is not on a water company's system and is therefore not billed.

We regulate water companies to ensure that they recover the right amount of revenue. The consequence of a water company not billing gap sites or voids appropriately is that other customers are charged more, as a water company will use this reduced customer base to recover its allowed **wholesale** revenue. Therefore, minimising gap sites and voids is important for affordability and fairness of charges.

Retail water businesses have a financial incentive to bill voids and gap sites, because otherwise they lose out on revenue allowed through our **retail** control. Wholesale businesses are also incentivised to ensure that bills are issued for sites incorrectly classified as voids and gap sites, as a way to manage estimated leakage[37]; they also face a reputational incentive to minimise average bills[38].

However, there are currently also disincentives to taking action:

- it costs money to do so;
- it could harm a water company's service incentive mechanism (SIM) score, if it led to more complaints; and

[36] Such sites are sometimes referred to as 'missing properties' in the residential market. We use the term 'gap site' to cover both the residential and business markets.
[37] Estimated leakage accounts for estimated water entering water companies' networks and estimated consumption into the system. Therefore, gap sites and occupied voids can increase estimated leakage, because they are not included in estimated consumption while the water entering the system is unaffected.
[38] Water companies' average bills can be found at discoverwater.co.uk/

- it could increase water companies' bad debt charge, if the newly identified customers are particularly likely to default.

For PR19 we are challenging companies to improve affordability. And we are replacing SIM with the customer measure of experience (C-MeX) – as discussed in chapter 4 (delivering outcomes for customers). Our move to C-MeX will help to reduce the disincentive to take action, because the number of customer complaints and unwanted phone contacts that a company receives will no longer form a direct part of the financial incentive of C-MeX. Instead, we have now decided that water company performance on complaints will act as a gate to accessing the higher financial performance payments available under C-MeX. This aspect of C-MeX is partly designed to reduce the disincentive for companies to undertake activities, such as pursuing bad debt (in case it generates complaints), and should help to lower bills and improve affordability overall.

These changes will help encourage companies to tackle gap sites and voids. We did not propose any additional measures in our draft methodology proposals. However, we have decided stronger and more targeted incentives are required to achieve fairer bills and improved affordability for existing customers. We consider this appropriate because:

- we want to ensure that water companies face the right incentives and we are concerned that without further action this would not be achieved;
- recent research suggests the level of residential voids is often overstated, because of poor quality customer data and the different approaches to void management adopted by the water companies; and
- some stakeholders (two business retailers in response to our consultation and, more recently, a company specialising in customer data) have said there is insufficient incentive to charge gap sites and/or voids, so they support an explicit financial incentive to encourage this.

Accordingly, we expect water companies to come forward with **bespoke performance commitments** to manage their voids and gap sites for the residential market and business market or explain why they have not. This is discussed further in appendix 2 (delivering outcomes for customers).

We also expect water companies' **business plans** to clearly explain their void numbers and how they plan to manage voids and identify and manage gap sites in both the residential market and business market. We will make this part of our assessment in our initial assessment of business plans. As part of this, we expect water companies to:

- explain how they use internal and external data to inform and validate their approach; and
- consider providing a financial incentive to retailers in the business market to identify gap sites and occupied voids, if they have not already done so.

Separately, we will consider the level and management of voids when we set our cost baselines for retail.

8.6 Initial assessment of business plans – retail controls

A number of tests under our initial assessment of business plans related to retail activities are covered in other chapters of this document (for example, those related to cost assessment). Questions related to our retail controls are shown below. Chapter 14 provides an overview of our approach to the initial assessment of business plans.

We will test retail controls in our initial assessment of business plans as follows.

Initial assessment test on retail controls

- How well does the company use and engage with markets to deliver greater efficiency and innovation and to enhance resilience in the provision of water and wastewater services to secure value for customers, the environment and the wider economy; and to support ambitious performance for the 2020-25 period and over the longer term?

Note that the test question we set out in chapter 14 (initial assessment of business plans: securing high quality, ambition and innovation) on assessing companies' capacity and readiness to innovate will also apply to retail controls. This question asks: "How well does the company's business plan demonstrate that it has the right culture for innovation and that it is able, through its systems, processes and people, to deliver results for customers and the environment from innovation?"

In our assessment, we will take into account evidence of:

- how water companies are looking for lessons learned and innovation adopted from the business retail market and how they plan to adopt a similar approach in non-contestable markets; and
- how water companies:

- explain their level of voids; and
- plan to identify and manage voids and gap sites – as part of this, water companies should explain how they will use internal and external data to inform and validate their approach.

We will take a proportionate and risk-based approach. Therefore, we want business plans to focus on retail services which are not open to competition – that is, retail services for residential retail customers and business customers in Wales (other than water supplies to those using 50 megalitres or more). For the avoidance of doubt though, we still expect water companies whose areas are wholly or mainly in England to cover gap sites and voids in their business plans and we will make this part of our assessment, as discussed above.

9. Securing cost efficiency

Key themes of PR19

Our approach to securing cost efficiency supports the key themes of PR19.

Our methodology will incentivise companies to deliver efficient business plans, to help deliver **affordable** bills.

We will promote long-term **resilience** by ensuring a robust approach to the assessment of cost adjustment claims.

We will set challenging total cost allowances for companies upfront, but will allow companies to retain a portion of their cost savings. This will incentivise companies to **innovate** to achieve cost efficiencies.

We will set efficient cost allowances for retail services. We will use evidence on the provision of efficient retail services in other sectors, to deliver improvements in **customer service**.

Securing cost efficiency for customers

In our 2019 price review (PR19), we expect a **step change in efficiency** for the sector. To achieve that, there will be several changes to the approach we used at PR14.

We will replace the menu approach to cost sharing with a **new, simpler cost sharing mechanism** to incentivise companies to submit and deliver efficient business plans.

We will set cost allowances for water companies based on **projected efficiency** for the period 2020-2025. Our projected efficiency will be based on **benchmarking** of cost performance among companies from within, and, if appropriate, **outside of the industry** as well.

We will develop **new econometric models**. We will develop aggregate and granular cost models to reveal information on the cost of different services and provide wider support for our view of efficiency. We will use **forecast data** where appropriate, such as to identify future efficiency trends and in the case of **enhancement** activities where there is little historical evidence to establish comparative efficiency.

We will fund companies to deliver **environmental requirements** efficiently. Where such requirements are yet to be confirmed, we will require companies to propose an adjustment mechanism to protect customers against paying for work that will not be delivered.

There will be a **high evidential bar for accepting cost adjustment claims** made by companies. We will make the **process more symmetrical**, that is ensure that adjustments do not only increase cost allowances but also reduce them where appropriate.

We will have a **transition programme**, which allows companies to use PR19 expenditure allowances in 2019-20 where appropriate, in the water resources and network plus controls (water and wastewater).

We intend to use econometric models to set efficient cost allowances for the residential retail controls. The retail controls will not be indexed to a measure of inflation.

Applicability to England and Wales

Our PR19 final methodology for **securing cost efficiency applies to both** companies whose areas are **wholly or mainly in England** and companies whose areas are wholly or mainly in Wales.

Our PR19 methodology for **business retail** applies only to companies whose areas are **wholly or mainly in Wales**, and those water companies whose areas are **wholly or mainly in England who have not exited the business retail market** by the time we set price controls. More information on the scope of the business retail controls can be found in chapter 8 (retail controls).

Responses to our draft methodology proposals

Although there was overall support for our high level approach of using a mix of aggregate and granular **benchmarking models**, some respondents raised concerns about the use of frontier benchmarking. Most respondents supported our proposal to remove menu regulation and introduce a simpler **cost sharing mechanism** although some concerns were raised about the potential for the proposed mechanism to provide perverse incentives to submit low cost business plans.

There was some disagreement with our proposal to consider the quality of **cost adjustment claims** in our initial assessment of business plans (IAP) and particularly so if the cost models are not to be known in advance of the claims being made. Most respondents considered that models should be provided in good time. Several companies also noted that downward adjustments needed to be implemented accurately and another said that they should be able to challenge any such adjustment.

Respondents supported our proposed approach to move to an **efficient retail benchmark** using an econometric approach, but generally disagreed with our proposal **not to index the retail controls** to inflation. We also received mixed views on the use of evidence (for retail efficiency) from other sectors.

Our consideration of respondents' views

We expect companies to catch up with an efficient level of performance so that customers do not pay for inefficiency. We will consider the appropriate level of challenge when we set our PR19 determinations. We have adjusted the calibration of the cost sharing mechanism to provide a stronger incentive, to better protect customers and to minimise scope for any perverse incentive.

We consider it to be very important to make the cost adjustment process more symmetrical. We will consider how companies use the adjustment process and the quality of evidence in our IAP categorisation.

We consider that not automatically indexing retail controls to inflation provides better incentives for retailers to manage input prices and a more appropriate allocation of risk between customers and companies. We will consider whether any allowance for input inflation needs to be made as part of totex.

9.1 Introduction

This chapter sets out our final methodology for PR19 with respect to our approach to cost assessment and securing cost efficiency. This PR19 final methodology has been determined following full consideration of the views expressed by respondents to our draft methodology proposals, published in July of this year.

Cost assessment is the setting of an efficient baseline for totex (that is, total expenditure of companies including both capital and operational expenditure) for each company for the price control period. In line with our new regulatory framework, for PR19 we will set cost baselines for six different controls:

- water resources controls;
- network plus controls in water;
- network plus controls in wastewater;
- bioresources controls;
- residential retail controls; and
- business retail controls for companies whose areas are wholly or mainly in Wales[39].

Our cost baselines feed into the calculation of our allowed revenue and regulatory capital value (RCV) additions. These play a key role in determining current and future bills.

The remainder of this chapter is structured as follows:

- expectations for companies' business plans (section 9.2);
- a new cost sharing incentive to submit efficient business plans (section 9.3);
- setting efficient cost baselines for water companies (section 9.4);
- our approach to retail controls (section 9.5);
- a transition expenditure programme for 2019-20 (section 9.6); and
- the initial assessment of business plans (IAP) – securing cost efficiency (section 9.7).

[39] A small number of companies whose areas are wholly or mainly in England for whom we will set full price controls at PR19 have not yet exited the business retail market. We have decided to keep a price control in place for these water companies. Chapter 8 (targeted controls, markets and innovation: retail controls) contains further information on the form of the retail controls at PR19.

Appendix 11 (securing cost efficiency) sets out the reasons for our policy and the detailed explanation of our methodology.

Section 8 of appendix 15 outlines respondents' views to the seven questions we posed on securing cost efficiency in our draft methodology proposals. In appendix 15, we provide (or reference) our response to the issues raised by respondents.

9.2 Expectations for companies' business plans

We expect business plans to be based on efficient costs. Customers are dependent on their water supplier to take firm action to drive efficiency into their businesses. It is the responsibility of water companies to put together efficient business plans that deliver value for money for their customers. Companies should challenge their own business plans to ensure customers are not paying for inefficient levels of performance, inefficient delivery of work, or an inefficient level of risk.

Companies' Boards should provide assurance that the expenditure forecasts included in their business plans are robust and efficient.

A step change in efficiency

Businesses across the UK are facing cost pressures from a changing economy and are responding to these pressures by improving efficiency. We expect monopoly water companies to play their role too.

In PR19, we expect company business plans to show a step change in efficiency, relative to past periods.

Our price control framework is designed to reward and encourage efficiency and innovation. At PR14, we introduced a totex and outcomes framework. The framework has given companies the flexibility to decide how best to deliver their services, and to come up with the most cost-efficient and innovative solutions. Changes in technology, innovation, the use of markets and business process redesign to focus on customers all offer significant scope to reduce costs.

In PR19, we expect that water companies, as well as the supply chain, will have better embedded the totex and outcomes frameworks in their business planning process. We have seen significant efficiency gains among regulated energy transmission and distribution companies and early evidence of similar outcomes in the water sector during 2015/16 and 2016/17 from moving to a totex and outcomes framework.

We expect companies to identify significant scope to improve efficiency in the delivery of their services, and set out their proposed efficiency gains relative to 2015-20 in their business plan. Companies should not assume that rolling over base costs from the previous periods is a sound basis for business planning. We also expect companies to explain how their efficiency gains compare to broader evidence of efficiency gains from best practice in the wider economy. Where practicable, we expect companies to benchmark their performance, not only against their peers in the water sector, but also against performance in other sectors.

9.3 A new cost sharing incentive to submit efficient business plans

Cost sharing rates are the proportion of cost savings that investors get to keep, or the proportion of any cost overrun that investors will have to bear. Cost sharing ensures that customers benefit when companies outperform their cost allowance, while they are protected when companies overrun their allowance.

In PR19 we will not use a menu approach to incentivise companies to submit accurate cost forecasts. Instead, we will introduce a new mechanism, which is simpler and more easily understood. This mechanism will provide a stronger incentive to companies to submit efficient business plans that deliver value for money for customers. The new mechanism uses cost sharing rates to incentivise efficient business plans – efficient plans will get more favourable cost sharing rates than inefficient plans.

9.3.1 How the mechanism works

Each company will have one cost sharing rate for outperformance, and another rate for underperformance. The rates will be determined by the ratio of a company's business plan totex to our view of efficient totex ('the totex ratio').

Companies with efficient business plans will have a lower totex ratio and will be able to retain a higher proportion of their cost outperformance, relative to companies with inefficient business plans. Likewise, companies with efficient business plans with a low totex ratio will bear a smaller proportion of any cost overrun than companies with inefficient business plans and a higher totex ratio.

9.3.2 Calibration of the cost sharing mechanism

We have adjusted our proposed cost sharing rates that we presented for illustration in our draft methodology proposals to better incentivise companies, better protect customers and mitigate perceived risks around gaming.

Relative to the scheme that we illustrated in our draft methodology proposals, the new scheme for PR19 will provide a stronger incentive for companies to submit efficient business plans and to outperform their cost allowance. This is because efficient business plans will be able to retain a larger proportion of any outperformance on costs, while inefficient business plans will retain a lower proportion of outperformance relative to the scheme we presented in July.

We also made changes to ensure the scheme better protects customers against inefficient business planning and against perceived risks around gaming. We did that by setting the underperformance sharing rate flat at 50% for business plans that are more ambitious than our view of efficient totex (namely, with a totex ratio of 100 or lower). Under our approach to setting cost baselines, such companies are likely to receive a higher totex allowance than what they submitted in their business plan. We would expect them to outperform our allowance. Setting the cost sharing rate at 50% ensures that customers do not pay more than half of any cost overrun incurred by such company. The flat schedule also substantially reduces any perception of perverse incentive to submit low cost plans, irrespective of actual company forecast costs.

The new cost sharing scheme is shown in figure 9.1. When a company submits its business plan, its totex ratio will be determined by the ratio of its totex forecast to our view of efficient totex. This will, in turn, determine its cost sharing rates. The figure shows that cost sharing rates are more favourable at lower ratios, which will incentivise companies to submit business plans based on efficient cost forecasts.

Figure 9.1 Cost sharing mechanism for PR19

	More efficient business plans ←						
Totex ratio[1]	70	80	90	100	110	120	130
Cost sharing rate for outperformance[2]	65%	65%	60%	50%	40%	35%	35%
Cost sharing rate for underperformance[3]	50%	50%	50%	50%	60%	65%	65%

[1] Ratio of company's view to our view of totex (%)
[2] Percentage of outperformance company gets to keep. The remainder is passed on to customers through lower bills.
[3] Percentage of cost overrun company has to bear. The remainder is passed on to consumers through higher bills.

The precise calibration is described in appendix 11 (securing cost efficiency). We have also published an excel model to demonstrate the cost sharing scheme, alongside our PR19 final methodology. We intend to use this calibration at PR19, although we will review this calibration as part of our IAP, and if appropriate, make adjustments to the calibration.

9.3.3 Application of the cost sharing mechanism across PR19 controls

The cost sharing mechanism will apply for total revenue controls only, namely for water resources, water network plus and wastewater network plus. We will not apply cost sharing in average revenue controls, namely in the retail and bioresources controls. In the average revenue controls, any deviation from our allowed expenditure will be incurred fully by the company.

For the water resources and water network plus controls, we will set the same cost sharing rates. That is, the same outperformance sharing rate across the controls, and the same underperformance sharing rate. The sharing rates will be determined on the basis of the totex ratio, where totex is the combined totex of the water resources and water network plus controls.

9.3.4 Cost sharing rates for significant scrutiny plans

The cost sharing scheme above will not apply for companies categorised as 'significant scrutiny' in the IAP.

For companies whose plans are assessed to need significant scrutiny, we have set a cost sharing rate of 75% for underperformance and 25% for outperformance – as outlined in chapter 10 (aligning risk and return). This means that significant scrutiny companies will keep only 25% of their cost outperformance but bear 75% of cost underperformance. This will incentivise investors to hold companies to account, and so strongly incentivise companies to deliver high quality business plans. It will also protect customers of companies whose business plan is of poor quality, and does not give us confidence as a basis for setting price controls.

9.3.5 Cash flow

A company's cost allowance will be equal to our view of efficient totex for the company. Any reconciliation between actual cost and the allowed costs will be made at the end of the 5-year period of PR19 and will impact PR24. To minimise the anticipated reconciliations, we will set our determination (for example, revenue allowances and RCV additions) to reflect the position that the company's outturn totex in PR19 is the same as its business plan totex. We illustrate this in the box below.

Box 9.1 An example of our cost sharing mechanism for total revenue controls

The example is based on the cost sharing scheme in figure 9.1.

Determining cost sharing rates

A company submits a business plan for the period 2020-25. Its totex forecasts are £110 million for the wastewater network plus service. Our independent view of efficient totex in the wastewater network plus service is £100 million.

The totex ratio in this example is 110, and the cost sharing rates are 40% for outperformance and 60% for underperformance (read from figure 9.1).

Cash flow

The company's allowed costs are equal to our view of efficient totex, namely, £100 million. The allowed cost serves as baselines for the cost performance incentive.

However, our PR19 determinations (in terms of revenue cap and RCV additions) will reflect an allowed totex of £104 million. This amount factors in a reconciliation of £4 million to the company, which is the reconciliation that would result if the company's actual expenditure turns out to be as it had forecasted in its business plan. It is calculated as £104m = £100m + 40% x (£110m - £100m).

Determining the reconciliation based on outturn performance

If the company's actual expenditure turns out to be £120 million – an underperformance of £20 million against our independent view of totex – its investors will bear £12 million of this cost overrun (60% x £20 million). The remainder, £8 million, will be recovered from customers.

In practice, the company has already recovered £4 million from customers, as our determination reflected outturn costs of £110 million by the company.

The remaining reconciliation will allow the company to recover additional £4 million from customers.

9.4 Setting efficient cost baselines for water companies

The main components of our approach includes the following.

- Cost assessment, where we use comparative assessment to form a view of comparative efficiency in the sector. This includes:

    - econometric models for cost benchmarking – these models will cover the majority of companies' costs (section 9.4.1); and
    - a separate assessment of cost items that are not covered by the main econometric models, such as components of enhancement expenditure, business rates and pension deficit recovery payments (section 9.4.2).

- An efficiency adjustment, where we set efficient cost baselines for companies. The efficiency challenge is based on our comparative assessment in the sector, as well as relevant information from other sectors and the wider economy (section 9.4.3).
- an adjustment process, where we would consider further adjustments to our baselines, based on company representations and our own analysis (section 9.4.4).

Our cost allowance for any given company will not be directly based on its own historical cost performance. There will be no extrapolation or roll forward of each company's historical expenditure to generate its baseline. This ensures that companies do not have perverse incentives to underperform towards the end of the control period in order to influence their starting position in the next control. Similarly, our cost allowance for any given company will not be directly based on its own cost forecast for PR19, so that companies do not have a perverse incentive to submit high forecasts in their business plans.

An exception to the above is where a company forecasts a significant cost reduction, or a cessation, of a specific cost activity, which is not due to improved efficiency. For example, a company may tell us in its business plan that it has finished its enhancement programme to comply with the Security and Emergency Measurers Direction (SEMD) and will not incur expenditure in this area in PR19. If our cost baselines include expenditure against this activity, we will adjust our cost allowance for the company as appropriate. We will not make a company specific adjustment except where it is material or where the activity is no longer relevant.

9.4.1 Econometric models for benchmarking analysis

We will develop econometric models to compare costs across companies and identify those companies that are relatively efficient. This will inform our cost baselines for the sector. The econometric models will cover base costs, which is operating expenditure (opex) and maintenance capital expenditure (capex). Where appropriate, the models will also include elements of enhancement expenditure.

Our econometric models will include ‘top down’ models that compare aggregate wholesale costs across companies, similar to those used in PR14. We will also develop more granular models. The granular models will benchmark expenditure on individual services, such as: treatment, distribution, water resources and bioresources. We will use a set of robust and credible cost models to inform our cost baselines.

We will develop our models initially using historical (outturn) data. When we receive company business plans, and with their information on forecast expenditure and level of activity, we will benchmark this data as well to help identify forward trends and future efficiency gains.

Sharing our cost models with stakeholders

We will consider whether it would be helpful to publish more details on our cost models in early 2018, once we have developed an initial set of models[40]. We do not consider that publication of our cost models is an essential input to company business plans – companies should focus on developing efficient business plans that deliver for their customers. Companies' business plans should not be driven by regulatory models of cost assessment.

9.4.2 Our approach to enhancement expenditure

Enhancement expenditure refers to expenditure for the purpose of enhancing the capacity or quality of service beyond current levels. The expenditure may be driven by a number of factors, including population growth, new statutory obligations and strategic prioritisation by company Boards (which should be in consultation with their customers).

Enhancement expenditure can be quite company-specific, irregular and difficult to predict.

In PR19, we will develop and use a number of approaches to deal with different types of enhancement expenditure. Our approach will depend on the type of enhancement activity, how well its costs are distinguished from base costs' to what extent it interacts with other activities, its materiality and the amount of data that we have to assess the cost through benchmarking analysis.

We consider that it may be appropriate to include certain activities in the scope of our econometric models, together with base expenditure. This may be the case with enhancement expenditure to address growth, given that the driver is common and persistent for all companies. It may also be appropriate for activities where the boundary between base costs and enhancement costs is ambiguous (and therefore separating them out may cause distortion).

For enhancement activities that are excluded from the scope of our econometric models, we will develop a separate assessment for each activity.

[40] The initial set of models may be changed and improved following additional analysis, feedback from stakeholders and receipt of annual performance reports in summer 2018.

Where we develop a separate efficiency assessment of enhancement costs, we will still use benchmarking analysis where we have sufficient data. However, the analysis will be based on cost comparison of each enhancement activity. This means we will be able to consider more specific, low level factors that affect the enhancement costs in our assessment. Given that, typically, there is a scarcity of data related to enhancement activities, we will make use of forecast data in our benchmarking analysis, as appropriate. Our use of forecast data will be particularly relevant where there is little or no historical information.

Where there is insufficient data for robust benchmarking analysis, we will use any other available information, including company business plans and evidence of market testing, to justify expenditure. Our approach will be proportionate. For material areas of enhancement expenditure, we will look to complement our analysis with an ‘expert review’ and any additional relevant information that may be available to us.

9.4.3 Our approach to unconfirmed requirements in environmental programmes drawn up by the EA and NRW

A large portion of enhancement expenditure is driven by environmental requirements. These requirements will be set out in the final release of the ‘water industry national environment programme’ (WINEP) in England, and the 'national environment programme’ (NEP) in Wales, due to be issued in March 2018. However, some requirements are not expected to be confirmed until December 2021 at the earliest. This means that these requirements will still be uncertain when companies submit their business plans to us in September 2018, and when we make our final determinations in December 2019.

In PR14, we made an efficient cost allowance to companies, based on the full scope of the requirements that were anticipated to be confirmed. In some cases, unconfirmed requirements turned out not to be required by the environmental regulator later on. This highlights the risk that customers may pay for enhancement schemes that companies will not be required to deliver.

In PR19, we will adapt our approach to funding unconfirmed environmental requirements to better protect customers against the uncertainty related to unconfirmed environmental requirements.

In PR19 we will fund the anticipated programme, as long as companies propose an appropriate cost adjustment mechanism to account for a potential discrepancy between the scale of the assumed and confirmed programmes. Companies will be required to link expenditure for unconfirmed requirements to an outcome and a unit cost. We will use the unit cost to make an adjustment at the end of the control period, based on the volume of work that was eventually confirmed as required and delivered by the company. Proposals for unconfirmed schemes without this safeguard would not attract funding at PR19, unless relatively trivial (for example, the cost of some investigations).

9.4.4 Setting cost baselines to deliver a step change in efficiency

In PR19, we will set efficient cost baselines for companies based on a forward-looking view of efficiency.

Our view of efficiency will be informed by our comparative assessment. We will use historical and forward-looking cost performance to identify the most efficient companies in the sector, which will set the benchmark for the rest of the companies.

But it is important not to look only at cost performance within the sector. We will look at cost performance in other sectors as well. For example, we will look at other sectors that have adopted the totex and outcomes frameworks for evidence of the efficiencies and innovation they have delivered. This will further inform our view of efficiency, so that our baselines do not perpetuate inefficiencies within the sector. We will also incorporate forecast productivity gains in the wider economy in setting our efficient baselines.

This is a change from PR14 where we used only historical information within the sector to set cost baselines. At PR19, we are expanding the set of evidence we will use to inform our efficient cost baselines.

By using all available information to set our cost baselines, we will ensure that our baselines are stretching, so that customers do not pay for inefficiency. At PR14, we set the efficiency benchmark at the 'upper quartile' level of historical totex efficiency[41]. In PR19, we will look to strengthen the efficiency benchmark and use forward-looking efficiency projections.

We will determine the appropriate level of efficiency challenge for the five years of 2020-2025 when we set draft and final determinations. We will take into account the

[41] That is, we set an efficiency challenge based on the historical performance of a (notional) company that was more efficient than 75% of its peers, but less efficient than 25% of its peers.

evidence we discussed above, as well as the quality of our cost models efficiency forecasts.

We intend to set efficient cost baselines from the start of the price control period with no gradual catch-up (glide path) over each year of the price control. Customers should not pay for inefficient performance. If a company is not efficient from the start of the period, its shareholders will have to bear at least 50% of this inefficiency. We recognise that there may be circumstances, for example where we have introduced new resource controls, where a gradual catch up to efficient levels of performance may be appropriate for one or more companies. This is because the efficient baseline, and companies' relative inefficiency, have not been visible at previous controls. We will consider this issue further as part of setting draft determinations.

We note that our approach means that most efficient or 'frontier' companies, with very efficient cost forecasts, may receive a cost allowance which is higher than what is in their business plan. This approach provides a strong incentive for companies to seek efficiencies and submit stretching cost forecasts.

In PR14, we intervened to 'cap' the difference between company forecasts of costs and our cost baselines - where company forecasts were significantly below our baseline. We considered that this intervention was appropriate to protect customers. We also acknowledged that such an approach could have the potential to distort the incentives on preparing stretching business plan forecasts at future price control reviews.

We do not intend to apply such a 'cap' in PR19. We consider that our approach to setting efficient baselines, using historical, forecast and out-of-sector evidence on efficiency, will provide a robust result and not require the use of capping. That said, where appropriate, we will intervene in a suitable way to protect the interest of customers, and it would be inappropriate at this point to rule out the use of capping. We will consider this issue further when we come to set draft determinations.

9.4.5 Adjustments to our modelled cost baselines

Our basic cost assessment approach relies on benchmarking models to set an efficient cost for each company. However, statistical models are not perfect and cannot take into account all relevant factors that affect costs. There may be instances where an adjustment is required to correct these imperfections.

As in PR14, we will allow companies to raise cost adjustment claims for unique or atypical material costs that they consider are not reflected in our cost baselines.

Symmetrical process

We will consider where our models may have understated or overstated expenditure requirements, and will make an adjustment accordingly. For this process, we will only make an adjustment if it passes the same materiality threshold that we apply to company claims.

We will have a process of symmetrical adjustments, which would apply to certain types of cost adjustment claims, namely for claims whose costs are already reflected in the baselines. We will offset accepted claims with a reduction in modelled allowances. The negative cost adjustment to affected companies will be determined on a case-by-case basis.

Materiality thresholds

We will apply materiality thresholds for cost adjustment claims. We will only consider claims that are above the materiality threshold.

We will apply a separate threshold for each of the PR19 controls. Table 9.1 shows the thresholds we will apply, at each control, for cost claims in PR19.

Table 9.1 Materiality thresholds for cost adjustment claims in PR19

Control	Materiality threshold*
Water network plus	1%
Wastewater network plus	1%
Water resources	6%
Bioresources	6%
Residential retail	4%
Business retail	6%
* As a percentage of business plan (5-year) totex in the respective control.	

The thresholds above, which we will implement at PR19, are higher than those we used at PR14. At PR14 we used thresholds of 0.5% for the wholesale water and wholesale wastewater controls, 2.25% for the residential retail controls and 5% for the business retail controls.

We have increased the threshold levels based on examination of PR14 cost claims. At PR14, we rejected over 70% of wholesale water and wastewater claims below 1% materiality, and the total value of those we accepted was quite small. This was not the case when we looked at claims that were slightly more material, for example, claims between 1-2% materiality, where the rejection rate was about 50%. We therefore decided to increase the threshold level at the network plus controls to 1% (which is equivalent to about 0.9% at the wholesale level).

The higher thresholds in the retail and resources controls reflects their smaller overall value out of the appointed company business. The 4% threshold in residential retail keeps the same threshold ratio as we had in PR14 between wholesale and residential retail. The water resources, bioresources and business retail controls are smaller yet. The 6% thresholds in these controls reflects this, although on average it amounts to a lower proportion of the appointed business as the other thresholds.

We consider that the higher thresholds will ensure customers are better protected from an adjustment process which is largely one-sided. The higher thresholds will ensure a more proportionate process that will allow us to focus attention on important adjustments to modelled costs.

Where a company raises a cost claim, we expect it to be contained within a single control. We will calculate the materiality of the claim as the net value of the claim (that is, the value of the full claim less any amount that we consider is already included in the modelled cost baselines) relative to the company view of totex in that control for the period of AMP7.

Interaction with the IAP

We consider that in many cases, companies can and should mitigate and avoid the need for cost adjustment claims. We expect companies to use the adjustment process responsibly, and raise cost adjustment claims only where there is convincing evidence that an adjustment is required and take an ‘in the round’ view. Companies should take a balanced approach and recognise that, just as there might be costs that are underestimated by our models, there may also be costs that are overestimated by our models. Likewise, just as there are operating circumstances that increase costs in a specific region or for a specific company, there are likely to be other circumstances that reduce costs in the same region. Companies that recognise this will be able to take account of it in their business plan submission and refrain from submitting some cost adjustment claims they would otherwise have made.

We will take account of cost adjustment claims in assessing business plan totex efficiency in the initial assessment stage. We will consider the quality of claims and a company's approach to the process. Other things being equal, a company that raises cost adjustment claims only where necessary, and where the claims are well evidenced and efficient, is likely to score higher in the cost efficiency test than a company that uses the process less carefully, and whose claims are unwarranted and of low quality.

We consider that, by their unique nature, a lot of cost claims can be anticipated and will not be dependent on the specific form or range of our models. But we recognise that there is some interaction between the cost adjustment process and companies' visibility of our cost models. If we provide information on our cost models ahead of cost claims submission, we expect companies not to submit cost claims that are covered by our models. If companies do not have early visibility of our cost models, we will take this into consideration when assessing companies' approaches to the process. In such cases, we will also expect companies to explain to us how their claim is dependent on model specification.

Exceptional and fast-track companies will benefit from early certainty on the adjustment process. Namely, at their early draft determinations they will have certainty on the cost adjustment claims that we accepted, and the size of the adjustment made. There is more information in chapter 14 on the initial assessment of business plans.

Early submission

We invite companies to submit information on their cost adjustment claims by 3 May 2018. Receiving early information on expected cost adjustment claims will assist the review process. In particular, it will provide valuable additional time to take into account companies' cost adjustment claims in the initial assessment of business plans, and provide early certainty on our decision on exceptional and fast-track companies. Early submission will give us the opportunity to ask the companies for further information or clarification, where appropriate.

Companies are invited to submit any information they have, at that point, to support their claims. We do not expect companies to provide assurance with this early information and it will not impact companies' categorisation in the initial assessment of plans. Companies should submit a final and assured version of their cost adjustment claims with their business plan.

9.5 Our approach to retail controls

PR14 was the first time that we set a separate price control for retail services. There is early evidence of good outcomes from the move to separate retail controls. Companies are more focused on efficiency in this service. Companies who were successful at adapting to the new framework will shift the efficiency frontier forward on costs. This, in turn, will drive our view of the efficient level of retail costs for PR19.

9.5.1 Our approach to residential retail

Our approach to residential retail in PR19 is an evolution of the one we had in PR14. Now that the new arrangements are better understood, data has improved and high cost companies have had the time to become more efficient, we will move to an efficient cost to serve, based on efficient companies' costs rather than average costs. The approach to retail will be similar to our approach in wholesale controls, with a strong focus on forward-looking efficiency in our cost baselines.

We intend to use an econometric modelling approach to benchmark companies' costs and set efficient totex baselines. This is a move away from the average cost to serve (ACTS)[42] approach of PR14. We will use cost benchmarking to identify an efficient, rather than average, level of total retail costs, taking into account a company's operating environment.

Our benchmarking analysis will set efficient costs for all companies, whether they are above or below our baseline, providing a strong incentive for companies to submit efficient costs. We will not allow a gradual catch-up (glide path) to the efficiency frontier. By 2020, companies will have had five years to catch up to the efficient level of residential retail costs.

Companies will be able to make a cost adjustment claim where they consider that our retail baseline fails to capture a specific, material cost in their totex projection. See section 9.4.5 for further detail on our adjustment process.

[42] The ACTS approach consisted of unit-cost benchmarking (average retail cost per customer in the year 2013-14) supplemented with industry-wide and company-specific off-model adjustments. See appendix 11 (securing cost efficiency) for further detail of our PR14 approach.

Use of wider evidence to inform our cost baselines

We will look for evidence on efficiency in the provision of retail services in other sectors. This will inform our view of efficient retail costs for water companies.

We commissioned PwC to compare water companies' cost performance in bad debt and customer services to other relevant sectors[43]. The report shows that water companies' cost performance lags behind the other sectors, and suggests that this gap cannot be explained entirely by the different legal frameworks within which they operate. The report suggests what water companies can do to address this and identifies specific areas where water companies can improve.

Companies should demonstrate that their revenue recovery and management of bad debt, are in line with best practice. Companies should outline how their proposed approach to debt management will enable them to become more efficient in the recovery of revenue and deliver improvements for customers.

We will also look for evidence of value for money and innovation in the provision of customer services such as billing and complaint handling.

9.5.2 Our approach to business retail

Applicability to England and Wales

Our PR19 final methodology for **business retail** applies only to companies whose areas are **wholly or mainly in Wales**, and those water companies whose areas are **wholly or mainly in England who have not exited** the business retail market by the time we set price controls[44].

[43] Retail Services Efficiency, PriceWaterhouseCoopers, September 2017 https://www.ofwat.gov.uk/regulated-companies/vulnerability/debt-management-and-other-retail-costs-research-and-recommendations/
[44] As at December 2017, a small number of water companies in England for whom we intend to set price controls have not exited the retail market. More information on the scope of the business retail controls can be found in chapter 8 (targeted controls, markets and innovation: retail controls).

We will assess retail costs for companies whose areas are wholly or mainly in Wales in respect of wastewater business retail customers and water business retail customers using less than 50 megalitres a year[45].

We expect companies whose areas are wholly or mainly in Wales to provide robust evidence to justify the efficiency of their business retail cost forecasts. We will examine the evidence in companies' business plans. We will challenge it using evidence on historical levels of costs and any other relevant evidence, such as from the English business retail market and the residential retail services.

Due to the small number of close comparators, we do not intend to develop econometric benchmarking models in this area.

Companies whose areas are wholly or mainly in England operate in a competitive environment. For those companies that have not exited the business retail market, we would set a revenue cap, based on previously allowed levels of costs (and margins)[46]. This would provide a safeguard to the level of charges that customers can be charged for retail services.

9.5.3 Our approach to retail input price pressure

As at PR14 we will not index the retail controls[47] to a measure of general inflation at PR19. We remain of the view that this approach continues to provide appropriate incentives for companies to manage retail input costs.

In retail controls the relevant inflation risk is the risk that input prices increase in the short term. There is no RCV in retail controls, so indexation is only relevant to allowed revenue and is not needed to protect the long-term value of the RCV against long-term inflation risk. We remain of the view that inflation risk for water retailers, which mainly consists of labour costs, is controllable by companies.

[45] Business customers of companies whose areas are wholly or mainly in Wales who use at least 50 megalitres of water a year, can switch their water supplier. We will set a gross margin cap to protect these customers. Further detail can be found in chapter 8 (targeted controls, markets and innovation: retail controls).
[46] We will set a gross margin cap to protect business customers of companies whose areas are wholly or mainly in England who use at least 5 megalitres per year.
[47] This applies to residential and business retail controls.

If robust evidence demonstrates that input price pressures present a material cost to companies at PR19, we will assess this as part of our totex allowance, not through indexation. See appendix 11 (securing cost efficiency) for further information.

9.6 A transition expenditure programme for 2019-20

The transition programme allows companies to bring forward planned investment from 2020-25 to 2019-20, where it is efficient to do so. Although the expenditure would be incurred in 2019-20, for the purpose of cost performance incentives it is considered as expenditure incurred in the following regulatory period (2020-25).

The purpose of the transition programme is to make more efficient use of resources and minimise whole life costs, where it is efficient to bring forward an investment and to enable statutory deadlines early in the next regulatory period to be met. It may allow companies to respond efficiently to new information related to the next price control period. The programme can also help to smooth investment in the sector and address the issue of investment cyclicality around price reviews.

In PR19, we will allow a transition programme in the network plus controls. We will also allow the transition programme in the water resources controls, but in exceptional circumstance only. We will not allow any transition expenditure in the bioresources controls (except for any efficient investment that South West Water incurs for schemes for the Isles of Scilly if it becomes the water and sewerage undertaker for all or part of the Isles) or in the retail controls.

Where companies propose transition expenditure, we expect them to make the case for why it is efficient to bring the investment forward, and why it was not part of its outcomes and long-term planning from PR14 t.

9.7 Initial assessment of business plans – securing cost efficiency

Based on our proposals for cost assessment, we will test cost efficiencies across the different price controls (wholesale and retail), and whether a company raises well evidenced and appropriate efficient cost adjustment claims, as part of our initial assessment of business plans.

We will test cost efficiency with reference to the following questions.

Initial assessment test on securing cost efficiency

1. How well evidenced, efficient and challenging are the company’s forecasts of wholesale water expenditure, including water resources costs?

2. How well evidenced, efficient and challenging are the company’s forecasts of wholesale wastewater expenditure, including bioresources costs?

3. How well evidenced, efficient and challenging are the company’s forecasts of retail expenditure, including bad debt costs?

4. To what extent are cost adjustment claims used only where prudent and appropriate, and where they are used, are costs adjustments well evidenced, efficient and challenging?

In carrying out these tests, we will take into account evidence of innovation, markets and a step change improvement in efficiency, the quality of evidence provided for efficient and challenging cost forecasts for each price control, the quality of evidence to support any cost adjustment claim and our own view of efficient costs for each company for the period 2020-2025.

10. Aligning risk and return

Key themes of PR19

Our approach to aligning risk and return, now and in the long term, supports the key themes of PR19.

Our PR19 methodology will incentivise all companies to improve their performance, and the best companies to deliver frontier-shifting performance on **affordable** bills, **resilience** and **customer service**, through the design of an incentive package that aligns investors' and companies' interests with those of customers.

We will promote long-term **resilience** by ensuring efficient companies can continue to finance their functions and invest in the services they provide, by earning a reasonable return that reflects the risks they face.

Our PR19 methodology will promote **innovation** by providing an incentive for companies that deliver exceptional quality business plans, and underperformance penalties for companies that fall short of customers' expectations.

Aligning risk and return

We will **set the cost of capital at the appointee level** on the basis of a notional capital structure.

Current evidence indicates that **both the cost of debt and equity are lower than in 2014**. Our early view on the appointee cost of capital is 3.4% (CPIH real, 2.0% long-term inflation), equivalent to 2.4% with a 100 basis point wedge to RPI.

To the extent appropriate, we will **set the cost of equity** for 2020-2025 taking into account evidence from historical data and more recent market and forward-looking evidence.

We will **index the cost of new debt**. Companies can outperform the index, but scope for outperformance resulting from market-wide falls will be limited and companies will be protected should the cost of debt rise. We will set a **fixed cost of embedded debt.**

There will be a **high bar for us to accept** any proposals for **risk pass through mechanisms** from companies to customers, or for **company specific adjustments** to the cost of capital.

Companies with **exceptional business plans** will get a 20 basis point (bp) to 35bp RoRE addition for the whole review period; **fast-track business plans** will receive a 10bp RoRE addition.

We will **increase the proportion of revenue at risk from service performance** through ODIs. We will **sharpen cost sharing incentives** to reward the most efficient; inefficient companies will bear a greater share of underperformance. This will encourage companies to focus on delivery for customers and the environment.

Price controls will transition to CPIH, so that bills better reflect the inflation rate faced by customers. From 1 April 2020, we will index 50% of the RCV to RPI; the rest, including new RCV, to CPIH.

There will be a **mechanism to pass through changes in the headline tax rates** to customers.

Applicability to England and Wales

Our PR19 final methodology for aligning risk and return **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. A consistent approach to risk and return is appropriate for financing and incentivising a range of ownership structures.

Our approach to setting a **retail margin** reflects the different circumstances in England and Wales. Eligible business customers of companies whose areas are wholly or mainly in England are able to choose their supplier; in most cases, appointed companies have exited the market and so they will not have a business retail operation that could be subject to a price control. Where appointees have not exited the market, we will set a price control. The retail exit code protects customers where there has been retail exit. We will review the code outside the PR19 process. We will set retail controls for business customers of companies whose areas are wholly or mainly in Wales.

Responses to our draft methodology proposals

Companies and investors raised concerns that the risk and return package **asymmetrically skewed** returns to below the allowed cost of equity for most companies.

Companies and investors raised concerns that our **cost of equity** proposals placed too much weight on recent market data as opposed to long-term historical equity returns. Respondents that raised concerns considered this increased subjectivity and was inconsistent with past regulatory decisions. Some companies and investors considered our proposal to apply a high bar for **company-specific adjustments** to the cost of capital to be inconsistent with our financing functions duty.

There was general support for our proposals to transition to **CPIH**, to include a **tax reconciliation adjustment**, and for **managing risk and uncertainty**, although some respondents raised some issues.

Our consideration of respondents' views

We have revisited the **risk and return** package; revising the financial incentives for the initial assessment of business plans and totex cost sharing rates. The package will give efficient companies balanced prospects of receiving the allowed returns. There will be scope for outperformance where companies deliver on what matters to customers.

We provide an early view on the **cost of capital** for companies to use when preparing business plans. Our **cost of equity** draws on a range of evidence, including historical data and forward forecasts. We retain our proposed approach in other areas, including **company-specific adjustments**, where the burden of proof must remain with the companies.

10.1 Introduction

Our aim is to align the interests of companies and investors with those of customers, by setting the appropriate balance of risk and return. If we get this right, then by responding to our incentives in the way that is best for them, companies will also deliver what is best for customers.

This chapter describes how we have set the balance of risk and return across the price review, and explains our approach to key issues such as the cost of capital, inflation and tax. The remainder of this chapter is structured as follows:

- aligning risk and return to drive company performance (section 10.2);
- overall risk and return package (section 10.3);
- managing risk and uncertainty (section 10.4);
- our overall approach to the cost of capital (section 10.5);
- our approach to the cost of equity (section 10.6);
- our approach to the cost of debt (section 10.7);
- allocating the cost of capital across price controls (section 10.8);
- our approach to inflation (section 10.9);
- our approach to corporation tax (section 10.10); and
- initial assessment of business plans – aligning risk and return (section 10.11).

Appendix 12 (aligning risk and return) provides further detail to support our policy and further explanation of our methodology. The appendix also sets out the assessment that underpins our view of the early view of the overall cost of capital.

Section 9 of appendix 15 outlines respondents' views on the five questions we posed about risk and return in our draft methodology proposals. We also address other issues that were raised in consultation responses on the overall balance of incentives and issues related to company specific adjustments.

10.2 Aligning risk and return to drive company performance

This section sets out how we use the balance of risk and return to align investor and management interest with what is best for customers.

Our aim is to set effective price controls that drive companies to deliver the outcomes and levels of service their customers want. We expect companies:

- to deliver for customers;

- to deliver all their legal obligations, including those as statutory water companies and for drinking water quality and the environment;
- to provide services that are resilient now and in the long term; and
- to do all this at a cost that is efficient and provides the best value for money over the long term.

10.2.1 Aligning risk and return for efficient companies

Our aim is for price determinations to be stretching, to encourage companies to deliver new levels of efficiency, by seeking new and better ways of delivering services at the most efficient cost. We expect customers to see levels of service that improve over time.

Investors in a company that is efficient on both service and costs should have a reasonable prospect of earning their allowed returns. We have set the proposed package of returns consistent with this view. We do not set the package of returns so that returns are skewed upwards by allowing an efficient company to expect to earn a premium over the allowed return for just delivering an efficient plan. Nor do we set the package of returns so that returns are skewed downwards for efficient companies. Companies that outperform efficient levels of cost and service should have a reasonable prospect of earning outperformance returns; investors in companies that underperform should have a reasonable prospect of earning less than the allowed return, as it is shareholders rather than customers that should bear the risk of underperformance.

We expect the efficiency challenge on companies to be stretching – we expect the efficient company in 2020-2025 to be more efficient than an efficient company today. This means that a company whose performance is average today (in terms of cost or service) can expect to be underperforming in 2020-2025 if its current level of performance continues.

Our determinations will reflect our expectation that investor returns should fairly reflect the levels of service and cost efficiency delivered. Where business plans are not sufficiently stretching, we will intervene to make sure the balance of risk and return includes a sufficient level of stretch.

To align the interests of management and shareholders with those of customers, we consider incentives for cost and service performance should:

- incentivise the best performing companies to stretch the benchmarks on efficiency and service performance;

- adequately reward companies that take on greater commercial risk, or that provide a particularly ambitious or innovative business plan; and
- include appropriate penalties for companies that deliver poor business plans or poor performance.

We have assessed the relative strength of different incentives to ensure they work together as a package to drive the right behaviour.

We set out our early view of the cost of capital in this PR19 methodology. Our allowance for the cost of capital will provide reasonable base returns that reflect the level of risk that is inherent in the sector. Our cost of capital will be set for a company with our notional capital structure and reflect evidence of expected market returns for 2020-2025.

Historically, outperformance on financing costs was a key driver of company returns. Our methodology links revenues more closely to service delivery and cost performance. We have also reduced the scope for financing gains by indexing the cost of new debt and introducing a reconciliation mechanism for changes in headline tax rates. This encourages companies and their investors to focus more on what matters for customers.

Companies can make a case in their business plans for risk mitigation mechanisms or company-specific cost of capital adjustments. Where they do so, the case must be robustly justified, and supported with compelling evidence such that the proposals balance the interests of customers with those of the company and its investors. This is necessary to mitigate the risk that companies and their shareholders face by passing these risks on to customers. We discuss these issues in sections 10.4.3 and 10.7.3.

This chapter focuses on the overall balance of risk and return, which is relevant to most chapters of this methodology. Reputational incentives are covered in chapter 4 (delivering outcomes for customers) and chapter 14 (the initial assessment of business plans: securing high quality, ambition and innovation). Procedural incentives are also covered in chapter 14.

10.2.2 Applicability of risk and return in England and Wales

Applicability to England and Wales

Our approach to aligning investor and management interest with customers in the PR19 final methodology **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Companies in England and Wales have a variety of ownership structures. Of the 15 water companies whose areas are wholly or mainly in England, three are listed on the London Stock Exchange; others are privately owned. Of the two companies whose areas are wholly or mainly in Wales, one is owned by a listed company and one, Dŵr Cymru, is owned by a not-for-dividend company limited by guarantee – this means any financial surpluses are retained for the benefit of its customers.

We consider the combination of reputational, procedural and financial incentives we use to be appropriate to all current ownership structures and models.

Reputational and procedural incentives should be equally effective under any ownership structure, because these primarily affect management – rather than the owners.

Financial incentives should motivate company performance, whether companies are privately owned or listed. These incentives drive investor returns; investors in turn put pressure on management teams to deliver against the incentives. Financial incentives also provide a useful indication of management performance, which can be factored into remuneration and which is also taken into account by private bond holders and in the company's credit rating.

We consider that financial incentives protect customers regardless of ownership structure – customers are protected from stagnating levels of performance where benchmarks are driven by the performance of the best. They can also work in the context of Dŵr Cymru, as ODI and totex outperformance will allow surplus to be allocated to benefit customers, which can provide further reputational benefits to the company.

It is for companies to determine what they do with outperformance payments – whether they reinvest, reduce bills or pay out dividends. In any scenario, companies still need to act in such a way to best ensure they have adequate access to financial resources and facilities to deliver for customers in the long term. We would also expect companies to consider how their decisions on outperformance payments affect the perceived legitimacy of the sector.

10.2.3 Overall balance of risk and return

Table 10.1 summarises the financial incentives that will apply in 2020-2025. In the table, we express the strength of incentives by reference to return on regulatory equity (RoRE) calculated as the incentive strength divided by regulatory equity at the notional level of gearing. The details of these incentives are covered in the chapters and appendices on securing cost efficiency, delivering outcomes and the initial assessment of business plans.

Table 10.1 Summary of strength of key financial incentives, in return on regulated equity (RoRE) terms

Incentive	Summary of our decision	Change from PR14 methodology
ODIs	We set an expectation that companies' ODI proposals will drive an expected range of ODI out/underperformance of ±1-3% of RoRE. This range is not capped, but we expect companies to propose approaches to protect customers in case their ODI payments turn out to be much higher than their expected RoRE range. This range includes enhanced outperformance and underperformance payments for common performance commitments, excluding C-MeX and D-MeX. We are challenging companies to achieve the forecast upper quartile for each year of the price control period for their performance commitments[48]. This will require stretching performance commitments from all companies, and will be more challenging than at PR14. Companies will only earn outperformance payments for delivering beyond stretching service levels, and will incur underperformance penalties for service below committed levels. A company whose future performance remains at the current average should expect to incur underperformance penalties on its ODI package. On balance, a company that delivers levels of performance consistent with our	We expect all companies to adopt an increased number of financial and in-period ODIs. We have increased the expected range of ODI out/underperformance to ±1% to ±3% of RoRE (from PR14 level of ±1% to ±2%). This will not be capped but we expect companies to propose approaches to protect customers if their ODI payments turn out to be much higher than their expected RoRE range. Companies' commitments will require a greater level of stretch than at PR14. This is consistent with increasing revenue at risk from operational

[48] This is a change from our proposal in the draft methodology to benchmark the level of performance for every year at the forecast upper quartile for 2024-25.

Incentive	Summary of our decision	Change from PR14 methodology
	benchmarks in 2020-2025 would receive neither outperformance payments nor underperformance penalties on ODIs. Our ODI approach is discussed in chapter 4.	performance. Higher returns for high performing companies and lower returns for poor performers.
Totex	Our benchmarks will take account of historical and forecast cost performance of the most efficient companies in the sector. We will also take into account forward-looking efficiency trends and, where appropriate, information from other sectors to inform our efficiency challenge. We will use asymmetrical cost sharing rates as set out in chapter 9[49]. We estimate a reasonable upper and lower RoRE range for totex would be around ±2%, as in the consultation, based on 10% cost out/underperformance against our benchmark, and around −2% to +1% for significant scrutiny companies. We expect a step change in the efficiency of the sector. A company whose future performance remains at the current average should expect to incur underperformance penalties on its totex performance. On balance, an efficient company would be in neither reward nor penalty on totex. Our cost sharing approach is discussed in chapter 4.	We have retained a similar range to PR14, but we would expect more dispersion across the range – with higher returns for companies who submit and deliver stretching plans, lower returns for companies in the middle of the pack and lower returns for poor performers.
Customer and developer services measures of experience (C-MeX and D-MeX)	We are replacing the existing service incentive mechanism (SIM) with the customer measure of experience (C-MeX) and we are creating a new incentive mechanism, the developer services measure of experience (D-MeX). C-MeX and D-MeX are both financial and reputational incentives to improve the satisfaction of companies' residential and new connections customers, respectively. The range of possible financial incentives for C-MeX is symmetrical at ±12% of residential retail revenue over five years. Performance payments of up to 6% of residential retail revenues will be available for high performing companies, while performance payments of +6 to +12% will only be available to the best three companies that perform at or above a cross sector benchmark, and demonstrate satisfactory complaints performance.	We have retained a similar penalty range for C-MeX as for the service incentive mechanism (SIM) it replaces. The move from asymmetrical to symmetrical high performance payment / poor performance penalty for C-MeX reflects the move to benchmarking with other sectors and increases the scope for higher returns relative to PR14. D-MeX is a new incentive for PR19 with higher poor performance

[49] We have amended the sharing rates we set out in our draft methodology proposals to better incentivise efficient and accurate cost forecasts.

Incentive	Summary of our decision	Change from PR14 methodology
	The range for D-MeX is +2.5% to -5% of developer services revenue over five years. The overall impact of C-MeX and D-MeX combined is around ±0.5% RoRE. C-MeX and D-MeX are discussed further in chapter 4 (delivering outcomes for customers).	penalties than high performance payments.
Initial assessment of business plans	Companies with exceptional business plans will receive an amount equivalent to a 20 basis points (bp) to 35bp addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60%. Companies with fast-track business plans will receive an amount equivalent to a 10bp addition to the RoRE over the whole price review period, based on notional gearing of 60%. For both categories, it will be up to companies to decide whether to take the incentive payment as additional revenue or as an uplift to the RCV. In either case, companies will need to decide how to split this reward between the water network plus, water resources and, where relevant, wastewater network plus price controls. To avoid distorting competition in the bioresources market, we will not allocate any of the incentive payment to bioresources RCV or revenue.[50] For companies whose plans are assessed to need significant scrutiny, we have set a cost sharing rate of 75% for underperformance and 25% for outperformance. This means that significant scrutiny companies will keep only 25% of their cost outperformance but bear 75% of cost underperformance. We discuss issues associated with the initial assessment of business plans further in chapter 14 and the cost sharing rates further in chapter 9 (securing cost efficiency).	Incentive payments for fast-track as well as exceptional business plans, but the bar for exceptional is higher as it includes ambition and innovation.

[50] Our draft methodology proposed 20bp RoRE addition for exceptional and no reward for fast-track. There was no proposal for 'early certainty' protection. We have made these changes in response to respondents' views that the rewards we proposed in our draft methodology proposals may be insufficient to incentivise companies. We recognise that the exceptional category is a step change in expectations from PR14 (where enhanced companies received a 20bp RoRE addition, and 'do-no-harm' protection), and that the fast-track category sets a high bar where companies may only just fall short of the ambition and innovation expected from an exceptional business plan.

Incentive	Summary of our decision	Change from PR14 methodology
Financing	We will take evidence from historical data and more recent market and forward-looking evidence into account when setting the cost of equity. Indexation of the cost of new debt means there will be less scope for outperformance or underperformance on financing costs. A benefit and cost test will assess whether to give company-specific adjustments to the cost of debt. There will be no company-specific adjustments for the cost of equity. Companies can request to include notified items in their price controls, but there will be a high bar; there is no assumption that items allowed in the last price review will be allowed in the next. We discuss these issues further in this chapter.	Reduced allowances for cost of equity and debt, reflecting market conditions. Reduced scope for both under- and outperformance as the allowance for the cost of new debt is indexed.

10.3 Overall risk and return package

Our proposals for this overall risk and return package are shown in figure 10.1, a stylised return on regulated equity (RoRE) chart for the 2020-2025 period.

RoRE allows us to compare the impact of different incentives on the overall equity return under the notional financial structure. The RoRE impact is calculated as the value of the incentive impact over the price review period, expressed as a proportion of the regulated equity[51]. The 'regulated equity' is the portion of the regulatory capital value (RCV) assumed to be funded by equity under our notional capital structure[52].

In figure 10.1, we show the RoRE impact as deviations from the early view of the cost of equity. We show the plausible range of company returns based on an assessment underpinned by:

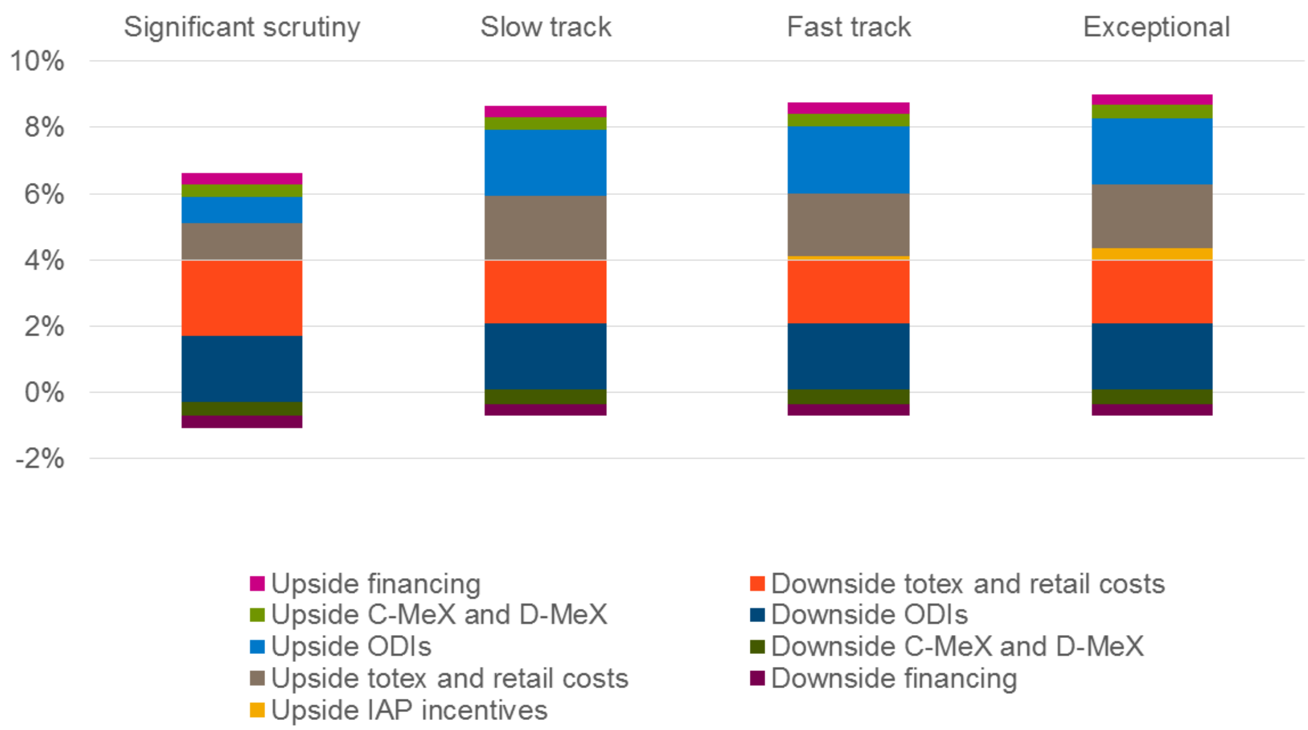
- sector RCV and totex data from PR14; and
- notional gearing of 60%.

The chart is illustrative, based on a company with the notional capital structure. The chart shows significant scrutiny companies' reduced potential to earn

[51] Figure 10.1 uses RoRE calculated as the incentive impact divided by regulated equity.
[52] Regulated equity = RCV x (1 – notional gearing)

outperformance payments and increased potential downsides compared to the other categories of business plan.

Figure 10.1 Illustrative percentage of RoRE chart



Notes: The chart is based around our initial view of a 4% return on regulated equity. Totex and retail costs include the upside/downside for water network plus, wastewater network plus, water resources, bioresources and residential retail price controls. Business retail costs are excluded from this analysis as their impact is small (business retail accounts for about 2% of the total value chain), and not all companies include business retail.

For ODIs, we have used a stylised, illustrative RoRE example of ±2% – the midpoint of the indicative range. It is unlikely that companies will achieve upper quartile performance across all ODIs for the full duration of the price control and so achieve the full 3% upside stated in our guidance.

Figure 10.1 also assumes we may limit the ODI outperformance payments from bespoke outcomes for a company under significant scrutiny, as we will have limited assurance of the stretching nature of their targets for bespoke outcomes.

Totex performance is based on the impact of 10%[53] over or underspend over the price control period for each of the price controls. Consistent with the policy set out in chapter 9 (securing cost efficiency), we assume companies bear 100% of the impact of out- or under-performance for the retail controls and bioresources controls. For the network plus and water resources price controls, the costs of out- and under-performance are shared between companies and customers based on the cost sharing rates referenced in chapter 9. For the purposes of this chart, we assume that companies correctly predict their outturn totex to determine the cost sharing rates. The difference in cost sharing rates is the primary driver of the difference between the RoRE of those companies in the significant scrutiny category and those in the other categories in our initial assessment of business plans.

The difference between slow-track, fast-track and exceptional companies in figure 10.1 is driven by the additional incentives for high-quality plans (for fast-track), and for high-quality, ambitious and innovative plans (for exceptional). It should be noted that fast-track and exceptional companies are likely to achieve higher RoRE through outturn performance on totex and ODIs, though this is not reflected in the chart.

Figure 10.1 shows that while the potential to earn higher returns for high performance has increased since PR14, the downside for poor performance has increased too, reflecting a sharpening of the incentives.

10.4 Managing risk and uncertainty

All businesses have to deal with risk and uncertainty when operating and planning their activities. They all have to take steps to understand, manage and mitigate the potential impacts of risk and uncertainty on their operations and profitability.

Water and wastewater companies are no different, although they have significant protection from risks compared to companies operating in a wholly competitive environment. These protections include:

- appointments that confer monopolies for specified geographic areas, reducing the risk of loss of market share;
- revenue controls, which means that companies do not face demand risk as they can recover any shortfall in demand from other customers;

[53] We use +/- 10% as this represents the range of totex out- and under-performance in 2010-15 against our PR09 price determination.

- a commitment to remunerate efficient investment in the RCV as at 31 March 2020;
- price limit reopeners defined in licences, which protect companies from material changes in circumstances;
- inflation indexation for all wholesale revenues, which protects against general inflation risk;
- totex cost sharing, which provides certainty around the proportion of cost overruns that companies will bear and the proportion of cost savings companies will get to keep;
- special cost factors, which allow companies to make claims for company-specific costs that may otherwise adversely affect the company;
- outcome delivery incentives, which provide certainty around the impact on the company of achieving different levels of performance (an impact that would be unknown in a competitive market);
- reconciliation adjustments for revenue, the cost of new debt and tax, which reduce the impact on the company of these differing from forecasts; and
- the financial ringfence, which protects regulated companies from adverse financial effects which may impact on the rest of their group.

10.4.1 Risk assessment and risk management

We expect companies to demonstrate a clear understanding of risk and to provide clear evidence of the risk management measures they have in place. As for the PR14 price control, to facilitate comparability, companies will be required to use RoRE analysis to assess the impact of upside and downside risk on the delivery of their business plans. We will assess this analysis in our initial assessment of business plans, as part of our assessment of risk and return.

We also expect business plans to contain statements by companies’ Boards explaining how they have identified risks associated with delivering the plan, and confirming that the plan will deliver operational, financial and corporate resilience over the next control period. We will assess the resilience statements made by companies’ Boards in the initial assessment of business plans, as part of our assessment of assurance and governance arrangements, which are discussed in chapter 13 (securing confidence and assurance).

10.4.2 Risk analysis

We have prescribed a set of scenarios that companies should use to underpin their RoRE analysis. These focus on movements in revenue, totex, ODIs and the cost of new debt.

Our approach to RoRE scenario modelling is described in more detail in appendix 12 (aligning risk and return). The detail of the prescribed scenarios is set out in 'final guidance for business plan tables' for table 'App 26'.

It is important to note that we consider these scenarios alone may not be sufficient for companies to demonstrate an appropriate understanding and assessment of risk. Each company should consider whether its business plan should include consideration of additional RoRE scenarios relevant to its own circumstances.

We are prescribing a smaller set of scenarios than was required at the PR14 price review. Companies should explain the assumptions underpinning their RoRE analysis (both upside and downside) and use the functionality in the financial model to provide the upside and downside scenarios based on high and low probability events occurring.

We expect companies to explain how their RoRE analysis takes into account the steps management would take in practice to mitigate the impact of downside risks. We also expect companies to show that their approaches to risk management align the interests of investors and managers with the interests of customers.

The RoRE analysis will be an important component of our initial assessment of business plans, but we expect companies to consider for themselves what additional evidence they should provide to demonstrate that their plans are underpinned by robust approaches to risk management.

10.4.3 Uncertainty mechanisms

Companies' licences allow price limits to be reopened in certain limited circumstances where a materiality threshold has been exceeded. There are two types of interim determination: (i) where there are circumstances having a substantial effect on the appointed business (a substantial effect interim determination); and (ii) in relation to relevant changes of circumstance and any 'notified items' (a standard interim determination).

A 'notified item' is an item we specify as such. It is an item which was not allowed (either in full or not at all) at the price determination. It can be considered under a standard interim determination. It is possible for a notified item to form part of an efficient and effective package of risk and return – for example, where the costs for an item are uncertain at the time of the final determination and so have not been allowed for in full.

Uncertainty mechanisms shift the balance of risk to customers. Therefore, given the scope of risk mitigation measures stated in section 10.4, we will set a high evidential bar for notified items.

Our final determinations will only include a notified item, or a bespoke uncertainty mechanism, where robust and compelling evidence has been presented for that item. Companies should set out the management actions they have taken and will take to manage the uncertainty, as well as the range of approaches considered when preparing their business plans, and the impacts of those approaches. A request for an uncertainty mechanism should be underpinned by RoRE analysis and supported by the company's risk analysis to demonstrate that a notified item or other mechanism is appropriate for dealing with the risk or uncertainty.

There is no presumption that the notified items allowed at the PR14 price control (business rates for water wholesale and the specific items related to the Thames Tideway Scheme, excluding land related items) will be repeated for the 2020-25 period.

10.5 Our overall approach to the cost of capital

The cost of capital is an important component of overall allowed revenue and the customer bill. It is necessary to provide debt and equity investors with a return that is commensurate with the level of risk that underpins their investment.

If the cost of capital is set too high, bills may be higher than customers may reasonably expect, company profits may be seen as excessive and the legitimacy of the regulatory regime may be called into question. If the cost of capital is set too low, companies' ability to raise the finance necessary to deliver services that customers expect might be put at risk.

In our framework paper for PR19[54], we confirmed we would provide a preliminary view of the cost of capital for PR19 in our methodology to facilitate development of business plans. We state our view of the key components of the appointee cost of capital in table 10.2. We will revisit the cost of capital for draft and final determinations in 2019.

We state our cost of capital in nominal and real (consumer price index, or CPIH) terms, assuming long-term CPIH inflation of 2%. As we are transitioning the RCV to CPIH indexation, we also state the cost of capital for the part of the RCV that remains indexed to the retail price index (RPI). The RPI-real cost of capital is based on a long-term difference between RPI and CPIH of 100 basis points (bps).

We state in table 10.2 the cost of capital for the appointee and disaggregated for wholesale activities following the deduction for the residential retail net margin. Our view is preliminary and will be updated for the draft and final determinations in 2019, to take new evidence into account.

Table 10.2 Our early view of the cost of capital

Component	Nominal	Real (CPIH 2%)	Real (RPI 3%)	Range (real RPI)
Cost of equity	7.13%	5.03%	4.01%	3.41% to 4.69%
Cost of debt	4.36%	2.32%	1.33%	1.07% to 1.55%
Gearing	60%	60%	60%	60%
Appointee cost of capital	5.47%	3.40%	2.40%	2.01% to 2.81%
Retail margin deduction	0.10%	0.10%	0.10%	0.10%
Wholesale cost of capital	5.37%	3.30%	2.30%	1.91% to 2.71%

This cost of capital represents a material reduction since PR14, driven by lower expectations of the market cost of debt and equity. Our early view for the appointee cost of capital is 2.40% (real, based on an RPI wedge of 100bps over CPIH; our PR14 cost of capital of 3.74% was underpinned by a long term RPI inflation assumption of 2.8%). The table above states a range for the cost of capital based on the upper and lower bound estimates for each component. Having considering the

[54] Ofwat, 2016 Water 2020: our regulatory approach for water and wastewater services in England and Wales

range of evidence available to us, we consider a more tightly-bounded plausible range for the Appointee WACC is 2.2% to 2.6%.

Our early view of the cost of capital and its components, has been informed by analysis we have carried out and analysis by consultants PwC and Europe Economics[55,56]. We explain in more detail the evidence we have taken into account in appendix 12 (aligning risk and return), including how we have taken account of the responses to the views we set out on the cost of equity in our draft methodology proposals.

We set the cost of capital by reference to a notional capital structure. This is consistent with the approach we have adopted in previous price reviews and was supported by respondents to our cost of debt consultation[57]. It incentivises companies to secure efficient costs of finance and protects customers from the risk of companies' financing decisions. It means we set allowances for all companies at an appropriate level for an efficient company.

Our gearing assumption is lower than at PR14. This is consistent, for example, with gearing trends observed in wider markets and is consistent with our approach to increase revenue at risk from service and efficiency performance. We explain our assumption in further detail in appendix 12.

10.6 Our approach to the cost of equity

The cost of equity represents the level of return equity investors should reasonably expect for their investment. Our cost of equity will cover the equity costs of a notional company.

The overall cost of equity is not directly observable in the financial markets. We therefore draw on a range of evidence and methodological approaches to judge the overall cost of equity and its components. We use the capital asset pricing model (CAPM) to calculate the cost of equity.

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[55] PwC, 'Updated analysis on the cost of equity for PR19', December
[56] 2017 Europe Economics, 'PR19 — Initial Assessment of the Cost of Capital', December 2017
[57] Ofwat, 'Consultation on the approach to the cost of debt for PR19', September 2016

The components of our early view of the cost of equity are summarised in table 10.3. The assumptions underpinning our early view are set out in further detail in appendix 12 (aligning risk and return).

Table 10.3 Our early view of the cost of equity

Component	Real CPIH (long-term CPIH 2%)	Real RPI (long-term RPI 3%	PR14 comparison (long-term RPI 2.8%)	Commentary
Total market return (TMR)	6.47%	5.44%	6.75%	Our early view is underpinned by 8.6% nominal TMR
Risk free rate (RFR)	0.10%	-0.88%	1.25%	We assume a negative risk free rate in real (RPI) terms. This is low by historical standards, but consistent with market expectations for gilt yields in 2020-2025
Equity risk premium (ERP)	6.37%	6.31%	5.50%	Calculated as the difference between the TMR and RFR. Currently, we assess the ERP is high by historical standards, reflecting a low RFR
Unlevered beta (no debt beta)	0.32	0.32	0.30	Europe Economics calculates the asset beta based on two years of daily data for Severn Trent and United Utilities. Our early view draws on two year trailing beta.
Debt beta	0.10	0.10	0	Europe Economics advises the use of a debt beta where there is divergence between the gearing underpinning the observed asset beta (calculated on an enterprise value basis) and the notional gearing
Asset beta (including debt beta)	0.37	0.37	0.30	Calculated as the unlevered beta adjusted for the debt beta.
Equity beta	0.77	0.77	0.80	Calculated based on the asset beta, debt beta and gearing
Cost of equity	5.03%	4.01%	5.65%	Calculated = RFR + Equity beta x ERP

In July, we referenced PwC's estimate of the cost of equity in the current market context which was in the range 3.8% to 4.5% (on an RPI real basis), compared with 5.65% at PR14. The range was calculated using a long term RPI of 2.8%. The cost of equity in our early view is 4.0%. This is based on a higher long term view of RPI (3.0%) and therefore our view on the cost of equity is slightly higher than the midpoint of the July range in nominal terms. It also takes account of our updated view on risk free rate and beta.

Our consultation set out evidence that total market equity returns vary over time. We said that the extended period of ultra-low interest rates, which is expected to persist through 2020-2025[58], and the extended period for which the real risk free rate has been negative[59] have led us to consider carefully our approach to setting the cost of equity for PR19.

When setting previous allowances for the cost of equity, UK economic regulators have tended to take both long-run averages of historical returns[60] and forward-looking evidence into account, with more weight being placed on the former. Focusing on long-term averages may result in customers or investors being disadvantaged if the required equity return for the price review period diverges from an allowance set using a long-term average. We set out evidence in appendix 12 (aligning risk and return) which supports the view that required returns are lower – and that investors and finance professionals expect returns over the next few years to be below their historical averages. On this basis, placing too much weight on long-term historical averages of returns approaches is likely to overstate the actual return on equity investors require for 2020-2025.

Several respondents to our draft methodology proposals were concerned that placing more weight on forward-looking evidence and less weight on observed long-term averages increases the extent of regulatory judgement in setting the cost of equity. However, we note that whether or not weight is placed on forward-looking evidence, regulatory judgement is required as to what estimate of returns is likely to best reflect expected returns for the next price review period. As we consider that placing excess weight on historical long-run returns is likely to be a poor basis for estimating returns for the 2020-2025 period, then we do not consider such an approach would be consistent with our duties or with taking appropriate account of the range of evidence.

Our approach of taking account of market conditions and expected returns for the next price review period is consistent with our regulatory approach in previous price

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[58] For example, the Office for Budget Responsibility's forecast in November 2017 that the Bank of England's base rate would be 1.2% by Q3 2022, compared with the 1975-2007 average of 8.7%.
[59] UK ten-year index-linked gilt yields have, for example, been negative since before 2012 and are expected to remain low by historical standards throughout 2020-25.
[60] Such as the Dimson, Marsh and Staunton dataset published annually by Credit Suisse and the Barclays Gilt Equity study.

reviews. For example, the allowed cost of equity in the 2009 price review implied a total market return (TMR) that was higher than the long-term historical average. This was in response to evidence of higher real returns required during the global financial crisis.

The details supporting our early view on the cost of equity are set out in appendix 12 (aligning risk and return).

10.7 Our approach to the cost of debt

The cost of debt should be sufficient for the notionally geared company to cover its efficient debt interest costs. Our approach will take separate approaches to assess the debt that will remain in the notional balance sheet for the period of the price control (embedded debt) and for debt that we assess to be new or that must be refinanced in the notional balance sheet in 2020-2025 (new debt).

We will set a fixed allowance for embedded debt. Our approach supports the importance of long-term finance for this sector. It ensures companies are remunerated for the efficient cost of embedded debt for the duration of the price control and provides some stability to cashflows compared with an approach that relies only short-term market data.

We will index the cost of new debt by reference to a market benchmark, with an end of period reconciliation adjustment. We consider this is the approach that best satisfies all of our duties. It protects customers as it removes the risk premium relating to the forecast error that would otherwise be included in our estimate of a fixed cost of new debt, but also provides protection to companies where there is an increase in the market cost of debt.

Our approach to the cost of debt follows extensive consultation, including a consultation published in September 2016[61], two separate cost of debt workshops[62] and a further consultation on the mechanics of the cost of new debt mechanism in our PR19 methodology.

[61] The responses we received to that consultation are available on our website.
[62] Details of our workshops are available on our website.

The components of our early cost of debt are summarised in table 10.4. The assumptions underpinning our early view are set out in further detail in appendix 12(aligning risk and return).

Table 10.4 Our early view of the cost of debt

Component	Real CPIH (long-term CPIH 2%)	Real RPI (long-term RPI 3%)	PR14 comparison (long-term RPI 2.8%)	Commentary
Cost of embedded debt	2.58%	1.59%	2.65%	Our early view draws on our assessment of the debt embedded in company balance sheets and benchmark indices. We assume debt falling due for repayment by 31 March 2020 is refinanced at market rates.
Cost of new debt	1.37%	0.38%	2.00%	We will set an initial fixed allowance using a benchmark index, uplifted for forecast increases in market-wide borrowing costs over 2020-2025. This allowance will be adjusted at the end of the period for variance against the actual movements of the index.
Ratio of new to embedded debt	70:30	70:30	75:25	Our early view is based on an assessment by Europe Economics which takes account of sector debt that is due to be refinanced (i) before 2020, (ii) in 2020-2025 and (iii) an assessment of nominal RCV growth based on growth in 2015-2020. We will update this analysis following receipt of business plans
Uplift for issuance and liquidity costs	0.10%	0.10%	0.10%	We include an uplift of 10bps to cover issuance and liquidity costs
Cost of debt	2.32%	1.33%	2.59%	Calculated as the weighted average of the cost of new and embedded debt using the assumed proportions of each as weights.

10.7.1 Embedded debt

Our assessment of the cost of embedded debt draws on relevant benchmark data (for example, indices of bonds for companies with similar credit ratings) and debt instruments issued by companies.

We place the greatest weight on evidence of the cost of debt achieved by companies in the sector and find evidence that companies in this sector typically outperform market benchmark data[63]. Our early view is based on the median cost of debt achieved by the ten water and wastewater companies and seven water only companies, but assuming debt falling due for repayment by 31 March 2020 is refinanced on the basis of mid-2017 yields on debt from a benchmark index. We consider our approach best satisfies all of our duties, including our duties to customers and to promote economy and efficiency.

The actual cost of embedded debt varies significantly between companies, and we expect that this will drive a range of under and outperformance relative to our allowance over the period 2020-2025. This range of performance is driven by the financing arrangements of each company and the timing and tenor of debt issuance. This is consistent with our long-held policy that companies and investors should bear the risk associated with their financing arrangements, not customers.

10.7.2 New debt

Our approach requires us to set an initial fixed cost of new debt for the purposes of price setting. In our early view of the cost of capital, we have set this with reference to a benchmark index of borrowing costs, taking into account market-implied increases in borrowing costs between now and 2025. At the end of the 2020-2025 control period we will calculate the difference between company revenues based on the initial fixed allowance and company revenues if they had tracked the benchmark index. The reconciliation adjustment will be reflected in future revenues.

The cost of debt mechanism will be based on changes in our chosen benchmark index. Our benchmark uses the iBoxx indices[64] for non-financial companies with a

[63] This is consistent with the findings of the report jointly commissioned with the CAA from CEPA, 2016 Alternative approaches to setting the cost of debt for PR19 and H7
[64] The iBoxx indices are published by Markit. The iBoxx bond indices are used to measure the value of different sections of the bond market, subdivided by credit rating. The non-financial index tracks the

tenor of ten or more years, which is reflective of the average debt maturity profile of the sector. We use a 50:50 mix of A and BBB rated indices which we consider reflects the appropriate credit profile for the notionally financed company. This is consistent with the view companies must maintain headroom against the floor for the investment grade. We apply a downward adjustment of 15bps to reflect evidence that companies typically outperform the market benchmark. In addition, we allow an adjustment of 10bps for issuance and liquidity costs.

For the purpose of the reconciliation adjustment, we must make an inflation adjustment to the benchmark index, which is reported in nominal terms. Our provisional cost of capital is underpinned by a long-term CPIH assumption of 2%. We consider that this long-term estimate best matches the inflation costs priced into nominal debt, and is more appropriate than a short-term view. We will apply this adjustment to the benchmark index in our reconciliation, because it is the CPIH-linked portion of the RCV that is most relevant for the cost of new debt.

We explain our approach in more detail in appendix 12 (aligning risk and return) and we have published an updated cost of debt reconciliation model alongside this document.

10.7.3 Company-specific adjustments

At previous price controls, we have allowed for company-specific adjustments to the cost of capital. For example, at the 2014 price review we allowed higher cost of debt allowances for two water only companies, based on both cost and benefits tests. Our assessment looked at the increased cost to customers associated with a company-specific adjustment and tested whether the benefits accruing to customers outweighed those costs.

Where companies make a case that their cost of capital is higher than our estimate, they will need to provide compelling evidence to justify that the uplift is appropriate, particularly given our duty to customers. We discuss in more detail the reasons why we do not consider there to be compelling evidence that company size should be a factor in setting the cost of equity in appendix 12.

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bond prices of a portfolio of bonds issued by investment grade, non-financial securities. We set out further detail in appendix 12 (aligning risk and return).

In general, small companies do not necessarily face higher debt financing costs, particularly given the development of private placement markets for corporate bonds. The likely main determinants of pricing differences are the timing and tenor of debt issuance, neither of which relates specifically to company size.

Nevertheless, there is some evidence that some of the smaller water only companies have historically had more limited options available to them for raising efficient debt. This may suggest it is reasonable to allow a higher cost of debt for such companies. However, given our statutory duties taken together, we remain of the view that we should only consider this reasonable where there is compelling evidence that customers will benefit and support the proposal. We provide more details supporting our rationale in appendix 12.

Company-specific adjustments

If any small water only company considers that its customers should incur the costs of a company-specific cost of capital adjustment, we must be satisfied that an adjustment is necessary and appropriate in light also of our duty to customers. We will apply a three-stage approach, which asks the following.

- Is there compelling evidence of customer support for the proposed adjustment?
- Is there compelling evidence that there are benefits that adequately compensate customers for the increased cost?
- Is there compelling evidence that the level of the requested adjustment is appropriate?

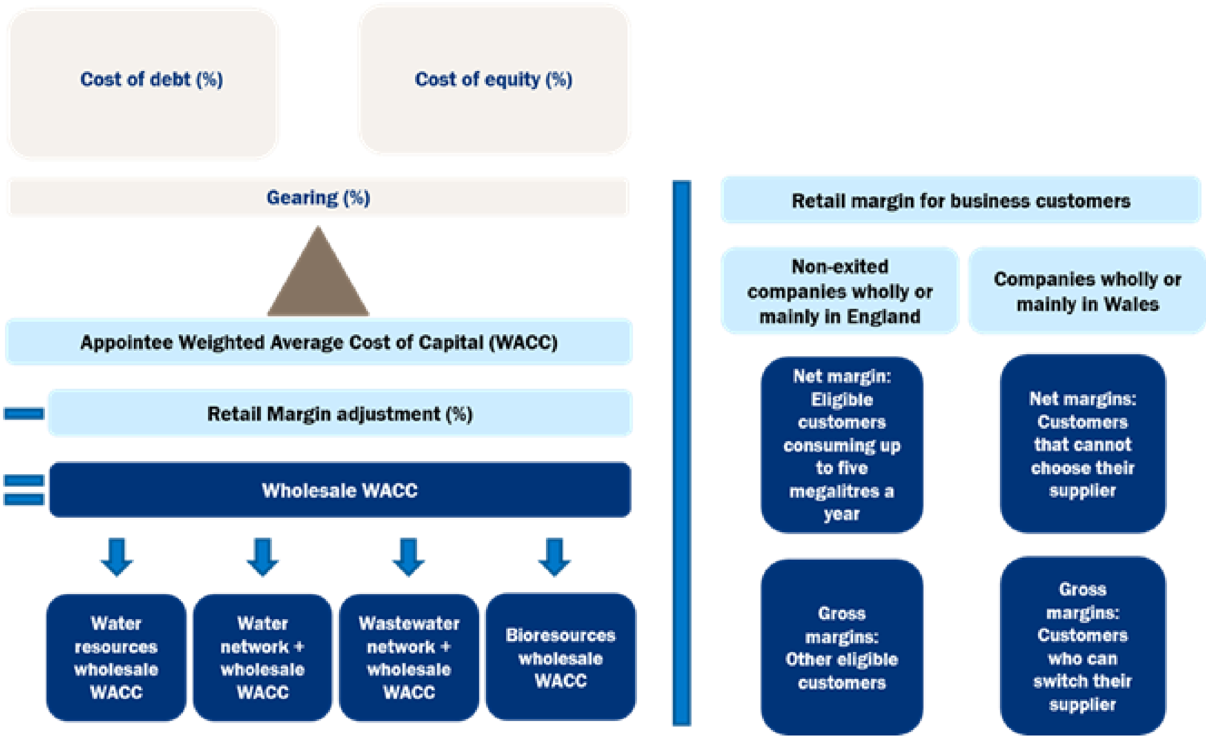
In assessing the evidence of customer support we would expect to see, as part of that evidence, assurance from the customer challenge group that the quality and nature of the customer research is appropriate and appropriately robust to support the conclusion that an adjustment is necessary.

Where requests for company-specific adjustments are made, we expect to see compelling evidence that there are benefits that adequately compensate customers for the increased cost. We explain the evidence we will consider in appendix 12. Information companies submit on company-specific adjustments will be assessed as part of our initial assessment of business plans.

10.8 Allocating the cost of capital across price controls

For setting price determinations, we must disaggregate the appointee cost of capital to remunerate the returns for the different price controls. Our approach is illustrated in figure 10.2. The retail control is remunerated based on a margin over retail costs because, unlike the wholesale price controls, it is not capital intensive.

Figure 10.2 Disaggregating the cost of capital to the price controls and net margin approach for retail activities



Note: In section 10.8.2 we state our early view that the pre-tax retail margin is 1%. To avoid double counting returns, we must translate this net margin to a cost of capital (WACC) impact and subtract it from the appointee WACC to derive a wholesale WACC. Projecting PR14 revenue and RCV growth forwards, we estimate the appropriate retail margin adjustment is 0.1%. This estimate is subject to revision based on information received prior to our draft and final determinations.

10.8.1 Wholesale cost of capital

The wholesale cost of capital applies to the wholesale price controls. We derive it by deducting the regulated profit margin for providing retail services from the overall appointee cost of capital.

In theory, the wholesale cost of capital could be different for each of the wholesale price controls if systematic risk is different. We discussed the relative level of systematic risk across different wholesale controls in May 2016. In summary we found there to be no increase in systematic risk across the network plus price controls from separating the price controls.

For water resources, the RCV allocated at 31 March 2020 will receive the same type and degree of regulatory protection as it would have received under the wholesale revenue controls. For significant new investment that is incurred post 2020, we expect companies to develop risk sharing arrangements. Some aspects of market wide demand risk could impact on the cost of capital, for example, if related to changes in the wider economic cycle. We would expect very compelling evidence if companies proposed a cost of capital increment for new water resource investment in 2020-2025 and to demonstrate how it is aligned with the proposed risk sharing arrangement.

The 2020-2025 period will be a transitional phase for the bioresources control, driving the sector towards greater use of markets. The bioresources control will be subject to some volume risk, but exposure will be limited and companies will retain direct control over the treatment of bioresources. Our modified average revenue approach provides mechanistic protection to fixed costs such that there is no stranding risk for efficient investment. Our refined approach to the average revenue control acts to align the incremental revenues allowed for changes in volume with the costs of providing bioresources services. While there is more exposure to volume risk for the bioresources control than the network plus price controls, we consider the impact on the cost of capital to be minimal for 2020-2025 because of the revisions we have made to the form of control.

For 2020-2025, our view is that the cost of capital, and its components, will be consistent across the wholesale price controls.

10.8.2 Retail margins

We will set average revenue controls, as described in chapter 8 (targeted controls, markets and innovation: retail controls). Where we use net margins, these will be set to cover retail earnings before interest and tax.

We set out our early view on retail margins below. We will review these margins in light of further evidence, before making our draft and final determinations. For example, we will cross check the margins with water companies' working capital requirements, after we receive the business plan data. For contestable business retail activities, we will consider any appropriate alignment with our review of the retail exit code, such as the structure of charges.

Non-contestable retail activities

For our early view, we use a pre-tax retail margin of 1% for residential retail activities and business retail activities in Wales for customers using up to 50 megalitres of water a year and wastewater customers. Our assessment takes account of the relevant comparator benchmarks that are set out in the Europe Economics report which draws on market evidence and other regulatory decisions.

Contestable retail activities

At PR16, we allowed water companies to allocate their net margin across their tariffs, while requiring that their overall net margin was no higher than 2.5%. We retained a net margin approach for eligible business customers of companies whose areas are wholly or mainly in England supplied with up to 5 megalitres of water a year. For other business customers, we used a gross margin approach.

We only undertook PR16 recently and consider that the overall net margin of 2.5% that was applied at PR16 continues to be appropriate. It is also within the range of business margins assessed by Europe Economics. Given this, we consider that the margins set for contestable activities at PR16 remain appropriate. That is, for PR19 we currently consider that where applicable:

a) the net margins which water companies used to set their default tariffs remain appropriate; and
b) the allowed gross margins and the supplementary cap[65] remain appropriate.

10.9 Our approach to inflation

Inflation is the rate at which the general level of prices for goods and services is rising.

Companies cannot control general inflation. They can control their costs and are exposed to this risk through price controls. If companies were exposed to general inflation risk, customers would pay a premium for the risk exposure. Indexing our price controls to a measure of inflation is, therefore, a core part of our regulatory

[65] This is the additional limit on price increases for companies' tariffs that are below the level implied by the gross margin cap. It stops price increases of more than 1% in the final bill for any customer type in any year.

approach. It promotes efficiency by making sure risks are allocated to the party best able to manage them.

Consistent with the position set out in May 2016, and the agreed licence modifications made in April 2017, we will move away from indexing price controls using the retail price index (RPI) and toward an inflation measurement that better reflects the overall inflation rate faced by customers.

Our draft methodology proposals set out our preference to move to the consumer price index including housing costs (CPIH), rather than the consumer price index (CPI), subject to the redesignation of CPIH as a national statistic. Our preference took into account the greater legitimacy of CPIH – that is, it better reflects the inflation rate that customers face. It is also the primary focus of the Office of National Statistics, as the most comprehensive measure of inflation. Subsequent to our consultation, the National Statistician redesignated CPIH as a national statistic on 31 July 2017. It is for these reasons that we have determined that the Relevant Index (the term used in licence conditions) will be CPIH from 1 April 2020.

From 1 April 2020, we will transition the indexation of the RCV to CPIH. We will index 50% of the RCV at 1 April 2020 to RPI and the rest, including all new RCV added after 1 April 2020, to CPIH.

The RCV that is linked to CPIH will be underpinned by a CPIH-based cost of capital. The long-term view of inflation that underpins this cost of capital is 2%. We have estimated a difference[66] of 100bps over our view of long-term CPIH inflation for the portion of the RCV that remains linked to RPI. This will be subject to a reconciliation adjustment at PR24 for the actual outturn wedge.

We explain our approach in more detail in appendix 12 (aligning risk and return). We have published the reconciliation model for the inflation wedge reconciliation adjustment alongside this document.

[66] CPIH and RPI are underpinned by different calculation techniques. RPI is upwardly biased and is typically higher than CPIH. As our price determinations are set by reference to CPIH, we take a view on the long-term measure of CPIH inflation to underpin our cost of capital assumption. The 'wedge' is our view on the difference between CPIH and RPI that may apply throughout the period of the price control.

10.10 Our approach to corporation tax

As part of setting price controls, we calculate a separate tax allowance to make sure the revenue that companies receive covers the corporation tax that companies will need to pay.

To calculate each company's tax allowance, we will use an approach based on the projected taxable profits of the appointed business. The calculation will use allowed revenue and available tax deductions based on expected expenditure. It will apply current corporation tax rates and associated reliefs and allowances, as set out in UK tax legislation.

In our draft methodology proposals we proposed to introduce a reconciliation mechanism to account for changes in the corporation tax rate and writing down allowances under the capital allowance regime. Respondents broadly agreed with the proposed mechanism which we explain in further detail in appendix 12 (aligning risk and return). In calculating the reconciliation adjustments for corporation tax, we will take into account the impact on the tax charge arising from changes to the cost of debt, derived from the cost of new debt index mechanism.

Consistent with our approach at previous price reviews, we will calculate the interest cost for the tax allowances on the basis of the gearing that underpins the notional financial structure, or a company's actual gearing, whichever is higher.

This will make sure that customers, rather than investors, benefit from the higher tax shield from interest payments as interest payments can be offset against companies' tax liabilities. Where a company increases gearing as a result of financial restructuring, we will claw back the tax benefits for customers at the next price review. This removes the incentive for companies to increase gearing simply to benefit from a lower tax bill.

We set out in more detail information about the basis on which we will calculate tax allowances in appendix 12.

10.11 Initial assessment of business plans – aligning risk and return

We will test the alignment of risk and return in our initial assessment of business plans as follows.

Initial assessment test on aligning risk and return

1. Has the company based the separate costs of capital that underpin each of its wholesale price controls, and the net margin(s) that underpins its retail price control(s), on those we state in our early view? If not, to what extent has the company robustly justified, in terms of benefits for customers, its proposed costs of capital and retail margin(s) within the context of expected market conditions for 2020-2025?

2. To what extent has the company demonstrated a clear understanding and assessment of the potential risks in its RoRE assessment, including the effect of the risk management measures it will have in place, across each of the price controls?

Where business plans are underpinned by **costs of capital or retail net margin(s)** that are different to our early view, we expect to see clear and compelling evidence to justify why it should be different within the context of expected market conditions for 2020-2025. We expect **company-specific adjustments** to be underpinned by clear and compelling evidence to demonstrate why it is reasonable for customers to incur the associated cost, taking account of the approach we set out in section 10.7.3.

In assessing the extent to which a company has demonstrated the required understanding on **risk management**, we will take into account evidence provided by the company in its **RoRE assessment** including that it has:

- a clear understanding of the risks that could affect the delivery of its plan;
- appropriate management practices in place to manage the impacts of risks, should they arise;
- carried out a clear and robust RoRE scenario analysis and clear and compelling commentary on the scenario analysis; and
- provided a clear and compelling case for any requested uncertainty mechanisms such that they appropriately align the interests of customers and investors, as set out in section 10.4.3.

11. Aligning risk and return: financeability

Key themes of PR19

Our approach to financeability supports the key themes of PR19.

We will promote long-term financial **resilience** by requiring companies to provide board assurance on their actual and notional financeability. We will set price controls to enable efficient companies, with a notional capital structure, to finance the proper carrying out of their functions. This includes investing in the services they provide by securing a reasonable return on their capital that reflects the risks they face.

We will assess whether company plans appropriately balance the recovery of costs between current and future customers and will intervene where necessary. This will help deliver **affordable** bills now and in the long term. We expect companies to explain the drivers of bill profiles and to demonstrate how they expect bill profiles to evolve beyond 2025.

Financeability

We interpret our financing duty as a duty to secure that an **efficient** company can finance its functions, in particular by securing reasonable returns on its capital. We will assess whether allowed revenues, relative to efficient costs, are sufficient for a company to finance its investment on reasonable terms and to deliver its activities in the long term, while protecting the interests of existing and future customers.

Each company will need to **submit a plan that is financeable** – with Board assurance that it is financeable on both the notional and actual capital structure.

- We will assess financeability at **appointee level** by reference to the **notional structure** that underpins the cost of capital.
- We will use a suite of **financial metrics**, based on those used in the financial markets and by credit rating agencies.
- We will also consider financeability at the control level. If individual controls are not financeable on a standalone basis, we will consider how to address this to ensure an appropriate balance between the customers affected by each control.
- Companies have a number of options to address **financeability constraints** that arise under the notional financial structure. We will look for evidence of customer support where companies take steps to address such financeability constraints.
- Companies and their shareholders should bear the risk of their **capital structure and financing,** not customers.

Companies can balance the recovery of costs between different generations of customers using **financial levers**, such as pay-as-you-go (PAYG) and regulatory capital value (RCV) run-off rates.

Companies should explain the assumptions underpinning their financial levers, explaining clearly any proposed departure from natural rates, demonstrate how they have taken into account customer views and the work they have done to assess the likely path of bills beyond 2025. We will test this evidence in our **initial assessment of business plans**, including how proposed PAYG and RCV run-off rates reflect the levels of proposed expenditure, bill profiles, affordability and customer views relevant to the short and the long term.

Applicability to England and Wales

Our financeability approach **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. This is because companies in England and Wales obtain finance in the same capital markets and customers in both England and Wales benefit from efficient financing both now and in the long term.

Consistent with our statutory duty, we will carry out the **financeability assessment at the level of the appointee**. For companies whose areas are wholly or mainly in England, this assessment will encompass the efficient costs included within the wholesale and residential retail price controls. For companies whose areas are wholly or mainly in Wales, we will also include the business retail price control for business customers who are not able to choose their supplier.

Responses to our draft methodology proposals

Most respondents agreed with our proposed approach to assessing financeability. However, there were some disagreements and requests for clarification in certain areas, which included:

- whether individual controls need to be financeable;
- the need to assess financeability over both the next period and the longer term;
- the definition of the notional capital structure;
- the basis on which we should reflect the impact of incentives when assessing financeability;
- our intention to require company Boards to provide assurance that company plans are financeable on a notional basis;
- the use of PAYG and RCV run off levers to address financeability;
- the basis of the calculation of the financial metrics, which we use in our assessment of financeability;
- the setting of targets for specific metrics;
- the use of average metrics over the price control; and
- the impact of direct procurement for customers (DPC) contracts on financeability.

Our consideration of respondents' views

We have considered the responses that we received to the consultation and have provided some additional clarification in a number of areas. This includes: how we treat reconciliation adjustments relating to incentive mechanisms from previous control periods when considering financeability and the use of average metrics over the price control period. We have also set out our approach to addressing the impact of direct procurement for customer (DPC) contracts on our assessment of financeability.

We have not made any other changes to the approach to assessing financeability set out in the consultation documents, as a result of those responses.

11.1 Introduction

This chapter sets out our final methodology for PR19 with respect to assessing financeability. This PR19 final methodology has been determined following the full consideration of views expressed by respondents to our draft methodology proposals, published in July of this year.

When setting price controls, we act in the way we consider best meets our statutory duties under the Water Industry Act 1991. We have primary duties which include duties to further the consumer objective to protect the interests of consumers and to secure that companies are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of their functions, and the secondary duty to promote economy and efficiency on the part of companies. Consistent with our long-held policies regarding our approach to regulation and setting price limits, we interpret the financing functions duty as applying to the ring fenced regulated activities of the appointee, such that an efficient company can:

- earn a return at least equal to the cost of capital we have allowed for; and
- raise finance on reasonable terms.

Our approach will assess whether allowed revenues, relative to allowed costs (including the cost of debt embedded within the cost of capital), are sufficient for an efficient company to finance its investment and so deliver its activities, on reasonable terms, while protecting the interests of customers now and in the long term.

The financeability assessment also acts as a final check that, when all the individual components of the companies' business plans (including totex, cost of capital, PAYG and RCV run-off levers) are taken together, an efficient company can generate cash flows sufficient to meet its financing needs.

The remainder of this chapter is structured as follows:

- approach to assessing financeability (section 11.2);
- cost recovery for wholesale price controls (section 11.3);
- proposed financial metrics (section 11.4);
- addressing financeability concerns (section 11.5);
- providing evidence of the impact of company proposals on bills (section 11.6); and
- initial assessment of business plans – financeability (section 11.7).

Section 10 of appendix 15 outlines respondents' views to the two questions we posed on **financeability** in our draft methodology proposals. In appendix 15, we provide our response to the issues raised by respondents and the reasons for our clarifications of our approach in three areas.

11.2 Approach to assessing financeability

We expect each company to provide **Board assurance** that its plan is financeable on both its **actual capital structure** and on the **notional capital structure**, as set out below. This assurance should take account of our early view on the cost of capital for PR19.

It is for each company to determine how best to provide such statements, but we expect the Board statements to set out clearly the steps taken to provide the required assurance. Companies will need to explain the credit rating that they have targeted and the associated level of financial ratios which are required. If companies need to take action to address issues of actual financeability, then we would expect them to set out how they have addressed these issues and provide compelling evidence of their financeability at the time they submit their business plan. This should include the suite of financial metrics we set out in section 11.4 (and any other metrics the company considers relevant).

We will assess financeability by reference to a **notional company** with a notional capital structure and which has an efficient level of expenditure including financing costs. We set out our initial view of the notional capital structure, which is consistent with the capital structure embedded within the weighted average cost of capital (WACC) in chapter 10 (aligning risk and return) and appendix 12 (aligning risk and return).

Consistent with our statutory duties, we will carry out the financeability assessment at the **level of the appointee**. For companies whose areas are wholly or mainly in England, this assessment will encompass the efficient costs included within the wholesale and residential retail price controls. For companies whose areas are wholly or mainly in Wales we will also include the business retail price control for those business customers who cannot choose their supplier.

Where companies whose areas are wholly or mainly in England have not exited the business retail market, then we will also include the business retail control within the assessment of financeability, as this remains an appointed activity.

We will use the aggregated revenues, costs and cash flows across each of the price controls and we will look for each company's projected financial ratios to be at levels which allow it to finance its functions.

We will assess financeability using a suite of financial metrics, discussed further in section 11.4. These metrics are drawn from those commonly used in the financial markets, including those used by the credit rating agencies.

We will also undertake headroom checks to see whether the activities covered by each of the individual controls (including retail controls) appear financeable in their own right.

While we consider that each of the wholesale controls should be able to support financial ratios at a level equivalent to an investment grade credit rating, we would not necessarily expect each control to have the same level of financial headroom.

For the retail controls, which are less capital intensive, we will carry out a headroom check to make sure each control can generate sufficient cash flows to service its working capital needs.

Our price determinations include a number of incentive and risk mitigation mechanisms that are designed to align the interests of companies with those of customers.

To maintain the incentives on management, we will make reconciliation adjustments relating to incentive mechanisms from previous control periods after carrying out our assessment of notional financeability. This ensures that customers do not pay more to address financeability constraints arising either from poor performance, or as a result of an adjustment being made to allowed revenue as a result of the company's performance against its totex allowances in the previous period. Similarly, it ensures that the value of outperformance payments for performance against regulatory incentive mechanisms is not eroded as a result of adjustments made following the financeability assessment.

For the **bioresources control**, we will calculate allowed revenues on a building block basis. These allowed revenues form the basis of the financeability assessment. For the purposes of the average bioresources revenue control, these revenues are used to derive a single price per tonne of dry solids for the duration of the price control. The financial model calculates this on a NPV neutral basis, taking account of forecast volumes. We note this may lead to a different, post-financeability year by year revenue profile. The NPV adjustment will ensure revenues allowed over the five years are consistent with those used in the financeability assessment. We note this approach is consistent with the way in which revenue re-profiling adjustments have been made to smooth customer bills in previous price reviews.

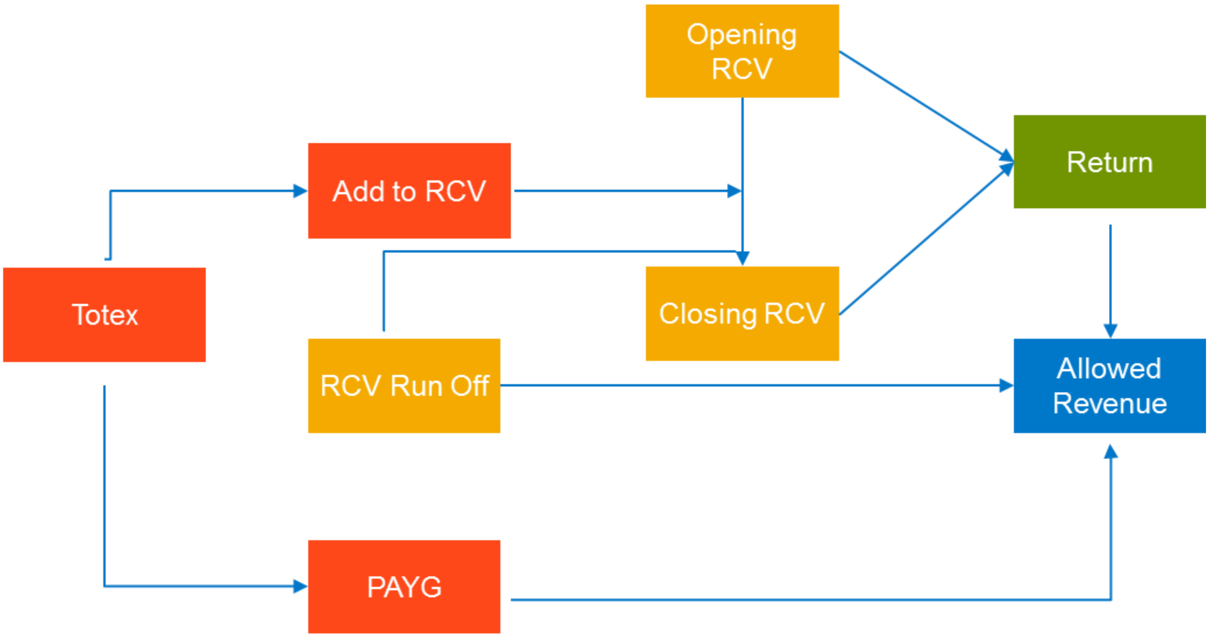
11.3 Cost recovery for wholesale price controls

Companies will need to consider the balance of costs recovered from customers in the short and the long term. Costs are recovered through allowed revenue, in one of two ways. Expenditure allowed for within price limits (totex) can be recovered in the year it is incurred through pay-as-you-go (PAYG) or, it can be added to the RCV and recovered over a longer period through RCV run-off (depreciation of the RCV), as shown in figure 11.1.

Each company's choice of PAYG and RCV run-off rates should reflect their own expenditure and investment plans within each control. Therefore, we would not necessarily expect the rates to be the same in each year or to be the same for each control.

Companies should also take into account customers' views on the profile of bills over time, which will enable companies to understand their implicit views on the impact of their PAYG and RCV run-off choices on bills, both in the short and long term. We acknowledge feedback from respondents to the consultation, in that we do not expect companies to directly ask their customers about their PAYG and RCV run-off rates. We require companies to explain to us clearly and evidence their choice of PAYG and RCV run-off rates. We will consider the evidence of customer support for company choices when we make our assessment of company plans. This is in line with our duty to customers. In their response to the methodology consultation, CC Water confirmed that they consider that "companies' evidence of customers' short-term and long-term acceptability should be a strong factor in the analysis Ofwat will undertake in assessing financeability".

Figure 11.1 Regulatory building blocks and cost recovery



PAYG represents totex expensed in the year

Totex not expensed is added to the RCV

Each control has a separate RCV

The return on RCV compensates for the investment that is in the RCV

RCV run-off represents the amortisation of RCV; in broad terms, an equivalent reinvestment is required to maintain assets in steady state

For the water network plus and wastewater network plus controls, any totex not recovered through PAYG in the year will be added to the RCV.

For the new water resources and bioresources controls, we will distinguish between the ‘post 2020 RCV’ and the RCV in place as of 31 March 2020 (‘pre 2020 RCV’). Different RCV run-off rates may therefore apply to pre 2020 RCV and post 2020 RCV.

Companies can use PAYG and RCV run-off rates to allow them to balance the recovery of costs between different generations of customers on a net present value (NPV)-neutral basis. Companies will need to explain how they have set rates and provide evidence of customer support for the impact of their choices.

Our financeability assessment will focus on 2020-25, but we will also take into account the impact of companies' choices to ensure that companies are not running down the RCV too quickly, which could result in financeability issues in future years.

Companies receive part of their return in cash through revenue in the price control period and part of their return as an inflationary uplift to RCV which can be recovered in future periods. This means that real returns are paid by customers in-period, while the nominal (inflation) element will be reflected in future price controls.

In recent periods as the real cost of capital has fallen, companies have received a smaller portion of their returns through in-period revenues and a larger proportion of their returns have through inflation of the RCV. Increasing the proportion of the return that is added to the RCV through inflationary returns reduces the proportion of the return that is remunerated in-period. This means lower cash flows and weaker financeability metrics. As financeability constraints are driven by the cash flow effect of a real return on an inflating capital value, it may be reasonable for companies to make some use of the financial levers (PAYG or RCV run-off) to address issues around notional financeability. We discuss this issue further in appendix 12 (aligning risk and return).

If companies use PAYG and RCV run-off levers to bring revenue forward to address notional financeability, then this will improve cash flows in the short term. However, it will also impact on the affordability of bills and on the balance of cost recovery between control periods. Companies will need to consider how their proposed balance of cost recovery impacts on affordability and the balance across current and future customers and provide evidence that this is aligned with customer preferences and priorities. Companies will also need to consider the impact of bringing cash forward on their RCV and provide evidence that their approach will not create financeability issues in future periods.

The switch to indexing the price control to CPIH (from RPI) will result in cash flows being brought forward all other things being equal, which will increase customer bills in 2020-2025 and reduce them in future periods. However, we do not consider that the switch to CPIH necessarily implies a change in profile of cashflows over price review periods. Where companies adopt a bill profile that takes account of the CPIH transition, we expect them to demonstrate how this differs from a bill profile on a RPI basis and provide compelling evidence that this is consistent with customer preferences.

We will test company proposals to ensure companies only make use of financial levers where this is consistent with customer preference and priorities. It is for companies to propose solutions to notional financeability constraints in their business plans. We may accept the use of financial levers to address the effect described above.

When companies are engaging with customers on affordability and acceptability of future bill levels, they need to clearly set out the assumptions that support those bill levels, including an assessment of the level of bills into the following regulatory period. While our financial model allows companies to model bill profiles to 2030, we are not mandating the requirement for companies to use the financial model to demonstrate the expected bill profile beyond 2025, but we do expect companies to set out the work they have done to assess the path of customer bills to 2030. Section 11.6 below sets out the information companies should provide in support of future bill levels.

In the box below, we outline our approach to assessing companies' proposals around the use of financial levers as part of our initial assessment of business plans.

Approach to assessing companies' proposals around the use of financial levers

We propose a staged approach to assessing companies' use of financial levers, which we will test as part of the initial assessment of business plans.

1. We expect companies to set out and supply evidence supporting the rates that they have proposed for PAYG and RCV run-off, for each of the wholesale price controls. This will allow us to assess companies' choice of PAYG/RCV run-off rates by reference to the economic substance of proposed totex. For example, the total amount of revenue recovered through PAYG and RCV run-off could reflect the proportion of totex expensed in the year, plus an amount reflecting the economic value of capitalised expenditure expensed to the profit and loss account. **Companies will be expected to clearly explain their choice of PAYG and RCV run-off rates, in relation to the rates indicated by the costs being expensed.**

In carrying out our assessment, we will look at the impact of the proposed PAYG and RCV run-off rates on allowed revenue, relative to the levels of both historical and forecast operational and capital expenditure, and RCV depreciation. Looking at both historical and forecast rates allows us to assess how the proposals reflect current expenditure plans. It also allows us to take into account the impact of any historical capital expenditure (capex) bias on the chosen rates.

We do not expect the different regulatory protections around pre- and post-2020 investment to drive companies' proposals around cost recovery rates. We expect companies to provide robust evidence to support their proposed cost recovery rates for pre- and post-2020 expenditure, especially for the water resources and bioresources controls.

2. We will transition to CPIH as our primary inflation rate from 2020. Companies can, if consistent with customer preferences, transition to a CPIH profile of cashflows. Where companies adopt a bill profile that takes account of the CPIH transition, we expect them to demonstrate how this differs from a bill profile on a RPI basis and set out evidence that this is consistent with customer preferences. For PR19, we consider it remains reasonable for us to assume that a proportion of the RCV on the notional balance sheet remains financed by RPI-linked debt and that we take account of the associated cash flow benefit when assessing financial metrics, particularly adjusted interest cover. Further information about our proposed notional structure is included in appendix 12.

3. If companies consider it appropriate to adjust their PAYG or RCV run-off rates further for other reasons (for example, to address financeability for the notional financial structure or to smooth customer bills), we will look for evidence that this has been fully explained within business plans, with **evidence of customer preferences**.

4. Companies will also need to provide evidence that the company has taken account of **affordability** and the impact on customers (both **in the 2020-25 regulatory period and in the future)**, and how they have ensured no undue bill volatility in the **profile of bills**. This means we expect companies to demonstrate how they have assessed bill levels into the following regulatory period (2025-30) as discussed in section 11.6.

5. **We will intervene, where necessary, if the balance of evidence suggests that a company's overall PAYG or RCV run-off proposals are not appropriate or have been made to solve financeability constraints driven by a company's actual financial structure.**

11.4 Proposed financial metrics

The financial metrics we will use to assess financeability are incorporated in the PR19 financial model. They comprise debt ratios, equity ratios and other return metrics, as set out in table 11.1.

These metrics draw on common approaches used in the financial markets and reflect metrics used by the credit rating agencies.

Each credit rating agency adopts a slightly different approach, including making company specific adjustments for individual items which reflect the specific circumstance of each company's capital structure, operations or financing. Some of these adjustments reflect company specific issues that are shareholder matters (furthermore one company is not rated). We do not therefore follow the precise approach of any credit rating agency.

We expect companies to provide commentary explaining how their plans are financeable on the basis of these metrics and any others they consider relevant.

In our assessment, we will consider the average of each metric over the price control and we will look at trends over the price control period, rather than focusing on individual metrics in a single year. We will exercise our judgement in looking at the suite of financial metrics as part of our assessment of financeability and will look at the entire suite of metrics over the entire control period, rather than focusing on a single metric or a single reporting period.

We would not consider that a poor cashflow metric in a single year necessarily raises financeability issues, however, we may have concerns if there were poor metrics in multiple years or if there was a significant decline in cash flow metrics across the period.

Table 11.1 shows the primary financial ratios we will use in our assessment

Table 11.1 Financial metrics

Key financial metrics	Basis of calculation	What does the metric calculate?
Gearing	$\frac{\text{Net Debt}}{\text{RCV}}$	Gearing measures a company's capital structure and level of indebtedness. It is critical to the assessment of financeability.
Interest cover	$\frac{\text{FFO(pre interest)}}{\text{Cash interest}}$	Interest cover measures a company's ability to meet interest payments from operational cash flows. As the industry tends to be reliant on borrowing, this is considered to be a key financial metric by ratings agencies. In our modelling, we will assume that a proportion of the debt is index-linked and indexed by RPI. The indexation of this debt is not included in cash interest.
Adjusted cash interest cover ratio (ACICR)	$\frac{\text{FFO(pre interest)-RCV run off}}{\text{Cash interest}}$	ACICR measures a company's ability to meet its interest payments after meeting costs that have been expensed and RCV run off.

Key financial metrics	Basis of calculation	What does the metric calculate?
		ACICR is a more conservative measure than interest cover. It provides an indication of interest coverage assuming companies cannot reduce the RCV-run off. Cash interest is calculated as set out above.
Funds from operations (FFO)/Net debt	$\frac{\text{FFO (post interest)}}{\text{Net Debt}}$	FFO/Net debt measures companies' debt burden relative to their operational income.
Dividend cover	$\frac{\text{Profit after tax}}{\text{Dividends declared}}$	Dividend cover measures a company's ability to pay dividends. Dividend payment policies should reflect the circumstances of each company.
Retained cash flow (RCF)/Net debt	$\frac{\text{FFO (post interest)-dividends paid}}{\text{Net Debt}}$	RCF/Net debt measures a company's debt burden relative to their operational income, after paying dividends.
Return on capital employed (RoCE)	$\frac{\text{EBIT-tax}}{\text{RCV}}$	RoCE lets us assess overall returns against the weighted average cost of capital (WACC). It presents the returns made by the providers of both debt and equity finance. It is considered to be a useful measure due to the capital intensive nature of the industry.
RoRE	$\frac{\text{EBIT-tax-(cost of debt* net debt)}}{\text{equity component of the RCV}}$ Net debt and the equity component of the RCV are calculated by reference to the notional capital structure.	RoRE is the return due to shareholders/equity assumed in the notional capital structure. It allows us to assess the returns earned by equity providers against the assumed cost of equity.
Net debt represents borrowings less cash and excludes any pensions deficit liabilities. **FFO** is cash flow from operational activities and excludes movements in working capital. **Cash interest** excludes the indexation of index-linked debt.		

We are not publishing target levels for these metrics. Companies are responsible for submitting a plan that is financeable. They should provide us with evidence about the credit rating targeted in their plan and the level of each ratio they consider appropriate.

We consider this is important to make sure companies can demonstrate full ownership of their plans. If we were to set targets for the metrics, this would limit Board ownership of company business plans.

We expect companies to provide a set of financial ratios for the appointed business, under both the notional capital structure and their actual capital structure. These should be in line with the definitions set out above and in our financial model.

Companies may also wish to provide additional evidence, including alternative financial ratios, to support their position. Within the financial model we have included the functionality to provide alternative calculations of both the ACICR and FFO/Net debt metrics, which reflect slightly different methodologies used by some individual credit rating agencies. We do not consider these alternative calculations to be the most appropriate indicators on which to base our assessment. However, some companies have indicated that it would be helpful for us to include them in our model to support their own analysis.

Companies may also wish to submit alternative metrics to support their assessment of the financeability of their plans.

11.5 Addressing financeability concerns

Where a company proposes an approach to address a financeability constraint that arises under the notional financial structure, we expect its business plan to show that:

- the underlying cause of the constraint has been identified;
- all appropriate factors have been taken into account when deciding how best to mitigate the constraint; and
- the approach to addressing the constraint is appropriate, taking account of the effects on customers' bills.

If individual controls are not financeable on a standalone basis, we will consider how we need to address this to ensure an appropriate balance between the customers affected by each control.

We discuss how companies should address concerns on financeability relating to their actual financing structure or cost inefficiency below.

There is a range of options and market mechanisms available to companies to address financeability constraints where they arise from the notional financial structure, as shown in table 11.2.

Table 11.2 Options for addressing financeability

Option	Usage	Comments
Use of PAYG/RCV run-off levers	The PAYG and RCV run-off financial levers can be used to move revenue between	This approach is NPV-neutral in the long term, but alters the balance of bills between current and future customers. Where companies use this approach, we

Option	Usage	Comments
	control periods on an NPV-neutral basis.	will expect to see evidence of customer support for the proposals, to be satisfied that the use of the financial levers does not cause the RCV to be unduly depleted and that the approach provides an appropriate balance between current and future customers.
Restriction of dividends	The use of dividend restrictions may be justified where the company has a large investment programme and the company is seeking to mitigate the effects on credit ratios.	Short-term restriction of dividends improves cash reserves and reduces net debt, which may mitigate impacts on some of the financial metrics (gearing, for example). This approach recognises the consumer interest, but restricting dividends does not directly affect interest cover metrics, so provides only limited benefits in that respect, aside from impact on gearing.
Equity injection	An equity injection may be appropriate where a company has a particularly large investment programme relative to its RCV and needs to maintain notional gearing.	This approach is likely to be particularly relevant where there is significant RCV growth.

If there is an impact on company financeability as a result of bringing additional debt onto the company balance sheet via direct procurement for customers (DPC) contracts, then we expect companies to consider this issue in their business plans and to set out their proposals for addressing the financeability constraints. It is for companies to satisfy themselves that they apply the correct accounting and tax treatment.

We do not anticipate there being significant impacts on the overall financeability of the company from DPC contracts. As set out in appendix 9 (direct procurement for customers) that revenue will flow from the customer to the Competitively Appointed Provider (CAP) via the appointee on acceptance of the asset. Appointees remain responsible for making sure their statutory and licence obligations as water and/or sewerage undertakers are fulfilled. In general, the risk profile for the appointee should be no worse than if they were delivering the DPC project themselves, and the appointee should look to pass on the risks that CAPs can better bear, so that the overall risk, or cost of mitigation, would be reduced.

Our approach to addressing financeability constraints arising in the context of the business retail control for companies, whose areas are wholly or mainly in England and which have chosen not to exit the market, may be different to the approach we would consider for addressing financeability concerns arising in other controls which are non-contestable. For example, we may consider accepting a lower level of headroom within that control than we would expect to see within the other controls.

If a company expects a financeability issue to arise based on its actual company structure or due to inefficient costs or reconciliation adjustments, it will need to give separate consideration to how it will address the issue and provide the necessary assurances about its approach. This assurance should take account of our early view on the cost of capital for PR19. Companies should provide details of the steps they have already taken to address the issue at the time they submit their business plans and details of the actions that are still in progress, including when they are expected to be complete.

The options available to companies in such circumstances may be different than for addressing a financeability concern under the notional capital structure. Companies and their shareholders bear the risks associated with their actual capital structure. Customers should not bear the cost of resolving an issue arising from inefficient or risky choices made by companies. Where excessive levels of gearing or expensive debt are causing financing issues under the actual company structure, then we would expect companies to consider injecting equity as an appropriate means to address these financing issues.

11.6 Providing evidence of the impact of company proposals on customer bills

Companies need to provide us with evidence that they have considered the impact of their proposals on customers both now and in the longer term and they should provide evidence of customer support.

In doing this, we expect them to provide us, and where appropriate customers, with calculations which show how they have reached their conclusions in relation to expected bill levels and the relevant projected bills for 2018-19 and 2019-20.

Companies can use the Ofwat financial model to undertake these calculations or can provide the calculation of proposed bills in another way – for example, an alternative spreadsheet.

The calculations should set out the companies' assumptions which feed the key inputs into the calculation of bills which should include:

- forecast totex levels,
- PAYG and RCV run off rates,

- cost of capital,
- customer numbers, or
- anticipated retail margins

Companies should also clearly set out any other assumptions or adjustments that they have made to support their calculations.

Companies should provide sufficient details to enable Ofwat to understand how they have established the level of bills that they are proposing.

11.7 Initial assessment of business plans – financeability

We will test financeability in our initial assessment of business plans as follows.

Initial assessment test on aligning risk and return: financeability

1. Has the Board provided a clear statement that its plan is financeable on both an actual and a notional basis? Is the statement appropriate and how robust is the supporting evidence?

2. How appropriate are the company's PAYG and RCV run-off rates? How well evidenced are they, including that they are consistent with customers' expectations, both now and in the longer-term?

Our financeability assessment will focus on whether the plan is financeable on the notional capital structure. Companies also need to provide assurance that the company is financeable under the actual capital structure and set out any actions that they have taken to deal with financeability constraints.

When assessing whether the plan is financeable on both a notional and an actual basis, we will take into account:

- the statements made by each company's Board, as to why they consider the plan to be financeable for the notional capital structure and for the actual capital structure;
- the evidence provided on the financeability of the notional structure and the actual structure and details of the steps taken to address financeability issues at the time of the submission of business plans;

- the level of credit rating that the company has targeted for the notional company and the reasons why the company considers that level appropriate; and
- the company’s financial metrics and other evidence provided to support the selected credit rating.

When assessing a company’s choice of PAYG and RCV run-off rates, we will take into account:

- the evidence the company gives to support its choices, including the extent to which it has proposed specific adjustments to address the underlying economic substance of the control (for example, to reflect the transition from RPI to CPIH, or for other reasons);
- the impact of the chosen rates on customers‘ bills, both now and in the future, and evidence that customers support the rates the company has selected; and
- the level of revenue the company is seeking in each year through its PAYG and RCV run-off rates relative to its forecast levels of expenditure, including considering the cash flow metrics arising from the company’s proposals.

12. Accounting for past delivery

Key themes of PR19

Our approach to accounting for past delivery supports the key themes of PR19.

Robust analysis of past delivery following the PR14 reconciliation rulebook methodology, coupled with the flexibility to smooth revenue adjustments, will support **affordability**.

Reconciling past performance keeps companies accountable for their performance, which will support **customer service**.

Taking past performance in the round into account, when assessing the achievability of business plans, will support delivery of **resilience** in 2020-25.

Accounting for past delivery

We will take performance in the period from 2015 to 2020 into account in two ways at PR19:

- we will apply **reconciliation adjustments** to revenues and the regulatory capital value (RCV) for the 2020 to 2025 period to take account of the incentive mechanisms we set at PR14, and reflect performance in the final year of the 2010 to 2015 period; and
- company performance in the 2015 to 2020 period will be taken into account in our **initial assessment of business plans**, as this will influence the confidence we have in company business plans and the future delivery of services to customers.

Reconciliation adjustments at PR19

- Companies' relative performance against the service incentive mechanism (SIM) in the period 2015-16 to 2018-19 will determine financial high performance payments and poor performance penalties of between -12% and +6% of residential retail revenues;
- Wholesale RCV adjustments will be applied to water resources and water network plus controls proportionately, and in full to the wastewater network plus control;
- Wholesale revenue adjustments will be applied to network plus controls, except where an outcome delivery incentive is clearly linked to water resources or bioresources; and
- Revenue adjustments can be flexibly applied either in the first year, or spread over a number of years.

Initial assessment of business plans

Our initial assessment of business plans will include two test areas:

- how well the company gave evidence for its proposed reconciliations for the 2015-20 period; and
- how well has the company performed, and is forecast to perform, over the 2015-20 period and, taking into account this overall performance, how well has it put measures in place to ensure it maintains confidence it can successfully deliver its business plan.

Applicability to England and Wales

Our final methodology for accounting for past delivery **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Responses to our draft methodology proposals

We received 17 responses to our proposals on accounting for past delivery. There was general support for all our proposals for reconciling performance. The majority of respondents agreed with the proposal not to reflect 2019-20 performance in the SIM financial incentive; only two disagreed. There was support for our proposals to run a customer measure of experience (C-MeX) in 2019-20, and to use it to proxy the SIM for that year for companies with reputational incentives on SIM in 2019-20.

No substantive new issues were raised, however, some respondents raised some detailed points. These included: seeking further information on how we will calculate the SIM high performance payments and poor performance penalties; having the ability to smooth RCV adjustments over the period; and practical considerations on publishing the PR14 reconciliation information with the 2018 annual performance report.

There was general support for taking into account past performance when undertaking our initial assessment of business plans. There were some mixed views on how past performance is taken into account: particularly on whether it should reflect the level of stretch in previous business plans, or differentiate between companies with and without 'enhanced' status at PR14.

Our consideration of respondents' views

We have made one minor procedural change to our draft methodology proposals: we will now allow, on request, up to two weeks after publication of the annual performance report for companies to publish their proposed reconciliations under the PR14 reconciliation rulebook. We have clarified how past performance is taken into account in the IAP and revised the wording of the second IAP test question. In addition we consider that we need to reflect the level of stretch in previous business plans, but not to differentiate between companies with and without 'enhanced' status at PR14, in the initial assessment of plans.

For the reconciliations, we consider that financial incentives for SIM will not be required for 2019-20. Whilst we are not proposing to set out further details of the SIM high performance payments and poor performance penalties calculations now, we ask companies to provide an estimate of their SIM high performance payment or poor performance penalty in their financial model (this may be zero). Furthermore, we continue to think that making RCV adjustments in March 2020 as 'midnight adjustments' avoids complexity and ensures consistency with the PR14 reconciliation rulebook methodology.

12.1 Introduction

This chapter sets out our final methodology for PR19 with respect to accounting for past delivery. This PR19 final methodology has given full consideration to the views expressed by respondents to our draft methodology proposals published in July of this year.

It is important to account for past delivery for three reasons:

- it will affect customers during the 2015-20 period, through the outcomes that companies deliver and the investments that companies make;
- it will be a guide to how well the company may be able to deliver for customers over the 2020-25 period; and
- it will affect revenue and RCV adjustments for the 2020-25 period through the incentive mechanisms set at PR14.

The remainder of this chapter is structured as follows:

- reconciliation for 2015-20 and 2010-15 performance (section 12.2);
- applying reconciliation adjustments in 2020-25 price controls (section 12.3);
- including reconciliations in business plans (section 12.4); and
- initial assessment of business plans – accounting for past delivery (section 12.5).

Section 11 of appendix 15 outlines respondents' views to the two questions we posed on accounting for past delivery in our draft methodology proposals. In appendix 15, we provide our response to the issues raised by respondents.

12.2 Reconciliation for 2015-20 and 2010-15 performance

In PR14, we set mechanisms to incentivise companies to do the right thing for their customers. Company performance in 2015-20 will have a direct and real impact on customers during the 2015-20 period. Part of this will be demonstrated through outcomes and performance metrics. More than half (60%) of the PR14 performance commitments had direct financial outcome delivery incentives (ODIs) attached to them. The remainder were reputational incentives. Companies also committed to timely and efficient investments, customer engagement and sharing gains with customers. Reconciling performance is a regulatory tool for making companies accountable for their performance against their PR14 final determination. The reconciliation puts into effect the consequences companies knew they would face as a result of the incentives introduced at PR14. For this reason, the PR14 reconciliation needs performance to be robustly analysed.

Part of PR19 will be the calculation of adjustments to take account of past performance and incentives. This is important given the potential effects of adjustments arising from the PR14 mechanisms covering the 2015-20 period. The PR14 reconciliation rulebook and models for each of the 2015-20 incentive mechanisms are on our website.

The PR14 reconciliation rulebook explains how we will take into account performance over 2015-20, along with factors not reconciled from PR09, at PR19.

The rulebook describes the approach to the reconciliation of the following mechanisms.

- **Outcome delivery incentives** – outperformance payments for companies that exceed their stretching performance commitment levels, and underperformance penalties for customers if performance is below their performance commitment levels. We published an Information Notice about the limited circumstances in which companies can change their outcomes.
- **Wholesale total expenditure (totex) sharing** – where a company over or under-performed on its totex allowance, the over- or underspend is shared with customers.
- **Wholesale revenue forecasting incentive mechanism (WRFIM)** – financial incentives for companies to make accurate forecasts for wholesale revenue, ensuring under and over-recovery is reconciled.
- **Water trading incentive** – incentive payments for new water trades that start in the 2015-20 period.
- **Residential retail** – the total revenue allowance is adjusted for actual customer numbers.
- **2010-15 reconciliation** – further adjustments for performance against the PR09 incentive mechanisms, to reflect the update for actual 2014-15 performance.
- **Land disposals** – adjusting the RCV to share any proceeds from disposals of interest in land equally with customers.

For each of these, the rulebook sets out how we treat, inflation, tax, the time value of money and mechanism specific issues.

PR09 also included incentives to encourage companies to improve and deliver their services more efficiently. Many of these mechanisms needed data for the last year of the price control period, 2014-15, to assess the final benefit for customers or for companies. When PR14 was completed, the 2014-15 financial year had not yet finished, so companies made a forecast, which we considered and adjusted for inclusion in the PR14 final determination. We have updated our PR09 reconciliation analysis using the complete information and final audited spend and performance for the whole 2010-15 period. We will publish our conclusions on the 2010-15 reconciliation further adjustments in due course. These further adjustments will be implemented as part of PR19.

In PR19 we will also implement the adjustment to ensure consistency in how we apply inflation indices for the PR09 capital expenditure incentive scheme. The need to do this was flagged in the PR14 final determinations. We consulted on this adjustment in the PR14 reconciliation rulebook consultation in March 2015, and concluded in February 2016. This will lead to a one-off change to the RCV for all companies at PR19. At an industry level, this will equate to around 2% of the RCV, but the exact adjustment for each company varies according to its actual capital expenditure. We published the adjustments in October 2016.

Reconciliation of the service incentive mechanism (SIM) performance

The PR14 reconciliation rulebook does not cover how the SIM will be reconciled for PR19.

The years SIM will cover:

- We will use the SIM results from the four years 2015-16 to 2018-19 to calculate the financial high performance payments and poor performance penalties for companies, based on their performance over those four years.
- We will not use the SIM results from 2019-20 for high performance payments and poor performance penalties, as performance for that year will not be known at the time we make the final determinations for PR19.

SIM will not operate in 2019-20. Instead we will run C-MeX that year. Some companies have reputational incentives for SIM in 2019-20. We will use the contact survey part of C-MeX to proxy the qualitative part of SIM, and complaints data for the quantitative part of SIM. This will enable companies and their stakeholders to assess whether they had met their reputational incentives for SIM in 2019-20.

Setting high performance payments and poor performance penalties: We confirm that the revenue adjustments for SIM at PR19 will be in the range of -12% (penalty) to +6% (payment) of residential retail revenues for SIM.

At PR14 we set SIM payments for 2010-11 to 2013-14 performance based on companies' relative performance to the mean score of all companies. We used standard deviations from the mean to determine how each company performed relative to others. There are alternative ways of calculating SIM payments for 2015-

16 to 2018-19 performance, for example, taking a point other than the mean as the point at which no high performance payments or poor performance penalties apply, or, using absolute rather than relative scores.

We confirm that each company's high performance payments and poor performance penalties will depend on its performance and those of all the other companies, that is, SIM will remain as a relative incentive mechanism. We will provide details of our approach to applying the relative incentive after considering the distribution of companies' performance. This is to ensure we apply appropriate high performance payments and poor performance penalties.

12.3 Applying reconciliation adjustments in 2020-25 price controls

When making adjustments to price controls for 2020-25, we need to apply each adjustment in the appropriate control, and consider over what period each should be applied.

The PR14 reconciliation produces adjustments for the five PR14 price controls (business retail, residential retail, wholesale water, wholesale wastewater and Thames Tideway). At PR19, we have split the wholesale water control into water resources and wholesale water plus, and the wholesale wastewater control into bioresources and wholesale wastewater plus.

For water, we will apply the RCV adjustments before splitting the RCV between water network plus and water resource controls. This is because we are using an unfocused (proportional) approach to allocate the RCV between controls.

For wastewater RCV adjustments, we will apply them wholly to the wastewater network plus control. To facilitate bioresources markets, the bioresources RCV will be based on the economic value of bioresources assets. We will not, therefore, apply the reconciliation adjustments to the bioresources RCV, as this could distort the economic value of the assets. Adjustments will be applied as midnight adjustments on 1 April 2020.

For water and wastewater wholesale, the revenue reconciliation adjustments are produced from the totex menu, outcome delivery incentives, water trading incentive, wholesale revenue forecasting incentive and the 2010-15 reconciliation. It would be time consuming and complex to allocate these adjustments across the water resources, bioresources and network plus controls. This additional complexity would appear to offer little benefit to the operation of the separate binding controls. We will, therefore, apply all the revenue adjustments from the reconciliation of the wholesale incentives to the water and wastewater network plus controls, except where it is clear that a specific outcome delivery incentive is wholly attributable to water resources or bioresources. We expect companies to provide clear reasoning where they consider that revenue adjustments (not RCV) should apply to the water resources and bioresources controls. The one exception to this is water trading incentives, where companies will need to allocate the incentive payments from new water trades in the 2015-20 period between the water resources and network plus water revenue controls. We expect companies to set out their approach for allocating incentive payments, which we will review.

For the reconciliation of the residential (household) retail revenues, we will apply the adjustment to the residential retail control.

In PR14, revenue adjustments could be flexibly applied either in the first year, or, spread over a number of years in the new price control period preserving the net present value of the outperformance payment or underperformance penalty due when spreading the adjustment over the period. We will retain this flexibility in PR19 and, as at PR14, it will be a matter for a company to decide as it prepares its business plan and considers affordability and bill volatility.

As we did at PR14, we will apply the revenue adjustments to the controls after financeability has been assessed. This is to make sure the outperformance payments or underperformance penalties are not offset, wholly or partially, as a result of the financeability assessment.

Table 12.1 summarises the adjustments produced by each of the past performance incentive mechanisms and the price controls we will apply them to.

Table 12.1 Applying past delivery adjustments to price controls

Incentive mechanism	RCV adjustment	Revenue adjustment
2010-15 reconciliation (further adjustments)	Allocated to water resources and water network plus controls proportionally, and to wastewater network plus in full to avoid distorting the economic value of bioresources assets.	Network plus (water and wastewater)
Land sales	Allocated to water resources and water network plus proportionally, and to wastewater network plus in full to avoid distorting the economic value of bioresources assets (unless the land asset is wholly attributable to bioresources).	Not applicable

Incentive mechanism	RCV adjustment	Revenue adjustment
Water trading	Not applicable	Company proposed allocation across water resources and water network plus
Outcome delivery	Network plus (except where an ODI is wholly aligned to water resources).	Network plus (except where an ODI is wholly aligned to water resources, bioresources or retail)
Totex menu	Allocated to water resources and water network plus proportionally, and to wastewater network plus in full to avoid distorting the economic value of bioresources assets.	Network plus (water and wastewater)
Wholesale revenue forecasting	Not applicable	Network plus (water and wastewater)
Residential retail revenue	Not applicable	Residential retail
SIM	Not applicable	Residential retail

12.4 Including reconciliations in business plans

The business plan tables collate all inputs for each of the PR14 reconciliation models. We expect companies to publish their populated PR14 reconciliation models, along with explanations, by the annual performance reporting deadline of 15 July. Some respondents expressed views that as there is already a significant volume of work for companies to complete between the end of the financial year and the 15 July APR submission deadline then a later date for the reconciliation information would allow a more efficient allocation of resource. After considering the issue, we have made a minor change to, on request, extend the deadline by up to two weeks for publishing the proposed reconciliations under the PR14 reconciliation rulebook. This will still allow for an early start on the reconciliation assessment and a smooth process for the initial assessment of business plans. There is more detail on the arrangements for dealing with data availability in chapter 13 (securing confidence and assurance).

We will use two feeder models to take the outputs from the PR09 and PR14 reconciliations, and convert them for use in the financial model. These are the revenue adjustments feeder model and RCV adjustments feeder model.

The first will profile the revenue adjustments in the 2020-25 price controls and direct the revenue adjustments to the right price control in the financial model. The second will direct the RCV adjustments from the reconciliations (including land sales, if any) into the right price controls when splitting the RCV across the wholesale controls.

Some of the PR14 reconciliation models published on our website calculate in 2012-13 prices and others in outturn (nominal) prices as set out in the PR14 reconciliation rulebook. The outputs from these models will be used in the PR19 financial model, which uses 2017-18 prices. We will convert the adjustments output from the reconciliation models to the correct price base for the financial model in the new feeder models mentioned above.

12.5 Initial assessment of business plans – accounting for past delivery

Company performance in 2015-20 will have an important impact on customers during the 2015-20 period and beyond. It is vital for companies to consider how they have learned from their performance, to ensure that they deliver for their customers in the future and maintain the trust and confidence of all their stakeholders. Some of this 2015-20 performance is directly affected by financial incentives, such as ODIs and totex cost sharing. Some performance is covered by reputational incentives, such as performance commitments, or, covered indirectly by the regulatory regime, such as the inclusion of complaint and customer contact data in the service incentive mechanism.

We want to take overall company past performance into account in assessing the achievability and deliverability of business plans. We expect companies to set out how they have delivered and forecast to deliver overall for customers in the 2015-20 period, including against our final determinations, their PR14 business plans and their statutory and licence obligations.

Given their overall performance in 2015-20, companies should set out their understanding of the drivers of their past performance, the lessons they have learnt from this performance and the additional measures that they have put in place to ensure they will deliver their 2020-25 business plans. These measures should ensure improvements where past performance has been below expectations, and to provide additional stretch where the company has outperformed expectations. We expect the level of evidence to be greater, the greater level of stretch included in companies business plans compared to past performance.

We will test accounting for past delivery in our initial assessment of business plans as follows:

Initial assessment test on accounting for past delivery

1. How well has the company given evidence for its proposed reconciliations for the 2015-20 period, and has it proposed adjustments by following the PR14 reconciliation rulebook methodology?

2. How well has the company performed, and is forecast to perform, over the 2015-20 period and, taking into account this overall performance, how well has it put measures in place to ensure that it maintains confidence that it can successfully deliver its PR19 business plan?

1. How well has the company given evidence for its proposed reconciliations for the 2015-20 period, and has it proposed adjustments by following the PR14 reconciliation rulebook methodology.

In this assessment, we would expect to see:

- forecast performance – the company's anticipated performance in the last two years of the 2015-20 period, where actual performance is not yet known, and how this fits with past performance published in its annual reports and forecasts in the business plan;
- robust analysis – how well the company has followed the PR14 reconciliation rulebook methodology to derive its proposed adjustments in the 2020-25 price controls; and
- customer engagement/support – evidence of customers' support, and the strength of that support, for its proposed adjustments to the 2020-25 price controls.

2. How well has the company performed, and is forecast to perform, over the 2015-20 period and, taking into account this overall performance, how well has it put measures in place to ensure that it maintains confidence that it can successfully deliver its PR19 business plan.

To maintain trust and confidence, it is important that companies not only have a great business plan but also that customers have confidence that the business plan will be delivered. This will come in part from how companies have learnt from their 2015-20 performance and put in appropriate measures to improve performance to ensure that they deliver for their customers in the future.

In this assessment, we will consider overall actual and forecast performance for the 2015-20 period, including performance against our PR14 final determinations, company PR14 business plans and statutory and licence obligations enforced by the EA/NRW, DWI and Ofwat, including:

- how well has the company performed and is forecast to perform in meeting its outcome and performance commitments;
- how well has the company performed and is forecast to perform in terms of its timely and efficient investment and operating efficiency;
- how the company has dealt with and given evidence of its performance on major incidents[67] and/or where statutory and licence obligations enforced by the EA/NRW, DWI and Ofwat have not been met;
- how well it has managed the customer relationship in major incidents, or when complaints are escalated;
- the company's understanding of the drivers of its past and forecast performance and the lessons that it has learnt from this;
- based on this understanding and performance, the measures the company has put in place to ensure it maintains confidence that it can successfully deliver its 2020-25 business plan; and
- the level of stretch included in the 2020-25 business plan compared to past performance and targets, and the level of evidence the company has provided for the change in performance.

When undertaking this assessment we expect to take account of the level of stretch included in previous targets, for example if the company was intending to extend the frontier for the sector, and the level of evidence provided by the company. Where a company has failed, or is forecast to fail, to deliver on its past promises we would expect to see strong and compelling evidence that performance is going to improve.

To run this test, we will, in part, draw on other test assessments which consider past performance. For example, our assessment of proposed performance commitments, discussed in see chapter 4 (delivering outcomes for customers), will look at a company's evidence that its commitments are credible in light of its past performance.

After considering the views expressed by respondents, we have clarified how past performance is taken into account in the initial assessment of plans in section 11 of appendix 15 (responses to our draft methodology) and revised the wording of this

[67] A major incident is a category 1 incident defined by EA/NRW or a major event defined by the DWI.

initial assessment test question and included additional explanation of the matters that we will take into account. In particular respondents raised concerns that past performance should not prevent a company being categorised as exceptional or fast-track. We agree and have amended the initial assessment test so that it is clear that it is considering overall actual and forecast performance in the 2015-20 period and how well the company has taken account of this performance and put appropriate measures into place to ensure it successfully delivers its business plan. We have amended the explanation of the test to reflect the change in wording and also to make it clear that we will expect stronger evidence, the greater the stretch included in the 2020-25 business plan, and that we will take previously particularly stretching targets into account. We have also made it clear that company performance goes beyond the delivery of business plans and includes compliance with statutory and licence obligations and dealing with major incidents.

13. Securing confidence and assurance

Key themes of PR19

Our approach to confidence and assurance supports the key themes of PR19.

Our proposals for PR19 aim to reveal more granular information, to allow us to set separate price controls and promote new markets. This will help to promote **affordability** by enabling us to challenge companies' business plans and costs more effectively.

By being able to effectively challenge companies' plans and compare performance across companies, companies will be held to account and incentivised to **innovate** and improve **customer service**.

Company Boards will be required to demonstrate how they have challenged and satisfied themselves that their plan will deliver operational, financial and corporate **resilience** over the next price control period and the long term.

Expectations for company business plans

We want companies' plans to be more focused and succinct, more accessible and easier to navigate than in PR14. Companies should publish the whole of their business plans and will need to provide very good reasons for any content to be withheld. We propose that:

- every company provides a guide to its plan that clearly signposts key information about its proposals and how this relates to our initial assessment of business plan tests;
- every company provides an executive summary of its plan; and
- a company's main business plan narrative should be supported by strong evidence and be no more than 200 pages long for a water only company and 300 pages for a water and wastewater company.

Expectations for the provision of supporting data

Companies need to submit a consistent, accurate and assured set of information in line with our data table requirements, using our new, secure data capture system and an Excel spreadsheet.

Assurance and governance arrangements

We expect company Boards to own and be accountable for their business plans. Each company's full Board should provide us with an assurance statement that explains, among other things, how it has challenged and satisfied itself that:

- all the elements add up to a plan that is high quality and deliverable;
- the overall strategy for data assurance and governance processes delivers high-quality data;
- the business plan will enable the company to meet its statutory and licence obligations, now and in the future;
- the business plan will deliver operational, financial and corporate resilience over the next control period and the long term;
- it will enable its customers' trust and confidence through high levels of transparency and engagement with customers on issues such as its corporate and financial structures; and
- it has provided ownership of the overall strategy and direction of the plan in the long term.

Applicability to England and Wales

Our final methodology for confidence and assurance **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales. We want to ensure that all companies are accountable to customers and society and that high-quality data is available to clearly explain their plans and allow meaningful comparisons across companies to drive excellence and innovation.

Responses to our draft methodology proposals

A number of respondents considered that our draft business plan and data requirements were clear and sufficiently specified. However, some respondents considered that the coverage and clarity of the requirements would be improved by, for example, having clearer definitions, increasing the linkages between tables, pre-populating more of the data, and establishing a post publication query and clarification process. We were also asked to look again at areas such as customer acceptability and vulnerability information, capturing enhancement expenditure for opex, ensuring consistency in reporting and the definitions of industry-wide data and whether the tax table needed to allow for other tax allowances.

There was broad support for our assurance proposals from all but one respondent, who raised concerns regarding the risk and proportionality of our assurance assessment. One respondent asked how assurance requirements could vary with the company monitoring framework (CMF) rating of a company given business plan submission would precede CMF assessment. Another respondent said that the 2018 CMF report should be published in January 2019 alongside the IAP.

Our consideration of respondents' views

Our business plan and data requirements are largely unchanged. We have revisited the data we need for customer acceptability and vulnerability, tax, water resources and PR14 reconciliation. In response to respondents' views on the usability of data requirements, we have increased the linkages between tables, improved the number and clarity of definitions and guidance and allocated item references. We have reconsidered our request for historical data in the business plan, previously sent to us in July 2017 and have constructed a tool to map inputs and outputs between tables and the financial model.

We can confirm that the outcome of the 2018 CMF assessment will be published alongside the IAP results in January 2019. We can also confirm that it is for companies to ensure that they have effectively assured their business plan, taking account of their CMF categorisation at the time of submission. We have also decided to introduce a new IAP test to require assurance from company Boards that their business plan will enable customers' trust and confidence through high levels of transparency and engagement with customers on issues such as its corporate and financial structures.

13.1 Introduction

This chapter sets out our PR19 final methodology for confidence and assurance. This final methodology has been determined following full consideration of views expressed by respondents to our draft methodology proposals published in July of this year.

We need high-quality business plans supported by a consistent, accurate and assured set of information across companies, so that we can assess whether plans deliver for customers and set price controls.

Our proposals for PR19 will reveal more granular information, to allow us to set separate price controls and promote new markets. This will help to address pressure on customers' bills and affordability by enabling us to challenge companies' business plans and costs more effectively.

This chapter is structured as follows:

- expectations for company business plans and narratives (section 13.2);
- expectations for the provision of supporting data (section 13.3);
- assurance and governance arrangements (section 13.4); and
- initial assessment of business plans – confidence and assurance (section 13.5).

Section 12 of appendix 15 outlines respondents' views to the two questions we posed on confidence and assurance in our draft methodology proposals.

In appendix 15, we provide (or reference) our response to the main issues raised by respondents. In the data table issues log, we provide our response to the individual issues raised on the tables.

13.2 Expectations for company business plans and narratives

In this section, we outline our expectations for:

- company narratives and supporting evidence;
- the form and format of business plans;
- customer challenge group reports; and
- transparency.

Further expectations about company business plans are set out in chapter 14 (the initial assessment of business plans: securing high quality, ambition and innovation) and appendix 13 (initial assessment of business plans).

13.2.1 Expectations for company narratives and supporting evidence

We expect companies to submit focused and succinct business plans. We therefore expect company business plans to incorporate a clear, concise and well-reasoned narrative with all necessary supporting evidence.

Companies' main business plan narratives should summarise the overall strategy for the plan, and how it delivers the four key themes of PR19 (customer service, resilience, affordability and innovation) and the UK or Welsh Government's strategic policy statement, as appropriate.

In PR14, main business plan narratives ranged from 250 pages to around 900 pages spread over a number of documents. We propose that companies limit their main business plan narratives to no more than 200 pages in a single document for a water only company and 300 pages for a water and wastewater company. This will allow us to obtain a succinct but sufficiently detailed overview and explanation of a company's plan.

To aid understanding, companies should provide an executive summary: a Board-level summary, no more than five pages long, of the main points of the company's business plan, how it meets our PR19 themes and expectations and the key drivers for the proposed price and outcomes trajectories.

We expect companies to provide to us all supporting evidence, analysis and models they have used in preparing their plans. We are not restricting the length of the business plan documentation. Companies can submit appendices in addition to their main narratives.

13.2.2 The form and format of business plans

We are not prescribing the form of the business plans but they must be:

- easy to navigate and make it easy to find information;
- capable of being hosted on our Sharepoint system;
- capable of being used by multiple teams; and
- based on content fixed at a point of submission to Ofwat.

We will need to be able to easily identify relevant supporting evidence and to quote and reference this evidence as required.

Specifically, the business plans will need to clearly signpost the areas of the plan where we can find evidence about how the company is meeting each of the tests for the initial assessment of business plans. Our assessments need to be repeatable to allow us to do appropriate quality assurance, so the ability to reference the evidence found is crucial. We have published a pro forma for this signposting exercise along with this final methodology.

We note that some companies have asked about the use of new digital formats for their business plan submissions (for example videos or web-based). We encourage companies to set out their business plans in formats that can be shared with their customers and stakeholders, using technology platforms which are most accessible to customers. However, we do not consider that a source of information that is hosted externally and subject to change would be an appropriate basis for assessing business plans. We want companies to submit information to us in consistent formats to facilitate evidence-based assessments and cross-company comparisons. For these reasons, we will not treat such formats as part of a company's formal submission.

We use standard Microsoft software. Therefore, companies' documents and files should be submitted in file formats that can be opened in Excel, Powerpoint and Word (as well as in a readable pdf format) and be capable of being used by multiple teams.

13.2.3 Expectations for customer challenge group reports

We expect each company's business plan to be accompanied by an independent report to Ofwat from the CCG. This report should provide the CCG's views on the overall quality of customer engagement and the degree to which the company has reflected the results of this engagement in its business plan. It is also important that CCGs highlight areas of challenge and disagreement, including how the company has responded to challenges and any areas of outstanding disagreement.

In 'Ofwat's customer engagement policy statement and expectations for PR19', published in May 2016, we set out the questions CCG reports should address in their independent reports. Since we published the customer engagement policy statement, we have provided CCG chairs with a draft 'aide memoire' which provides CCGs with further clarity on the role of CCGs particularly relating to our PR19 methodology consultation. We will update and publish the final aide memoire in early 2018 following publication of our PR19 final methodology.

The independent reports from the CCGs will inform our assessment of companies' business plans. We will continue to work with the CCG chairs to support their role in independently challenging companies.

13.2.4 Expectations for transparency

To improve transparency, we want companies to make their business plans accessible to us, companies, customers, stakeholders and other regulators. We therefore expect them to publish the whole of their business plans at the same time as they submit their plans to us in September 2018.

If a company considers some information should not be published – because it is commercially sensitive information, for example – then the company will need to provide its stakeholders and us with strong, robust reasons that are specific to the information concerned.

Companies who choose to submit their plans early can publish their plans when they wish, but must do so no later than 3 September.

We will continue with our approach of publishing financial models and supporting feeder models, to promote transparency and understanding of our decision making.

13.3 Expectations for the provision of supporting data

The companies' business plan narratives will provide us, customers and other stakeholders with a detailed explanation of their proposals for the 2020-25 period.

To complete our initial assessment and set the different price controls, we need consistent, accurate and assured data. We also require companies to base their financial projections on the use of our published financial model.

We will collect this data using a suite of supporting data tables and our financial model, which accompany this PR19 final methodology.

You can find more details on the data requirements in the supporting guidance document. Here we also set out the changes and improvements we have made for the PR19 final methodology.

13.3.1 Early data submissions

By working with the industry since 2016, we identified a need to collect information in specific areas before companies submit their business plans in September 2018. Doing this enables us and companies to:

- improve the quality and consistency of data; and
- resolve any queries more quickly.

It also helps us to refine our methodologies and make an early start on key elements of the initial assessment of business plans.

Since our draft methodology proposals, companies have submitted information on 2016-17 costs and explanatory variables to inform our cost assessment work and debt information.

Companies have also provided their proposed allocations of historic regulatory capital value (RCV) for bioresources. We will give companies feedback on their asset valuations and proposed RCV allocations by the end of January 2018.

Apart from the early submission on cost adjustment claims, we expect the data and information contained within these early submissions to be subject to the same good assurance and governance processes companies use for their business plans. We may also consider this information within our 2018 company monitoring framework (CMF) assessments.

We summarise the rest of the planned submissions in table 13.1 below.

Table 13.1 Early submission summary

Data required	Purpose	By when	How	Reference
Companies' proposed allocations of historic RCV for water resources	To give companies feedback on their allocations (by the end of April 2018) before they submit their business plans	31 January 2018	Separate tables set out in excel file PR19 Jan 2018 tables – WR RCV allocation of our draft methodology consultation.	IN17/01 'Allocation of RCV to water resources and bioresources at 31 March 2020', January 2017
Companies' performance commitment definitions	To give companies feedback ahead of business plans, reducing ambiguity and improving consistency	3 May 2018	Document similar to Appendix 4 of the PR14 final determination company-specific appendices.	'Water 2020: our regulatory approach for water and wastewater services in

Data required	Purpose	By when	How	Reference
			Spreadsheet similar to table App1 (performance commitments and outcome delivery incentives) of the PR19 business plan tables. We expect to provide the templates for companies to use for their 3 May submissions in early 2018.	England and Wales', May 2016
Information about companies' expected cost adjustment claims	To assist with the review process and allow us extra time to take into account claims ahead of the initial assessment of business plans, and provide early certainty on our decision to exceptional and fast track companies.	3 May 2018	Separate information submission. We have provided further details on the type of evidence we expect companies to submit in support of their cost adjustment claims in appendix 11	
PR14 reconciliation information	To help us understand and review the data with which companies have calculated adjustments for their performance during the 2015-20 period	15 July 2018 (extendable by two weeks on request)	With the 2018 annual performance report	Chapter 12 (accounting for past delivery), allows period to be extended from draft methodology to allow separate submission dates

13.3.2 Approach to small companies

We define a small company as one with an annual turnover of less than £10.2 million. This includes water companies we refer to as NAVs, as well as Cholderton and District Water. 'NAV' stands for new appointments and variations and is a process that involves one company replacing another as the water and/or wastewater company for a specific geographic area[68]. We also use the term NAVs to describe a sub-group of small entrant water companies[69].

The number of customers served by small companies is far smaller than by the larger companies. So we take a proportionate approach to price controls and reporting requirements.

We do not propose making any changes at this stage to the relative charge control in NAVs' licences, at least for residential customers[70]. Each NAV's charges will continue to be capped and would be fixed relative to, and could not exceed, the equivalent charges of the previous incumbent company or companies. We do not require NAVs to submit business plans or supporting business plan data tables. In the coming months we will be giving further consideration to the roles of NAVs and the way we regulate the sector[71].

However, this approach is no longer possible in relation to business customers of NAVs where an incumbent company has exited the business retail market, because the previous incumbent will not be setting end-user charges for such customers. We will consult separately on proposals for business customers and any necessary licence modifications.

For Cholderton and District Water, we have set a price control at each previous price review. As the company is very small, we have always used a much simpler price review process. For the 2015-20 period, it is subject to a simplified revenue control that covers all its activities; we have not set separate price controls for retail and wholesale activities.

Cholderton and District Water is likely to become a private water supplier (see our March 2017 consultation). Under these plans, we will no longer regulate the company, a new charitable trust will manage the company to safeguard customers' interests. Tariffs will be set by the trustees using neighbouring regulated company

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[68] A new appointment is where a limited company is first appointed by us to provide water and/or wastewater services for a specific geographic area or areas.
[69] These small companies have the same legal duties and responsibilities as the ten large water and sewerage companies (WaSCs) and the seven largest water only companies (WoCs). We also have the same statutory duties when we carry out relevant functions – see, for example, chapter 1 (overall framework).
[70] We propose to continue with our existing approach for Albion Eco Limited. This company only has two large business customers, so prices are set by agreement.
[71] See page 20 of Study of new appointment and licences variations - summary of findings and next steps.

charges as a reference. For the case of Cholderton and District Water only, the CCG will work in conjunction with trustees in setting tariffs.

13.3.3 Data capture system

Our PR19 final methodology will improve some of the practical issues associated with a price review – namely:

- how companies will submit their business plan tables and documentation to us;
- how we store their information; and
- how we manage the query process.

We also consider there to be scope to improve the audit and validation of data in the business plan submission process. This became increasingly evident at PR14, when we were managing large volumes of data and large numbers of files received throughout the price review.

Given the increased volume of data needed for PR19, we are integrating a secure data capture system into our database that will:

- make it easier for companies to complete and transfer data submissions;
- improve data validation; and
- make more use of automation, reducing reliance on manual inputs.

The data capture system will replace the current method of submission for spreadsheet tables with an online portal. Companies will be able to complete the Excel spreadsheets at their offices and then upload these into our secure online database.

We plan to release a version of the portal in 2018 to allow submission of companies' annual performance reports for 2017-18. We then plan to release minor updates and improvements after the annual performance report submissions.

13.3.4 Future issues and clarification process

The consultation responses revealed a strong preference for us to operate an open and transparent query/clarification process in relation to the business plan data and financial model. This is because companies may identify further queries when starting to complete the final tables and when using the financial model.

Details of our queries process and plans for an external review of the financial model, are provided in chapter 15 (next steps).

13.4 Assurance and governance arrangements

Good assurance of business plans is vital if stakeholders, including Ofwat, are to have confidence in the information presented in them. We see assurance as having two key aspects.

First, a business plan can only be of high quality where the data and information presented in the plan has been subject to good assurance processes to ensure it is consistent and accurate.

Second, a company's full Board should provide assurance of the business plan. This would include ensuring that the business plan is of high quality in the round, and reflects the views of customers. We expect company Boards to own and be accountable for their business plans. It is for the companies and their Boards to determine (taking account of their categorisation under the company monitoring framework) how best to provide this assurance, including the role of external assurance.

The evidence companies provide in their business plans about how they have assured themselves that data is consistent and accurate, and the process their Boards have followed to challenge management to deliver a high-quality plan, will provide us with confidence in the plans. Our assessment of this evidence will form part of our initial assessment of business plans in relation to confidence and assurance.

13.4.1 Board assurance of the plans

We expect a company's full Board to take collective responsibility for assuring its business plan. We also expect it to put in place, and explain, the processes it feels it needs to be sure it is submitting a high-quality plan that can be delivered.

To provide confidence in its plan, a company's full Board needs to provide us with a statement, in its own words, of why it considers all the elements (including supporting data) add up to a business plan that is high quality and deliverable. The Board should provide evidence of where it has challenged company management and an explanation of the process it has used to arrive at the view that its plan is the best it can be (including any external assurance, where appropriate), rather than simply asserting confidence in the plan.

This Board assurance statement should cover the specific areas set out below.

Table 13.2 Board assurance

Area	Board assurance requirements
Business planning	How it has challenged and satisfied itself that: • all the elements add up to a business plan that is high quality and deliverable; • the overall strategy for data assurance and governance processes delivers high-quality data; • the business plan will enable the company to meet its statutory and licence obligations, now and in the future and take account of the UK and Welsh Government's strategic policy statements; • its plan will deliver operational, financial and corporate resilience over the next control period and the long term through its governance and assurance processes, taking account of its track record of performance; and • it will enable its customers' trust and confidence through high levels of transparency and engagement with customers on issues such as its corporate and financial structures. How it has provided ownership of the overall strategy and direction of the plan in the long term.
Customer engagement	Assurance that the company's business plan has been informed by: • customer engagement; and • feedback from the company's CCG about the quality of its customer engagement and how this has been incorporated into its plan.
Affordability	Assurance that the company's business plan is affordable for all customers, including in the long term and including appropriate assistance for those struggling, or at risk of struggling, to pay.
Outcomes	Assurance that the business plan will deliver – and that the Board will monitor delivery of – its outcomes and performance commitments. Assurance that the company's proposed outcomes, performance commitments and outcome delivery incentives (ODIs) reflect customer preferences and are stretching. Assurance that the company's proposed approach to reporting on its performance commitments, ODIs and projections of outcomes is robust.
Resilience	Assurance that the company's business plan has been informed by: • a robust and systematic assessment of the resilience of the company's systems and services; • customers' views about managing resilience; and • a comprehensive and objective assessment of interventions to manage resilience in customers' long-term interests.
Cost assessment	Assurance that the expenditure forecasts included in the company's business plan are robust and efficient.

Area	Board assurance requirements
	Assurance that large investment proposals are robust and deliverable, that a proper assessment of options has taken place, and that the option proposed is the best one for customers.
Risk and return	Assurance that the Board has identified the risks associated with delivering the plan. Assurance that the risk mitigation and management plans the Board has in place are appropriate.
Financeability	Assurance that the company's business plan is financeable on both the notional and actual capital structure and that the plan protects customer interests in both the short and the long term. The statement should clearly set out the steps taken to provide this assurance.

13.4.2 Resilience

Companies' business plans should deliver long-term 'resilience in the round', that is operational, financial and corporate resilience over the next control period and the long term.

We will seek assurance that the business plan has been informed by a robust and systematic assessment of the resilience of the company's systems and services, customers' views about managing resilience, and a comprehensive and objective assessment of interventions to manage resilience in customers' long-term interests.

Companies need to demonstrate that they are financially resilient. If the basis on which they have made their assessment is not consistent with the basis they used when making the long-term viability assessment in their most recent annual performance report then they should clearly explain their change of approach.

13.4.3 Earning customers' trust

We want a blueprint for a new era of openness and transparency. Transparency increases the accountability of companies, not only to us as the regulator, but also to their customers and society more widely. Companies need a high level of transparency and engagement with their customers to earn their customers' trust and confidence. This extends to issues such as companies' corporate and financial structures so that customers can readily and clearly understand the nature and purpose of these arrangements and how they relate to the companies' long-term resilience. We have therefore decided to introduce a new test in our initial assessment of business plans to require assurance from company Boards that the company's business plan will enable customers' trust and confidence through high levels of transparency and engagement with customers on issues such as the company's corporate and financial structures.

13.4.4 Meeting statutory and licence obligations

We expect companies to meet their statutory and licence obligations both now and in the future. We need to have confidence that companies have planned effectively to deliver everything they are required to do. Company Boards should provide assurance that their business plans will enable them to comply with their statutory and licence obligations. Companies have obligations as water and sewerage undertakers under the Water Industry Act 1991 and in their licences as undertakers.

The Environment Agency and Natural England's water industry strategic environmental requirements (WISER) document[72] and Natural Resources Wales's 'PR19 expectations and obligations' paper[73] set out certain statutory obligations on water companies operating in England and Wales respectively. These documents describe the environmental, resilience and flood risk obligations that water companies must take into account when developing their business plans.

The Environment Agency, Natural England and Natural Resources Wales have also set out wider expectations for companies, as have the UK and Welsh Governments through their strategic policy statements. We expect companies to take these into account when developing their business plans and outcomes, and to implement them when they are in customers' interests and have customer support.

13.4.5 Track record for assurance

To help us decide how much confidence we can place in the assurance statements submitted with companies' business plans, we consider it appropriate to take account of performance under the company monitoring framework.

We expect companies to provide good assurance at all times. The initial assessment of business plans will focus on the quality of submissions associated with the business plan. Our assessment under the company monitoring framework (CMF) can take account of companies' assurance of any information they submit to us and

[72] This is available on request from the Environment Agency or Natural England.
[73] This is available on request from Natural Resource Wales.

share with stakeholders. Considering both of these aspects together will give us, investors and other stakeholders information about companies' overall approaches to assurance.

A company that provides good assurance of all the information it submits, regardless of whether it relates directly to price review information, is demonstrating that it takes the quality of the information it submits and its governance processes seriously all the time – promoting greater trust and confidence. We will therefore take the 2018 CMF assessment into account as part of the initial assessment of business plans as this will represent the most recent review that was able to take account of how the company has handled any of its information. To aid clarity and avoid confusion about different processes, we will align the publication of the 2018 CMF assessment with the publication of the initial assessment of business plans in January 2019. This will not affect the period that the 2018 CMF assessment will cover but we will update our guidance to reflect the change of timing.

13.4.6 The quality of data submitted

We want to be confident that the data submitted to us is consistent, accurate, assured and in line with our information requirements.

We expect companies to complete a full set of data tables appropriate to them, in line with the guidance and line definitions for each table, supported by suitable commentaries that clearly explain their proposals.

If a company restates previously reported historic data in its business plan, we expect it to clearly highlight and explain this in its commentary. We also expect the company to explain:

- why it needs to be changed and why it only become aware of it now;
- its assurance of this data;
- the steps it has taken to make its customers and stakeholders aware of the changes; and
- the steps it has taken to make sure customers are appropriately recompensed.

There must be consistency between models and business plan tables. We expect companies to provide assurance that all figures entered into the financial model (or supporting feeder models) match the relevant figures entered into their business plan tables. We expect companies to make sure their reporting is consistent between tables.

We also expect submissions to be complete, accurate and final. Additional submissions after 3 September 2018 can affect stakeholders' confidence in company business plans. Companies submitting data later will need to explain clearly why this needs to happen and how it reflects on the assurance of their plans. We are likely to take this into account in our assessment of the quality of the assurance of the data provided in the business plan. Also, depending on the circumstances, it might not be possible to take the additional data into account.

Companies will be responsible for making sure their data is correctly entered into our new data capture system. They should provide specific assurance statements through this system. Alongside their tables, companies will also be able to submit auditor reports or free-form assurance statements.

13.5 Initial assessment of business plans – confidence and assurance

To assess our confidence in the assurance of a company's plan, we are including the following six tests in our initial assessment of business plans.

Initial assessment test on confidence and assurance

1. To what extent has the company's full Board provided comprehensive assurance to demonstrate that all the elements add up to a business plan that is high quality and deliverable, and that it has challenged management to ensure this is the case?

2. To what extent has the company's full Board been able to demonstrate that its governance and assurance processes will deliver operational, financial and corporate resilience over the next control period and the long term?

3. To what extent has the company's full Board provided assurance that the company's business plan will enable customers' trust and confidence through high levels of transparency and engagement with customers, on issues that matter to customers (which extends to their ability to understand both the company's corporate and financial structures and how they relate to its long-term resilience)?

4. To what extent has the company's full Board provided comprehensive assurance to demonstrate that the business plan will deliver – and that the Board will monitor delivery of – its outcomes (which should meet relevant statutory and

licence obligations and take account of the UK and Welsh Governments' strategic policy statements)?

5. To what extent does the company have a good track record of producing high-quality data, taking into account the company's data submission, assurance process and statement of high quality, and our 2018 assessment of the company under the company monitoring framework?

6. How consistent, accurate and assured are the company's PR19 business plan tables, including the allocation of costs between business units, information on corporation tax, and the assurance and commentary provided?

As we have done in our assessments under the company monitoring framework, we will consider the assurance provided in the round, taking into account the individual circumstances of companies and characteristics of the data being assured.

14. The initial assessment of business plans: securing high quality, ambition and innovation

Key themes of PR19

Our approach to the initial assessment of business plans supports the key themes ofPR19.

The initial assessment of business plans includes several test areas focused on **customer service**, including engaging customers and delivering outcomes for customers.

The initial assessment of business plans includes a test area specifically focused on addressing **affordability** and vulnerability; and other areas of our assessment, such as securing cost efficiencies, will support the delivery of affordable bills. It also includes a test area specifically focused on securing long-term **resilience**.

The initial assessment of business plans incorporates a focus on **innovation** as a critical enabler of PR19 delivery.

The initial assessment of business plans

We want companies to produce **high-quality, ambitious and innovative** business plans, pushing forward the performance and efficiency of the sector for customers.

For our initial assessment of business plans, we will:

- assess company business plans against **nine key test areas** that reflect our PR19 themes and help ensure companies deliver for customers, the environment and wider society – they reflect the strategic policy statements of the UK and Welsh Governments;
- assess company business plans against **three key characteristics** (quality, ambition, and innovation);
- categorise company business plans into **four categories** (significant scrutiny, slow-track, fast-track, or exceptional) depending on the level of quality, ambition and innovation demonstrated;
- incentivise companies with a range of **financial, procedural and reputational incentives**;
- expect companies to get it right first time and put forward the best business plan for their customers at the point of submission by 3 September 2018; and
- publish the outcome of our assessment in late January 2019.

Companies with exceptional business plans will receive an amount equivalent to a 20 basis points (bp) to 35bp addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60%. This recognises that truly stretching performance benefits all customers. Companies with exceptional business plans will receive an amount equivalent to a 10 bp addition to the RoRE.

Both exceptional and fast-track business plans will benefit from procedural incentives through an early determination with early certainty on specified components of costs and outcomes.

Business plans categorised as significant scrutiny will receive reduced cost sharing rates and potentially capped outcome delivery incentive outperformance payments.

Applicability to England and Wales

Our PR19 final methodology for the initial assessment of business plans **applies to both** companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Our approach to the initial assessment of business plans is designed to deliver on our PR19 themes, and reflects the UK Government's and Welsh Government's strategic policy statements. We recognise that there are differences in: the statutory obligations, legal and policy frameworks, including on the extent of markets; the strategic policy statements of the UK Government and Welsh Government; and the social, economic and environmental characteristics across nations. We also recognise that within nations, there are differences between regions. We expect companies to submit plans which clearly evidence and account for differentiation; and we will take relevant differences into consideration when making our assessment of business plans.

Responses to our draft methodology proposals

There was **broad support** for our overall approach to the initial assessment of business plans.

Some respondents **disagreed with the balance of incentives** that we proposed for the initial assessment of business plans. Several argued that the financial incentives for the top two categories (exceptional and fast-track) were too weak. On the other hand, one respondent considered that there should be no upfront financial benefits to the top companies or that these should be contingent on the delivery of results for customers. Some companies also considered that we should include a 'do no harm' procedural incentive as otherwise the benefit of an early draft determination would be limited.

Several companies **requested more details** on our methodology for assessing plans. Some respondents suggested that it would be **challenging to assess companies' ability to innovate**. A number of other comments were provided; we cover the issues raised in appendix 15.

Our consideration of respondents' views

We are retaining the proposed framework for assessing business plans. We are strengthening the incentives for the fast-track and exceptional categories in recognition of the additional effort and risk those companies will have taken in preparing their plans. We have set the bar high, and all customers will benefit from companies putting in place truly stretching plans. Exceptional and fast-track companies will receive an amount equivalent to, respectively, a 20-35 basis points (bp) and 10bp addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60%. As a strengthened procedural benefit for exceptional and fast-track business plans, we will provide early certainty on specific components of the early draft determination related to outcomes and the cost allowance.

14.1 Introduction

This chapter sets out our final methodology for the initial assessment of business plans at PR19. This PR19 final methodology has been determined after fully considering the views expressed by respondents to our draft methodology proposals, published in July of this year.

Companies need to be ambitious and innovative to push the frontier on what they provide for customers, the environment and wider society, and to meet the challenges facing the sector. They must take full ownership of these challenges and produce high quality, ambitious and innovative plans for PR19 to address them. This includes understanding and managing risks to service delivery effectively and efficiently on behalf of customers.

We want companies to develop truly stretching plans that that benefit all customers by pushing all companies to perform better at lower cost. The initial assessment of business plans, as part of the overall incentive package for PR19, helps to incentivise the submission of such plans. It allows companies which submit high quality, ambitious and innovative plans to benefit from this; thereby aligning the interests of companies and investors with those of customers.

It will enable us to focus our challenge and scrutiny of companies' business plans where it is most needed – and where we can deliver the greatest benefits for current and future customers, the environment and wider society.

This chapter is structured as follows:

- objectives and approach (section 14.2):
- test areas (section 14.3);
- characteristics (section 14.4);
- categories (section 14.5); and
- incentives (section 14.6).

We provide details of the proposed timeline for business plan submission and the initial assessment of business plans in chapter 15 (next steps).

Appendix 13 (initial assessment of business plans) sets out in more detail the reasons for our policy decisions. This appendix also sets out the background, including details of our proposals as they appeared in the draft methodology, the responses to our draft methodology proposals, our consideration of those responses and an explanation of any changes to the PR19 final methodology.

Section 13 of appendix 15 details respondents' views on the six questions we posed about the initial assessment of business plans in our draft methodology proposals. We also provide (or reference) our response to the issues raised.

14.2 Objectives and approach

We want companies to produce **high-quality, ambitious and innovative** business plans that are well-evidenced and grounded in excellent customer engagement, are right the first time, push forward the performance of the sector as a whole and stretch the boundaries for delivery and efficiency.

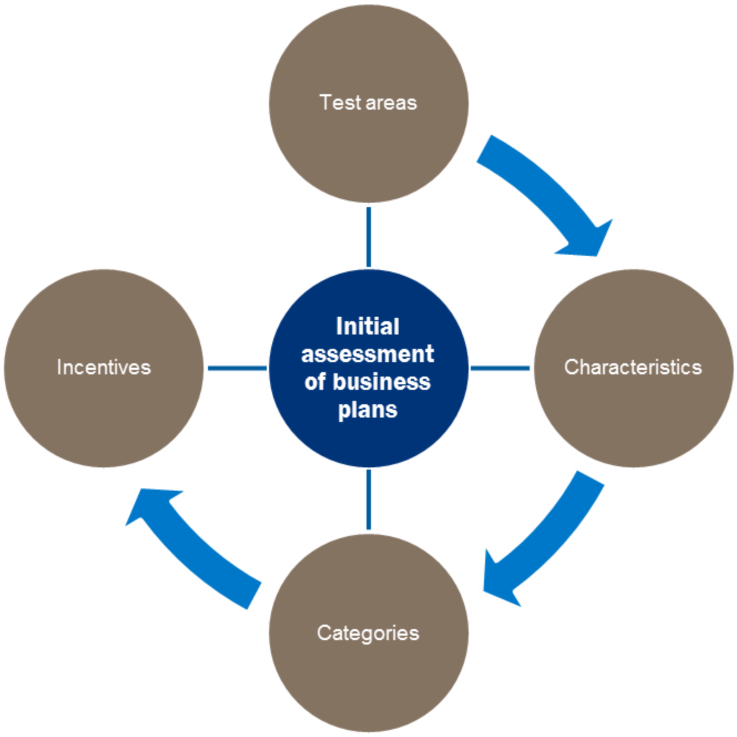
The strongest incentives within the PR19 final methodology are associated with the delivery of business plans; for example through outcomes performance payments and penalties, and through cost sharing rates (discussed in chapters 4 and 9 respectively). The initial assessment of business plans works in conjunction with these delivery incentives, further encouraging companies to really stretch themselves and set ambitious targets for what they can deliver for their customers and the environment.

The initial assessment of business plans will help to achieve this by incentivising:

- all companies to produce well-evidenced plans that reflect their customers' preferences and priorities and are efficient, by offering:
    - procedural, reputational and financial benefits for companies whose plans do not require a level of material intervention to protect the interests of customers; and
    - procedural, reputational and financial disincentives to discourage companies from preparing low quality plans;
- the best companies to push the frontier for all companies, by offering the greatest procedural, reputational and financial benefits to companies with high quality, ambitious and innovative plans, recognising the additional effort and risk these entail.

There are four key elements to our initial assessment of business plans as set out in figure 14.1.

Figure 14.1 Key elements to our initial assessment of business plans



Our approach to the initial assessment of business plans is designed to deliver on our PR19 themes, and reflects the UK Government's and Welsh Government's strategic policy statements. We recognise that there are differences in: the statutory obligations, legal and policy frameworks, including on the extent of markets; the strategic policy statements of the UK Government and Welsh Government; and the social, economic and environmental characteristics across nations. We also recognise that, within nations, there are differences between regions. We expect companies to submit plans which clearly evidence and account for differentiation; and we will take relevant differences into consideration when making our assessment of company business plans. We provide some examples below.

- **Use of markets:** tests on the use of markets will be applied to the extent they are relevant to a company's business plan. We would not, for example, apply tests to a company whose areas are wholly or mainly in Wales in relation to the bilateral water resource market;
- **Retail costs:** in terms of assessing costs, as set out in chapter 9 (securing cost efficiency), we will assess retail costs for water companies whose areas are wholly or mainly in Wales in respect of wastewater business retail customers and water business retail customers using less than 50 megalitres a year. This will not apply to water companies whose areas are wholly or mainly in England which have exited the business retail market;

- **Alignment to different policy objectives:** we can, for example, consider bespoke performance commitments which are designed to meet specific objectives, such as those within the Welsh Government's strategic policy statement related to the sustainable use of natural resources.

14.3 Test areas

The initial assessment will cover all areas of a company's business plan, and we will use the following test areas:

- engaging customers;
- addressing affordability and vulnerability;
- delivering outcomes for customers;
- securing long-term resilience;
- targeted controls, markets and innovation;
- securing cost efficiency;
- aligning risk and return;
- accounting for past delivery; and
- securing confidence and assurance.

Setting out a framework of test areas gives a clear indication of our expectations and priorities for company business plans. This structured approach will also allow us to carry out the initial assessment of business plans effectively and efficiently.

In their response to our draft methodology proposals, several respondents requested clarification on the relative positioning of the test areas in categorising business plans overall. When considering business plans across test areas and across companies, we will apply an 'in the round' approach to our assessment and categorisation decisions. We want companies to take full ownership of their business plans and do not want to drive a one-size-fits-all approach by setting out a relative position of individual test areas. This also allows us to apply our regulatory judgement in an objective, proportionate and consistent way. We set out further detail on this in appendix 13 (initial assessment of business plans).

In appendix 13, we provide further information on each of the test areas. This includes the main test questions and, at a high level, what we are looking for in plans which we consider to be high quality, ambitious and innovative. As we cannot foresee what companies will put forward in their plans, we will take account of the content of company business plans and any wider relevant factors where appropriate. We have not set out more detailed criteria in order to avoid a 'tick-box' approach by companies and to help ensure that companies retain ownership of their business plans.

Appendix 15 provides full details of stakeholders' views on the proposed test areas.

14.4 Characteristics

We want companies to demonstrate how their business plans meet three overarching characteristics:

- high quality;
- ambition; and
- innovation.

In a **high-quality** plan, the company's proposals will not only be efficient, resilient and affordable, but also include stretching performance commitments that really deliver for customers. We will have a high degree of confidence that the business plan will be delivered. A high-quality business plan will also provide a focused and persuasive vision of the future, with clear evidence appropriately used and with well set out, robust reasoning to support the company's proposals. We expect all companies to be able to produce a high quality and easy to navigate business plan.

We provide below an indication of what we might look for in terms of high quality; further detail is provided in table 2 of appendix 13. This will inform our assessment of company business plans in terms of whether they are high quality. While our intention is to provide helpful and sufficient clarity for companies to work to produce a high quality plan, companies own their business plans and we reserve the right to consider other relevant factors if appropriate.

A high-quality business plan:

- is grounded in excellent customer engagement, with a wide range of evidence. It should include stretching outcomes and performance commitments that reflect what customers want, and their relative priorities, and clear line of sight from these through the plan. It should also include evidence of consideration of customer participation;
- is cost-efficient, including high quality assessment of different options for mitigating the risk to outcome delivery;
- is resilient in the round and over the long term
- is sustainable, while meeting current and future customers' water and wastewater needs;

- sets out the company's approach to identifying, managing and mitigating risks in the best interests of customers;
- is affordable for all current and future customers, with appropriate assistance provided where needed;
- sets out the company's approach to effectively and efficiently identifying and providing support for customers in circumstances which make them vulnerable;
- uses markets, including direct procurement for customers, where appropriate to drive efficiency, improve resilience and benefit customers;
- shows that the company can and will innovate for the benefit of customers and the environment
- is accompanied by a consistent, accurate and assured submission of business plan tables (including the allocation of costs between business units, PR14 reconciliation, assurance of the tables and any commentary on the tables);
- gives a high level of assurance – including assurance from the company's Board that: all the elements add up to a business plan that is high quality and deliverable; it has ownership of the overall strategy and direction of the plan in the long term; it will enable its customers' trust and confidence through high levels of transparency and engagement with customers on issues such as its corporate and financial structures; and the business plan will enable the company to meet its statutory and licence obligations and deliver operational, financial and corporate resilience over the next control period and the long term; and
- provides compelling evidence that the company understands the drivers of its past performance, the lessons learnt from this performance and the additional measures it has put in place to ensure it maintains confidence that it will successfully deliver its 2020-25 business plan.

An **ambitious** business plan pushes forward the efficiency and delivery frontier for the sector, setting a new standard for the future and benefitting all customers as a result. Ambition could mean significantly reducing cost and improving efficiency beyond the frontier for the sector, or significantly improving service for customers beyond the established frontier for the sector at efficient cost. Another example of ambition may be where a company's plan demonstrates a clear understanding of the risks facing service delivery, complemented with an exceptional approach for managing and mitigating those risks in a cost-efficient way.

We will test ambition on a relative basis across companies. A company will need to demonstrate that it is stretching itself beyond the industry norms in areas that are important to customers. It will also need to demonstrate that its plan is achievable in light of past performance.

Innovation is a key theme for PR19. It underpins the other three themes of customer service, affordability and long-term resilience, and we expect innovation to be embedded across company business plans at PR19.

At PR14 we created a framework that supports innovation through the total expenditure (totex) and outcome delivery incentive (ODI) mechanisms, providing companies with a step-change in their freedom to navigate a range of solutions to deliver better services for customers at efficient costs. Water companies have demonstrated pockets of good practice in terms of innovation, as we have seen in catchment management approaches to improving water quality in a practical, affordable and sustainable way. Nonetheless, more could be done by individual companies and by the sector as a whole.

At PR19 we incorporate innovation more explicitly into the regulatory framework, including through the initial assessment of business plans. We elaborate on our wider approach to innovation in our separate publication: 'driving innovation in water'.

Meaningful innovation leads to new benefits for customers, companies and the environment. It contributes to resilience through better management of risks and opportunities. Innovation will be embedded in the culture, the processes and the people of the company. It will not be limited to the use of new technology or new services. It could involve, for example:

- new ways of encouraging customer participation in service design and provision;
- new and more collaborative ways of working with customers, communities, the supply chain and other stakeholders;
- redesign of business processes utilising technological development to deliver better outcomes at lower costs; and
- further development of markets and new catchment management approaches.

High levels of innovation would lead to a step change in the ways in which companies deliver their services. For a plan to be ambitious, it must be innovative – the two must go hand in hand. To expand the boundaries of efficiency and delivery in the sector, companies will need to work in more innovative ways. To be classed as exceptional, an ambitious business plan must therefore show how innovative approaches create opportunities to, for example, make costs more efficient; deliver stretching outcomes performance; or produce benefits in terms of greater resilience and the environment. We also recognise that innovation in the coming control period may also result in benefits in future control periods.

As one of our PR19 themes, innovation is embedded across test areas to help ensure that companies consider innovative solutions to deliver results. In table 2 of appendix 13 we provide some potential features of an innovative and ambitious plan within different test areas.

We will also need to be confident that there is alignment between companies' plans for innovation and their capabilities to deliver on these. So as part of our initial assessment of business plans, we will also assess companies' capacity and readiness to innovate. We consider that this will manifest itself through a company's culture which will need to embed innovation throughout the business. An organisation's culture will affect norms, values and behaviours, and for innovation can be manifested through its systems, processes and people. We expect companies' innovation strategies to be built into various elements of their plans in a similar way to resilience. This will help reinforce the importance of innovation for all companies and make innovation an integral part of their business plans. We can also consider how well companies have developed and delivered innovations in the past, where they demonstrate that their proposals acknowledge and build on this experience (both where innovations have been successful and less successful). We will use the following question for our initial assessment test.

Initial assessment test on innovation ability and readiness

How well does the company's business plan demonstrate that it has the right culture for innovation which enables it, through its systems, processes and people, to deliver results for customers and the environment from innovation?

14.5 Categories

Companies' performance against the above characteristics will determine how the business plans are categorised. At PR19, we will use four categories, which will reflect the quality, ambition and innovation of the plan.

Exceptional status will be awarded to plans that are high quality with significant ambition and innovation for customers and that push the boundaries of the industry and set an example for others.

Our assessment of ambition and innovation will take both absolute and relative aspects into account. We do not think it is appropriate to predetermine what level or kind of ambition or innovation would be sufficient to be assigned to the exceptional category; this would reduce the incentive for companies to stretch themselves and innovate. We have no fixed limits, but exceptional status will be achievable only by a small number of the most ambitious and innovative companies. We do not consider it necessary to give any companies exceptional status, if none is deemed to have submitted a plan sufficiently ambitious and innovative.

Fast track status will be given to plans that are high quality and where limited, minor or no intervention is required to protect customers' interests, but which are not ambitious or innovative enough to attain exceptional status. The threshold to be placed in the fast track category is high. It is an in the round assessment and we might make limited or minor interventions to the business plan.

Slow track status will be given to plans where a level of material intervention is required to protect the interests of customers. Companies may be required to resubmit parts of their business plans or to provide additional evidence.

Significant scrutiny status will be given to plans that fall well short of the required quality and where extensive material intervention is required to protect the interests of customers. Our assessment will take into account both the number of areas of concern and the extent of the concerns. This may include expecting companies to substantially rework these plans.

A plan under significant scrutiny is one which fails to give us confidence that it will deliver good outcomes for customers. The quality of data, customer engagement and assurance may be so poor that it does not provide sufficient basis for making a draft determination, without significant further work.

For example, a plan with weak evidence and justification for its performance commitments, including weak evidence of customer support, and with performance commitment levels well below stretching levels, would require significant scrutiny. Another example would be a plan which falls outside the cost thresholds for most or all price controls or well outside the cost threshold for at least one control, with no robust explanation and poorly evidenced special cost factor claims.

We expect companies to submit plans of such quality that we do not need to assign any to the significant scrutiny category at the end of our initial assessment of business plans. However, we will use this category if we see a plan that does not meet the quality necessary to achieve a higher category.

We know less about companies' businesses than they do. This asymmetry of information has an impact on our ability to assess their business plans. Therefore our starting assumption will be that all plans require significant scrutiny until shown otherwise. It is up to companies to demonstrate that they should be in a higher category.

14.6 Incentives

We want companies to produce **high-quality, ambitious and innovative** business plans which push forward the performance of the sector as a whole and allow customers, the companies and their investors to share in the value created.

The financial incentives we are providing for actual delivery of business plans, for example for totex efficiency or outcome delivery, are significantly greater than those available for submitting a high quality plan. The initial assessment of business plans works as a complement to, and in conjunction with, these delivery incentives. It further encourages companies through clear **financial**, **procedural** and **reputational** incentives to submit really stretching plans, which will in turn enable us to challenge aspects of other companies' plans, benefitting all customers and the environment.

In their responses to our draft methodology proposals, a number of respondents asked us to consider the balance of the incentives for the initial assessment of business plans. Several argued that the financial incentives for the top two categories (exceptional and fast-track) were too weak. On the other hand, one respondent considered that there should be no upfront financial benefits to the top companies or that these should be contingent on the delivery of results for customers. Some companies also considered that we should include a 'do no harm'[74] procedural incentive as otherwise the benefit of an early draft determination would be limited.

Our PR19 final methodology has been determined after fully considering the views expressed. Appendix 13 (initial assessment of business plans) sets this out in further detail.

Companies whose business plans we categorise as **exceptional** will receive:

[74] At PR14, we applied a 'do no harm' principle to enhanced companies as a procedural incentive. We offered a range of commitments to ensure enhanced companies would not be any worse off for being categorised as enhanced and receiving an earlier draft determination.

- an amount equivalent to a 20 basis points (bp) to 35bp addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60% – we will decide on the final percentage based on such factors as the level of ambition and innovation to the benefit of customers;
- procedural benefits from receiving an early draft determination in March or April 2019, reflecting the fact that they don't require a level of material intervention to protect customers' interests and helping to accelerate the delivery of company plans; and
- reputational rewards from being – and being seen as – exceptional compared to their peers, and from the communication opportunities this will offer.

Those companies whose plans we categorise as **fast track** will receive:

- an amount equivalent to a 10 basis points (bp) addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60%;
- procedural benefits from receiving an early draft determination in March or April 2019, reflecting the fact that they don't require a level of material intervention to protect customers' interests and helping to accelerate the delivery of company plans; and
- reputational rewards from being – and being seen as – a fast-tracked company.

It will be up to companies to decide whether to take this incentive payment as additional revenue or as an uplift to the regulatory capital value (RCV). In either case, companies will need to decide how to split this reward between the water network plus, water resources and, where relevant, wastewater network plus controls. To avoid distorting competition in the bioresources market, we will not allocate any of this incentive payment to the bioresources RCV or revenue.

The procedural benefit of an early draft determination will be strengthened by the application of an **early certainty principle** to specified components of the draft determination related to outcomes and the cost allowance. Table 14.1 shows which components of the draft determination the early certainty principle will apply to.

Table 14.1 Specified components of the early certainty principle

	Costs	
1	Cost adjustment claims	We will not apply any change to our draft determination decision related to the company's own cost claims.
	Outcomes	
2	Bespoke performance commitment (PC) levels	We will not apply any changes to bespoke performance commitment levels
3	ODI outperformance or underperformance payment rates	We will not apply any changes to ODI outperformance and underperformance payment rates. However, to protect customers, the early certainty principle will not apply if a company's outperformance payment or underperformance penalty rate was the highest or lowest, respectively, of all the companies. This is to protect customers against a company which has proposed outlier ODI rates.
4	Financial ODIs	We will not make any changes to the number of financial ODIs.
5	ODI deadbands, caps and collars[75]	We will not make any changes to the design of ODIs in terms of deadbands, caps and collars.

We will retain the flexibility to make changes to the specified components of outcomes and costs, in exceptional circumstances, such as where there have been:

- errors (by us or the company), including any misreporting to Ofwat;
- changes to legal obligations; or
- new information about the actions required to meet current legal obligations.

We will retain this flexibility in order to maintain the integrity of the regulatory framework, but we will take a proportionate approach when deciding whether to make any changes if such exceptional circumstances arise.

Other components will remain subject to change between the draft determination and final determination as appropriate, including by reference to reconciliations

[75] Deadbands are a specified range of performance levels where the ODI payment or penalty is zero. Caps and collars are the limits on payments and penalties for an ODI, respectively. For more details, see appendix 2 (delivering outcomes for customers).

based on 2018-2019 actual data which we will receive between the early draft determination and final determination.

The early certainty principle also does not apply to the weighted average cost of capital (WACC) or to retail margins. This allows us to make sure these are set at the efficient level for all companies in the final determinations.

The early certainty principle will provide **symmetrical certainty**. This means that we will make neither upward nor downward adjustments to those components specified as covered by the early certainty principle (unless in those exceptional circumstances stated above). We consider that the certainty provided by the principle gives companies a real procedural benefit, and that this approach aligns the interests of the companies with those of their customers.

Companies will have the option to opt out of the early certainty principle if they have a preference for adjustments to the specified components to be applied after their draft determinations. Companies would need to indicate – at the time of submitting their business plan – that they want to exercise this opt-out.

This opt-out would cover all specified components. It will not be possible to opt out of some components of early certainty but not others. Because an opt-out would expose companies to all adjustments, upward as well as downward, we consider that this approach aligns the interests of the companies with those of their customers.

These financial, procedural and reputational incentives for exceptional and fast-track plans are intended to recognise and encourage the development of plans that will ultimately benefit all customers in the sector by pushing the boundaries of efficiency and delivery.

Companies whose plans we categorise as **slow track** require a level of intervention and may be required to resubmit parts of their business plans or to provide additional evidence. These companies will receive draft determinations in July 2019 and will therefore not benefit from an earlier draft determination. There are also reputational disincentives associated with this status.

Companies with business plans that fall in the **significant scrutiny** category may need to resubmit business plans to address the material concerns we have identified and be subject to increased ongoing regulatory scrutiny and assurance. They will receive their draft determinations in July 2019 and will not benefit from an earlier draft determination. We may put extra measures in place to protect customers from risks associated with poor business planning. These companies may also be subject to strengthened reporting requirements.

In addition to these procedural disincentives, companies in significant scrutiny will receive reduced cost sharing rates and potentially capped ODI outperformance payments. We will set a cost sharing rate of 75% for underperformance and 25% for outperformance – as outlined in chapter 9 (securing cost efficiency). This means that significant scrutiny companies will keep only 25% of their cost outperformance but bear 75% of cost underperformance. We will also consider capping, including down to zero, the ODI outperformance payments on bespoke performance commitments. This is because for bespoke performance commitments data quality will depend on information provided in the significant scrutiny company's business plan, in which we are likely to have identified significant issues. We will also consider capping the ODI outperformance payments for the common performance commitments for a company categorised as being under significant scrutiny. However, a cap is less likely to be appropriate for these ODIs, given our ability to test the degree of stretch in the performance commitment levels across companies' plans

There are also clear reputational disincentives associated with plans being assessed into the significant scrutiny category. Figure 14.2 summarises the incentives associated with the initial assessment of business plans categories.

Figure 14.2 Summary of incentives for the initial assessment of business plans

Reputational	Procedural incentives	Financial incentives
Exceptional		
Published performance relative to peers and public recognition	Early draft determination (March or April 2019) with early certainty principle applied to specified component of costs and outcomes. Companies can opt out of the early certainty principle.	An amount equivalent to a 20 basis points (bp) to 35bp addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60%. Standard cost sharing rates.
Fast track		
Published performance relative to peers	Early draft determination (March or April 2019) with early certainty principle applied to specified component of costs and outcomes. Companies can opt out of the early certainty principle.	An amount equivalent to a 10 basis points (bps) addition to the return on regulated equity (RoRE) over the whole price review period, based on the notional gearing of 60%. Standard cost sharing rates.
Slow track		
Published performance relative to peers	Draft determination in July 2019. Business plans will require a level of material intervention to protect the interests of customers. These companies may be required to resubmit some of their business plans or to provide additional evidence.	Standard cost sharing rates.
Significant scrutiny		
Published performance relative to peers	Draft determination in July 2019. Business plans will require extensive material intervention to protect the interests of customers. These companies may need to substantially rework their plans. Companies whose plans fall into this category will require increased ongoing regulatory scrutiny and assurance. We may put extra measures in place to protect customers from risks associated with poor business planning. These companies may also be subject to strengthened reporting requirements.	Reduced cost sharing rates. Companies will share only 25% of cost outperformance and bear 75% of cost underperformance Potential cap on ODI outperformance payments.

15. Next steps

15.1 Introduction

In this chapter, we outline the next steps in the PR19 process. The remainder of this chapter is structured as follows:

- future engagement with stakeholders (section 15.2);
- PR19 true up and incentive models (section 15.3);
- timeline for the submission and assessment of business plans (section 15.4); and
- key PR19 milestones (section 15.5).

15.2 Future engagement with stakeholders

In developing our PR19 final methodology, we have valued the extensive input and involvement from water companies and other stakeholders. Following publication of the PR19 final methodology, and leading up to the price review itself, the way in which we engage with stakeholders will need to change. This is because we need to ensure that all stakeholders have access to the same information, as companies finalise their business plans for submission in September 2018.

We will publish more details on our engagement approach for PR19 early in 2018. We intend to build on the approach we adopted at the last price review, where the transparency, openness and consistency it promoted was welcomed by water companies and other stakeholders.

We will run a queries process for specific questions about the methodology. Stakeholders should direct queries for clarification, corrections or further explanation in relation to our methodology to PR19@ofwat.gsi.gov.uk. If a query is raised that we think is relevant to other stakeholders then we will publish the query and our response on our website.

We do not want to make any further changes to the definitions and guidance beyond April 2018. If companies have any final queries, in particular related to any changes made to the updated financial model or data tables, these should be provided by the end of March 2018.There are also specific areas of policy that require further targeted engagement with stakeholders in 2018. For example, on customer engagement we intend to meet all 17 water companies between January and March 2018 to get a better understanding of their approaches to customer engagement for

PR19. We have invited the chairs of the customer challenge groups (CCGs) to these meetings.

Following publication of our draft methodology proposals in July 2017, we provided CCGs with a draft 'aide memoire' to give further clarity on their role in relation to our proposals. We will update the draft aide memoire to reflect the decisions set out in our PR19 final methodology and publish it in early 2018.

In relation to outcomes, we propose the following engagement in early 2018:

- hold a workshop on the abstraction incentive mechanism;
- hold working groups to develop the pilots for the customer measure of experience (C-MeX) and developer services measure of experience (D-MeX);
- meet with water companies collectively to discuss reconciling leakage performance commitments; and
- work with companies and other stakeholders to finalise consistent definitions for those of the 14 common performance commitments where the definition is not yet complete, including through a joint Ofwat-Water UK project on seven of them.

15.3 PR19 true up and incentive models

We intend to provide further details on the calculations of true up adjustments and incentive mechanisms for PR19. The following models are planned for publication in early 2018. We may publish further models in due course.

Figure 15.1 PR19 True up and incentive models to be published

Ref	Model description
1	Bioresources forecasting incentive
2	Bioresources modified revenue calculator
3	Bioresources in-period revenue correction
4	Revenue forecasting incentive (Network plus and water resources)
5	PR19 Water trading incentive
6	Developer services incentive

15.4 Timeline for the submission and assessment of business plans

Companies will be required to submit business plans by 3 September 2018. We want companies to get it right first time and put forward the best plan for their customers at the point of submission, thereby also increasing the efficiency of the price review process.

After we have received the business plans, we will carry out an initial review and submit clarification queries to companies. After this short period, we will limit the interaction between Ofwat and water companies about business plans until we have reached our decision about the initial assessment of business plans. This will allow us to meet the tight timelines of the process.

Other than on points of clarification, the business plans submitted will be considered to be the final version for the purposes of the initial assessment of plans and the associated categorisation only. Plans may require revisions or rework after this in order for us to set our draft determination, as described in section 14.5, for slow-track and significant scrutiny categories in particular.

We invite companies to present their business plans after submitting them. These presentations will offer an opportunity for the company to set out its business plan. We would expect at least one company Non-Executive Director to be present as well. Ofwat, including Ofwat Board members, would be represented at a senior level in every meeting.

In early 2018, we will publish a pro forma for companies to complete, which draws together high level information and key metrics from the business plan and which explains the drivers behind the business plan, the key benefits for customers and the impact on customer bills. This information will also be made available to all Ofwat Board members ahead of the company presentations.

Companies are also welcome to submit a single video (no more than 5 minutes long) when they submit their business plans, which could be used as part of the company's presentation (although the video should not substitute the presentation). Any slides presented on the day, and any videos submitted, will be made available to all Ofwat Board members. We will also publish these after all company presentations have been held.

We expect any presentations to take place shortly after the submission of business plans. The sessions would be limited to one hour: a presentation of no more than 15 minutes followed by up to 45 minutes for Ofwat to ask questions. We will write to companies in 2018 to finalise these details.

Company presentations and any videos submitted will not form part of the initial assessment of business plans process.

In late January 2019 we intend to announce the outcome of our assessment, including the category to which we have assigned each business plan.

Companies who submit high quality business plans (and are assessed as exceptional or fast-track) will receive the procedural benefit of an early draft determination in March/April 2019We will announce, in January 2019, whether these companies' draft determinations will be published in March or in April 2019; this decision will depend on the number of exceptional and fast-track business plans.

Companies whose business plans are assessed as slow-track or significant scrutiny will receive their draft determinations in July 2019. In chapter 14 (the initial assessment of business plans: securing high quality, ambition and innovation), we outline the process we will use to assess companies' business plans.

15.5 Key PR19 milestones

In figure 15.2, below, we summarise the key milestones in the PR19 process over the two year period from now until the publication of our final determinations in December 2019.

Figure 15.2 PR19 milestones[76]

2017	
13 December	Ofwat publishes PR19 final methodology.
2018	
January	Ofwat publishes feedback on company bioresources RCV allocation proposals.
31 January	Companies propose their own allocation of historical RCV for water resources.
January / February	Companies wholly or mainly in England publish their water resources information alongside their draft WRMP.
March	Ofwat releases pilot version of the data capture system. Ofwat publishes report on the external review of the financial model and a revised model (incorporating changes recommended by the review). Companies wholly or mainly in Wales publish their water resources information alongside their draft WRMP.
30 March	Final date for issues and clarifications on the updated business plan tables and financial model
April	Ofwat publishes feedback on company water resources RCV allocation proposals.
3 May	Companies submit: • definitions of their performance commitments; and • information on their expected cost adjustment claims. Publish further revised business plan tables and financial model (if required).
May	Ofwat releases updated version of the data capture system for use with the business plan tables.
by 15 July	Companies submit: • Annual performance report; • their populated PR14 reconciliation models; and • their bioresources market activity information (and publish their 2017-18 bioresources market information on their web-sites).
3 September	Companies submit business plans to Ofwat.
September / October	Companies present their business plans to Ofwat Executive / Board. We expect any presentations to take place between 24 September 2018 and 5 October 2018.
2019	
late January	Ofwat publishes: • initial assessment of business plans; and • 2018 company monitoring framework assessment.
March/April	Ofwat publishes early draft determinations (exceptional and fast track plans).
April	Companies submit revisions to business plans (significant scrutiny and slow track).
July	Ofwat publishes draft determinations (slow track and significant scrutiny).
December	Ofwat publishes final determinations.

[76] The in-period ODI timetable for Anglian Water, Severn Trent Water and South West Water in 2018 is: 15 September 2018 – companies submit in-period ODI claims; November 2018 – Ofwat consults on their in-period ODI draft determinations; and 14 December 2018 – Ofwat issues their in-period ODI final determinations.

We have commissioned an external review of the financial model. This will take place after publication of the version issued with our PR19 final methodology. In March 2018, we plan to share an updated financial model along with the recommendations from this external review.

We note that, as we outline in chapter 12 (accounting for past delivery), companies may request a two week extension to the deadline for the submission of PR14 reconciliations if they are unable to submit these by 15 July 2018.

There are more details about early company submissions in 2018 in section 13.3.1 of chapter 13 (securing confidence and assurance).

List of acronyms

Acronym	Text
ACTS	average cost to serve
AIM	abstraction incentive mechanism
APRs	annual performance reports
CAP	competitively appointed provider
capex	capital expenditure
CAPM	capital asset pricing model
CBA	cost benefit analysis
CCGs	customer challenge groups
CCWater	the Consumer Council for Water
CMA	Competition and Markets Authority
C-MeX	the customer measure of experience
CMF	company monitoring framework
CPI	consumer price index
CPIH	consumer prices index including housing costs
CSO	combined sewer overflow
D-MeX	the developer services measure of experience
DPC	direct procurement for customers
DWI	Drinking Water Inspectorate
EA	Environment Agency
EPA	Environmental Performance Assessment
FAST	The FAST(Flexible, Appropriate, Structured & Transparent) standard in financial modelling
LTVS	long-term financial viability statements
MOSL	market operator services limited
NAO	National Audit Office
NAVs	new appointments and variations
NEP	national environment programme
NPS	net promoter score
NPV	net present value
NRW	National Resources Wales
ODI	outcome delivery incentive
ONS	Office for National Statistics

Acronym	Text
opex	operational expenditure
PAYG	pay as you go
PC	Performance commitment
PoMs	programme of measures
PR09	the 2009 price review
PR14	the 2014 price review
PR16	the 2016 price review
PR19	the 2019 price review
PR24	the 2024 price review
RAG	regulatory accounting guideline
RBMPs	river basin management plans
RCV	regulatory capital value
RoRE	the return on regulated equity
RPI	retail price index
SDB	supply-demand balance
SELL	sustainable economic level of leakage
SIM	service incentive mechanism
SIPR	specified infrastructure projects regulations
SLOs	self-lay organisations
SMC	strategic management consultants
STW	sewage treatment works
SuDs	sustainable urban drainage
TDS	tonnes dry solids
TMR	total market return
totex	total expenditure
TTT	Thames Tideway Tunnel
WTW	wastewater treatment works
UKCSI	UK customer satisfaction index
UKSA	UK Statistics Authority
WACC	weighted average cost of capital
WaSCs	water and sewerage companies
WFD	Water Framework Directive
WINEP	water industry national environment programme
WoCs	water only companies

Acronym	Text
WRMPs	water resources management plans
WRZ	water resource zone
WTP	willingness to pay
WWRAG	Water and Wastewater Resilience Action Group

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales. Our vision is to be a trusted and respected regulator, working at the leading edge, challenging ourselves and others to build trust and confidence in water.

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Resilience in the round

Building resilience for the future
#resilienceintheround

Ofwat

Resilient, reliable and sustainable water and wastewater services are essential for people, for the economy, and for the environment.

Resilience is the ability to cope with, and recover from, disruption and anticipate trends and variability in order to maintain services for people and protect the natural environment now and in the future.

Though resilience has always been an important issue for customers and the sector, the nature, awareness of and tolerance to future threats is changing. As a result, resilience has moved up the political and social agenda. This document sets out how water companies might respond to the challenge of developing a coherent approach to resilience in the round.

Future threats to the sector are likely to increase in frequency, interconnectivity and unpredictably (World Economic Forum Global Risk Report 2017). These range from climate change and extreme weather events, to cyber security threats and a rapidly changing labour market. They demand an integrated and intelligent response. So it is right that resilience should be at the core of how the sector plans to deliver its services to customers. And, just as the threats evolve, so do customers' expectations; customer tolerance of service failures is likely to continue to decline.

Resilience in the round is what matters to customers and is a core concept for Ofwat. In order to manage resilience in this more complex and less predictable world, companies will need to see the bigger picture if they are to deliver against customer expectations – linking corporate, financial and operational elements together with customers at the heart.

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This document provides water companies and others with food for thought on what resilience in the round might look like.

The dynamic nature of the threats facing the sector means that achieving resilience presents new challenges.

Companies will need to exploit new technologies and new ideas, as well as the existing tools available to them, to design innovative approaches to meet these challenges head on.

This document provides water companies and others with food for thought on what resilience in the round might look like in practice. It highlights a selection of case studies from the water sector and beyond, to illustrate good practice. But the sector is still on a journey – there are, so far, few solid examples of a truly joined up approach to resilience.

We are also, today, publishing a Targeted Review of Asset Health, conducted for Ofwat by CH2M, which highlights a series of challenges relevant to the themes explored in this document, including the need to take an integrated, long-term view of asset health, and the scope for greater innovation in the sector.

We hope companies are inspired by these examples and will consider a wide range of approaches which can be brought together to enhance resilience for the benefit of their customers.

John Russell
Senior Director, Strategy and Planning

Resilient water and wastewater services continue to be a priority for customers, governments and wider stakeholders.

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Resilience in context

The world the water sector operates in is changing rapidly. The scale, nature and complexity of new and emerging challenges will require novel and innovative responses to deliver the levels of resilience customers want and can afford now and in the long term.

Acute challenges such as cyber-attacks and extreme weather events, together with future pressures, such as climate change, population growth, and economic and social change, may increase in intensity and unpredictability. This will further emphasise the importance of resilience.

Resilient water and wastewater services have always been an important focus for companies and for Ofwat. It will continue to be a priority for customers, society, governments and wider stakeholders. This focus reflects the risks if resilience isn't achieved, including destructive and disruptive asset failures and an inability to cope with floods, droughts, and other natural hazards. And as the World Bank report in our case study below highlights, getting resilience right can provide value for society and the economy well beyond the immediate benefits to service delivery.

The Water Act 2014 gave Ofwat an additional primary duty to further the long term resilience of water and wastewater services. In the last price review, Ofwat agreed a number of successful resilience outcomes, such as the delivery of the Birmingham Resilience project.

The Welsh Government's Water Strategy for Wales sets out the importance of the water sector's contribution to achieving the resilience of ecosystems. And the Welsh Government has led efforts to test the implementation of payment for ecosystem services markets.

The UK Government's draft strategic priorities and Welsh Government policies and draft objectives both emphasise the importance of resilience. The UK Government has also made clear that the resilience of the UK's water resources infrastructure is a key priority in its approach to water sector policy.

In 2015, we established an independent 'task and finish' group to consider what resilience means for the water sector. We set out our response to the group's work in December 2015 in 'Towards Resilience'. In November 2016 we consulted on how to better incentivise resilience through our outcomes framework and put forward a set of principles for resilience planning.

In our 2019 price review methodology consultation, published in July 2017, we set out our draft resilience tests for the initial assessment of business plans and a further iteration of resilience planning principles.

The concept of "resilience in the round" is at the core of how companies should approach this issue. This includes:

- **Corporate resilience:** the ability of an organisation's governance, accountability and assurance processes to help avoid, cope with and recover from, disruption of all types; and to anticipate trends and variability in its business operations.
- **Financial resilience:** an organisation's ability to avoid, cope with and recover from, disruption to its finances.
- **Operational resilience:** the ability of an organisation's infrastructure, and the skills to run that infrastructure, to avoid, cope with and recover from, disruption in its performance.

This document sets out some ways companies might respond to the resilience challenge. The themes explored are inspired by the resilience planning principles, which should guide companies' own approach to resilience planning.

This is not a 'rule book' for companies to follow. We want water companies and others to use this document as food for thought as they develop their own innovative ideas and solutions for resilience.

Resilience in context

In 2015 "Unlocking the 'Triple Dividend' of Resilience" was published by the World Bank in the context of economic losses from natural disasters reaching $150-$200 billion globally each year, with devastating impacts on the achievement of international development goals. The study aimed to give both governments and other organisations better insight into the wider financial and social benefits of good resilience planning. It highlighted the global trend of increasing disaster and weather-related losses. However, the main focus of the report was how the value of resilience has three key components, which can be considered in understanding the benefits of good resilience planning:

- **Avoiding losses** – this benefit tends to be the primary motivation for resilience action.
- **Stimulating economic activity** – how good resilience encourages economic growth by making investors confident that risks and resilience are managed well (e.g. confidence in water services is essential for investment in many production activities).
- **Development co-benefits** – the added value of good resilience, particularly how more resilient systems often deliver ongoing service improvements (e.g. strengthening natural capital benefits such as recreation and food production).

It will be vital for companies to have a better understanding of the interrelationships and interdependencies across the systems underpinning their service delivery.

Systems thinking

Water and wastewater services are made up of a complex set of operational, corporate, and financial systems. They are also linked with a wide range of other systems. These include the broader natural environment, social systems, the economy and agriculture. These macro systems also operate in association with infrastructure systems such as communications and energy networks and highways drainage. Impacts on any of these related systems can impact water and wastewater service delivery.

As future pressures converge and increase in intensity, they are likely to increase interactions between these different systems. The legal, constitutional, societal and economic context water companies operate in, such as the nature of markets and the impact of the UK's exit from the European Union, will also continue to evolve. All these unpredictable elements will bring additional complexity and new challenges.

In this context, it will be vital for companies to have a better understanding of the interrelationships and interdependences across the systems underpinning their service delivery (see case study below on the Systems-of-Systems approach highlighting both risks and opportunities). Water companies typically have a good understanding of individual operational and corporate systems. But companies will need to adopt a more truly integrated view taking full account of the interactions between disparate areas of their business. In short, companies need to adopt a systems thinking mindset at all levels of their businesses.

By taking a more systems based approach, companies will be able to see the bigger picture, and benefits are likely to include:

- **Better customer engagement** by helping customers understand the wider context of resilience, e.g. the links between energy security and water security.

- **Better planning** by understanding system pinch points e.g. bridges vulnerable to flooding which also carry key water and communications infrastructure. Or potential weaknesses in company supply chains which, if well understood, can be better managed.

- **Better value options** to deliver for long term resilience, e.g. catchment management schemes using environmental systems to deliver long term resilience outcomes, technology solutions such as remote sensing and control, big data and analysis, and potentially artificial intelligence as well as the ability to reveal commercial opportunities.

Resilience in the round is built upon the concept of interdependencies between related systems with customers at the heart of it all. To deliver against expectations, companies will need to demonstrate a sophisticated understanding of these interactions. This will enable them to deal with the causes of future threats, rather than just the symptoms, through adopting a stronger systems based approach.

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Systems thinking

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100 Resilient Cities and New York

100 Resilient Cities (100RC) is an innovative global network pioneered by the Rockefeller Foundation to help cities around the world become more resilient to 21st century challenges. The basis of the 100RC approach is to look at the system as a whole and include the physical, social, and economic interrelationships and interdependencies together.

The approach looks not just at shocks (superstorms, blackouts, heat waves, and other acute events) but also stresses that weaken the fabric of a city on a day-to-day or cyclical basis (aging infrastructure, unemployment, public transportation, inequality etc.). By addressing both the shocks and the stresses in a holistic manner, cities are better able to deliver basic functions in both good times and bad.

New York City was in the first wave of cities to join the 100RC network in 2013. Using the 100RC framework, New York City took a systems level approach in terms of assessing both risks and outcomes in developing its resilience strategy. By taking a more comprehensive systems approach New York City now has an integrated plan bringing together economic growth, societal health, sustainability and long term resilience.
http://www.100resilientcities.org/

The Future of National Infrastructure: A System-of-Systems Approach

A 2015 study from the Infrastructure Transitions Research Committee infrastructure research consortium sets out the value of a systems based approach to making choices about future infrastructure (energy, transport, water, waste and ICT). It illustrates how water and wastewater services do not exist in isolation and how interconnected systems and networks can deliver better outcomes for resilience and sustainability. They can provide a conceptual framework and methodologies for modelling and evaluating systems-of-systems.

Royal Society: Resilience to Extreme Weather

In 2015 the Royal Society considered resilience to extreme weather. It made a range of recommendations for how policy makers and others should integrate systems approaches to responding to extreme weather events. The report set out the need for better understanding of the interrelationships and interdependences both within and across whole systems. It observed that:

"Systems thinking is... central to the planning, design and maintenance of resilient infrastructure. It involves taking a holistic approach and recognising that vulnerabilities or failure in one sector can affect the whole system, potentially leading to a cascade of failures. These knock-on effects are due to interdependencies in the system, which can be exposed by stresses and shocks such as extreme events."

We want to see companies embracing opportunities to ensure the natural environment can continue to support long-term resilience.

The environmental foundation for a resilient sector

The natural environment is at the core of water and wastewater service delivery. Managed well, this natural system underpins resilience. But managed poorly, it will exacerbate many of today's threats and introduce new threats in the future. Companies should see the environment not simply as a resource to be exploited, but as a key enabler of long term, best value, resilience. We want to see companies embracing opportunities to ensure the natural environment can continue to support long-term resilience.

The water environment is a finite, but largely renewable, natural resource for water and wastewater services. But changes in the natural environment, such as the effects of climate change, or declining health of river catchments, can result in instability and fragility.

Upstream or catchment management (including Sustainable Urban Drainage Systems), water demand management

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and environmental market approaches should be assessed and implemented wherever they provide best value. In particular, we want companies to continue to work with other stakeholders, in partnership, at all levels. Companies should make more use of innovative market-based mechanisms to achieve environmental resilience where they deliver best value for customers.

Water companies are an important set of stakeholders in planning for and achieving improvements to the health of catchments. We want to see companies working with others to implement a range of sustainable catchment management approaches.

At the 2014 price review, we were pleased to see the sector making some good progress on green infrastructure and catchment management. But the scale of these emerging options was generally modest.

The three case studies we have highlighted below are great examples of the types of schemes which work with the environment to deliver better, long term, resilience outcomes for customers.

Companies should now be actively seeking to adopt and develop these innovations to fully exploit their potential. Some, such as Wessex Water's EnTrade (see case study below), the Severn Trent Environmental Protection Partnership (STEPS), and Anglian Water's "Slug It Out" are notable examples. These, and other catchment management and system operation models, have the potential to offer widely applicable lessons.

The Natural Capital approach also provides an opportunity for the value of ecosystems to be better incorporated within the evaluation of resilience. In the 2019 price review business plans we are expecting companies business plans to consider their broader environmental impact. The Natural Capital approach could be incorporated into assessments of the impacts of company activities, and the effect they have on all facets of resilience in the round where appropriate.

Case Study

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The environmental foundation for a resilient sector

South West Water: Upstream thinking

South West Water's Upstream thinking project is a multi award-winning catchment management initiative. The project is pushing new boundaries on how water companies can work with the environment to deliver long term, sustainable, resilient outcomes for customers. The Upstream Thinking initiative works with a wide range of land users, such as farmers and conservation groups, to improve water quality, quantity and reduce runoff to improve key water catchments across the South West. This approach reduces the need for down-stream, end of pipe, fixed infrastructure solutions, which benefits both the environment and customers.

RainScape - Sustainable Urban Drainage Systems

Sustainable Urban Drainage Systems (SUDS) provide opportunities to deliver long term resilient drainage solutions for communities. SUDS work with natural systems and mimic natural runoff processes by reducing the flow rate into the system. Through this mechanism SUDS provide local sustainable solutions which can help reduce the need for wastewater infrastructure and reduce surface water flooding.

Dŵr Cymru Welsh Water's RainScape approach is using innovative solutions to manage the amount of surface water entering sewers. Using modern engineering materials, the RainScape project has created storage tanks beneath roads and kerbs to reduce the speed of surface flows through the catchment.

EnTrade

The use of trading platforms and market mechanisms to deliver outcomes is still relatively new in the UK water sector but holds great potential for the future. Wessex Water have developed a unique market platform, EnTrade, to reduce pollution in Poole Harbour. The scheme provides a market platform delivering water quality resilience by paying farmers, via reverse auction, to reduce their application of chemicals to the land in the catchment. This approach avoids the need for costly, less flexible fixed water treatment infrastructure at the bottom of the catchment. EnTrade is a recent winner of the Institute of Water's Innovation Prize.

Resilience is important for customers and companies will need to ensure customers are actively involved in determining the levels of resilience they receive.

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Customers at the heart of resilience

Resilience matters because it is important to customers, and developing solutions to resilience challenges requires a sound understanding of customers' preferences.

In our recent report, Tapped In, we highlighted our ambition for customers to be seen not simply as passive recipients of water and wastewater services but as active participants with a real impact on the services they pay for. And as the case studies below demonstrate, customers can play an important role in delivering more resilient services.

Resilience is important for customers and companies will need to ensure customers are actively involved in determining the levels of resilience they receive.

Engaging customers in decisions about resilience - particularly resilience to low probability, long-term, but high impact events, can be challenging, as reflected in the Targeted Review of Asset Health conducted for Ofwat by CH2M. For example, insights from behavioural science tell us that initially customers are typically better at assessing circumstances that affect them today rather than tomorrow. Nevertheless, these challenges can be overcome with innovative approaches. Companies should inform customers of threats to resilience in a nuanced and balanced way, and company plans to mitigate against those threats should be supported by evidence of clear value to customers.

We have encouraged companies to change how they engage with customers on resilience issues in a number of ways, for example setting out our expectations for transparent community-led engagement being part of the planning process in the Tapped In report. Customer Challenge Groups also play a vital role in reporting on the quality of this customer engagement and how it is included in plans.

We have begun to see many companies embrace customer engagement across their business planning programmes such as Southern Water's domestic metering water efficiency campaign (winner of the Environment Agency's 2014 Chairman's Award). Companies will want to step up efforts to engage customers in determining their approaches to resilience in the round.

We will be expecting to see:

- Companies informing and **engaging with customers on resilience.** Companies should make sure their plans reflect the needs of future as well as current customers.
- **Greater customer participation which** embeds customer engagement in the design, production and delivery of their water and wastewater services. Participation techniques can help companies understand customer behaviour and preferences to improve long term resilience. The Cabinet Office's open policy toolkit provides insight into a number of innovative, yet cost effective engagement techniques. We are pleased that the sector has begun to embrace such innovative approaches and can take further inspiration from other sectors. For example, NHS "Hack days" help policy makers collaborate with experts to work together with patients to create solutions to policy problems. This type of method should be directly transferable to water companies.
- Companies **working with customers to co-create and co-deliver more resilient services.** In particular, customers have a direct role to play in informing the design of demand management options, as the case study from Belen, Costa Rica below, demonstrates.

Customers at the heart of resilience

Applying behavioural nudges in Belen, Costa Rica

Evidence from a randomised control study in Belen, Costa Rica demonstrates how water utilities can work with communities to develop targeted “nudges” to reduce water consumption. Focus groups were used to develop a range of behavioural interventions that were then tested across the municipality’s entire metered customer base.

One intervention demonstrated how using brightly-coloured stickers on water bills gives direct feedback on a customer’s water consumption in comparison to that of the average household in their neighbourhood.

Households with above average consumption in the neighbourhood received “frowny face” stickers while those below average received “smiley face” stickers.

This simple, but engaging, approach demonstrated real impacts on water consumption with an average household reduction of 3% - 6%. These findings are consistent with the effects of similar experiments conducted in other sectors in the UK, USA, and Australia.

Drought Resilience in Valencia, California

During a recent record-breaking five-year drought across much of California the state government quickly recognised the value of resilience through water demand management. By working with customers to manage the demand for water down, it was possible to conserve supplies and extend the timeframe. This is before further measures might be required, including restrictions, costly investment and environmental damage.

The Valencia Water Company pioneered a wide range of innovative initiatives with customers, such as tailored customer drought reports, enhanced information on bills, watering days and online education. As a result, between 2013 and 2015 water consumption in Valencia was reduced by 25%, meeting the toughest California state targets. This scale of water demand management represented a real resilience benefit for customers and communities both in terms of water security and customer bills.

Keep it clear – Anglian water

The majority of all pumping stations failures are the result of blocked pumps, costing £4m a year in the Anglian region alone which adds to the cost of water bills. The normal price range for call out for private drainage clearance is between £60 and £240.

Anglian targeted the root of the problems in their area - nappies, building rubble and food waste. It tested and piloted a number of initiatives using personal mailers, targeting key customer groups, including 35,000 local children through its “Keep It Clear Mad Science Shows”. It also improved customer participation by partnering with NGOs, retailers/ manufacturers and local government enforcement teams to roll out flushable test guidelines.

Anglian found a 20% reduction in blockages in locations such as holiday resorts where the campaign was rolled out.

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PR19 provides a clear challenge for companies to develop Business Plans which truly embrace planning for resilience in the round.

Resilience planning

Planning processes are already well embedded in the water sector. But these processes, though increasingly long-term in nature, are typically focused on risk mitigation, rather than planning for resilience in the round. Risk management and resilience require different approaches, and we expect companies will need to adapt their approach to corporate, financial and operational planning to achieve resilience in an ever-changing world.

At the 2019 price review, part of the initial assessment of company business plans will be how companies demonstrate an appropriate planning approach to resilience management.

To plan effectively for resilience, companies will need to focus less on discrete elements of service delivery, such as financial planning, water resources, network operation and wastewater. They will need to shift towards a more integrated approach reflecting the interdependencies between these systems. But more than this, planning processes will also need to reflect a deeper understanding of interdependencies with other sectors and systems, such as the energy network, the labour market and supply of critical skills. Companies will need to have an increasingly sophisticated understanding of how these various internal systems interact with the supply chain and other organisations to impact on the resilience of local communities as well as the retail market.

The shift from planning to mitigate specific risks to managing cross-cutting resilience requires a more integrated approach to planning, to strengthen networks of services and functions, and to enable effective monitoring of resilience across the board.

Companies will need to put in place mechanisms to respond to new and emerging threats, some of which, such as cyber-security threats, are evolving rapidly. And planning processes will need to accommodate considerable uncertainty in the way threats evolve and affect their businesses. Examples such as extreme weather threats, population movement and the effects of technology on consumer behaviour present clear challenges which companies will need to consider carefully.

Companies should explore and embrace national, international, and multi-sectoral best practice in planning. These include new and emerging planning techniques able to incorporate complexity and uncertainty into planning at an early stage. The two regional water resource groups (Water Resources South East and Water Resources East) are great examples of how advanced decision support systems can be used to identify better outcomes for best value, long term, resilience.

There may be opportunities for more widespread use of business continuity management (BCM) standards in the water sector. For example, few UK water companies currently hold a ISO 22301 BCM accreditation, which specifies requirements for a management system to protect against and respond to disruptive incidents. However, while such accredited processes may be useful in driving the adoption of integrated planning approaches, adoption of such standards needs to be accompanied by active management support and ongoing oversight.

Advances in technology provide clear opportunities to deliver improved efficiency, better service and enhanced resilience. But as companies embrace new technologies, they will also need to carefully plan to ensure they have access to the right skills and workforce capacity. The Energy and Utilities Skills Strategy case study below highlights good workforce planning and its essential role in the delivery of resilient water and wastewater services.

The 2019 price review provides a clear challenge for companies to develop business plans which truly embrace planning for resilience in the round. The combination of emerging acute risks and a clear focus on long term resilience, as highlighted by the Targeted Review of Asset Health conducted by CH2M highlights, means that the planning landscape is getting more complex. So companies must rise to this challenge and adapt and evolve their approaches with creativity, rigour, and imagination.

Resilience planning

Hunter Water, Australia, Critical Stage of Future Water Planning

Hunter Water Corporation (HWC), in Australia, is currently at a critical point in its water planning. It has a 20 year window before demands exceed supply capacity. HWC has set itself the goal of adding an extra 10 years to this timeframe. This will give them a window-of-opportunity to explore new solutions to offset the need for significant new fixed infrastructure solutions. They are taking an adaptive pathways approach to planning to help them understand key decision points and create additional opportunities in the planning process.

In the next 10 years, the company believes, technology will have advanced to enable potential new approaches, such as intelligent homes, greater customer choice and smarter infrastructure systems to be considered more fully. HWC has recognised the value of not investing too early in new water infrastructure that locks in substantial resources to large-scale solutions that may prove redundant because of changes in technologies and customer behaviours.

Energy & Utilities Skills Partnership

Energy & Utilities Skills Partnership is an initiative bringing together sector leaders from across England, Wales, Scotland and Northern Ireland, to find ways to ensure effective planning for a resilient, skilled and sustainable workforce. The Council of 29 Chief Executives has published the first ever **strategic workforce renewal and skills strategy for the UK utility sector.** It pursues three overarching strategic priorities (recruitment, investment in skills and targeted actions on skills) and provides a new foundation on which people and skills resilience can be based against existing and emerging UK policy priorities. Active measures to manage the future supply of skills needed to support innovation and new technologies are likely to be an important part of securing resilient operational and corporate services.

Smart resilience

New, innovative, "smart" approaches to delivering long term resilience will be required.

Just as increasing uncertainty and complexity implies the need for better planning for resilience, the same forces mean new, innovative, "smart" approaches to delivering long term resilience will be required.

The interventions delivering best value resilience outcomes are likely to be different to those effectively addressing individual risks. A smart approach to resilience needs a broader perspective, not only in terms of reducing the chance of threats but also improving the ability to cope and recover when they occur.

The water sector has historically invested in options which enhance capacity, especially operational capacity. Though additional capacity has an important role in delivering resilience against some threats, we now expect to see companies looking at a wider set of factors in order to deliver "smarter" options for the future. These factors are likely to include:

- **Valuing options which are scalable, adaptable and can be rolled out incrementally,** to manage uncertainty without locking a company into fixed options which may subsequently not provide best value in the long term. For example, some demand management interventions can be scaled up and down in response to both short term and long term pressures.

- **Addressing multiple threats through a single intervention.** For example, enhancing network connectivity to reduce the number of customers reliant a single source of supply. This type of approach can provide water supply resilience to multiple threats such as outages, drought and contamination.

- **Recognising that any intervention will have its own embedded vulnerabilities** to future threats. Understanding the vulnerabilities of option types will be critical to planning respective roles in delivering the planned level of resilience. For example, water transfers between areas of surplus and deficit can be a good options but might be vulnerable to wider scale drought impacts and/or contamination.

- **Accepting that a mixed set of options types might provide greater resilience in the face uncertainty.** Our case study for long term climate change management in Perth, Western Australia, shows the value in reducing reliance on a single resource type. The adoption of new technologies carry many important benefits, but systemic overreliance on a single technology may present a resilience risk. At the same time, manual backup systems may be less prone to failure or be better protected against emerging threats such as cyber-attacks.

In addition, the government's framework for resilience planning, Keeping the Country Running – natural hazards and infrastructure provides a useful outline of types of solutions to be considered in the water and wastewater sector.

Companies must be prepared to innovate in their thinking on how to deliver solutions, as highlighted in the Targeted Review of Asset Health conducted by CH2M, which points out that innovation in other sectors is considerably greater than that in the water sector. Collaborating with partners in other sectors and the supply chain with similar or shared objectives, but different types of expertise, may help deliver better overall value for money for customers. We have already begun to see some companies developing an innovation mind set. But we want companies to embed systemic models which create truly innovative approaches to operations but also to customer service and to corporate processes and practices. These approaches need to cover not only resistance to interruptions and failures, but also response and recovery. This includes companies considering how they can work with local partners to understand the impacts of service disruptions and interactions with other wider services. This will build integrated partnerships based on a sound mutual understanding of each others' concerns. This is likely to lead to companies needing to commit to, and to measure, recovery performance levels.

Smart resilience

Californian Reservoir Protection

In 2015, after four years of relentless drought, California was facing difficult choices about how to safeguard water supplies. In Los Angeles, city officials came up with a new, innovative, sustainable and cost effective solution - they used millions of cheap plastic (recycled) balls which float on and cover the entire surface of reservoirs. These plastic balls significantly reduce the amount of sunlight reaching the water and protect against algae growth (maintaining and enhancing water quality) and reduce evaporative losses.

Perth, Western Australia

The Water Corporation in Perth, Australia, historically had a high reliance on reservoir storage, at around 90% of supply. From the 1970s onwards the inflows to existing reservoirs slowly reduced as the climate shifted. Rather than simply build more reservoirs, which had previously been the favoured option, in 1980s and 1990s the Water Corporation took the decision to develop a mix of option types to provide resilience. Today the water supply for Perth is comprised of reservoirs (<10%) and a mix of groundwater, desalination and now water reuse via groundwater – all in combination with demand management. This mix of option types, each with their own individual vulnerabilities, provide Perth with greater resilience than reliance on a single option type.

Heathrow Winter Resilience

Following the severe weather at Heathrow in December 2010 BAA, which then owned the airport, commissioned the Heathrow Winter Resilience Enquiry. The review made a number of important recommendations on how BAA could learn lessons to improve Heathrow's resilience to disruption in order to improve passenger welfare and experience.

In response, as part of its 2011 Winter Resilience Program, Heathrow led the joint development, with airlines and other stakeholders, of a passenger welfare charter that clearly set out common ambitions to support passengers at times of disruption. The charter was accompanied by clear roles and responsibilities for both airlines and the airport. Heathrow also launched a formal Reservist Program – over 900 non-operational airport staff trained in passenger assistance roles ready to be deployed during both disruptive incidents and peak travel periods.

Developing meaningful methods to measure and monitor resilience should be an important factor in achieving resilience in the round for the long term.

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Monitoring and measuring resilience

The ability to set a baseline and then measure and monitor performance is a pre-requisite for achieving sustained improvements in outcomes. So developing meaningful methods to measure and monitor resilience should be an important factor in achieving resilience in the round for the long term.

We have set out a clear expectation that as part of the 2019 price review business plans, companies will develop their own forward looking **resilience metrics.** These metrics will need to be focused on what matters for customers. We have been pleased to see progress being made by the Task and Finish Group on Resilience Metrics working to the Water and Wastewater Resilience Action Group (WWRAG) described in the case study below. However, more is required and we expect to see the sector working in partnership to embed these metrics in business plans.

Naturally, it is a challenge to develop metrics for resilience against rarely materialising or, indeed, so far unidentified or unexperienced threats. We recognise that some forward looking metrics will need to work in combination with more traditional, backward looking, performance metrics, such as mains burst frequency or interruptions to supply, to inform operational and corporate planning.

The ability to monitor and measure resilience provides important benefits which need to be developed further. These include:

- Improving **customer engagement.** If customers are better able to understand the relative baseline resilience of the services provided by water companies they will be better placed to engage in discussions on levels of investment and costs of resilience options. At the same time, aggregate measures may obscure important information, so great care will need to be taken in developing these metrics.

- Robust monitoring of resilience will also enhance companies' ability to **plan and deliver best value resilience investment.** Being able to understand what level of resilience different types of options could provide will support good decision making. In addition, as our Asian Water Development Outlook case study below illustrates, resilience metrics can also be used to highlight relative disparities in resilience standards between regions, which can inform strategy and investment in combination.

- Once companies have agreed resilience outcomes with their customers we will expect these to be incorporated within the company's **performance monitoring plan.** This will enable customers to hold companies to account for their performance, and support the building of trust and confidence in the sector.

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Effective monitoring is also part of good corporate and financial resilience. Companies already report under the financial monitoring framework, which provides a view of their solvency, liquidity, and risk management, as well as their long-term financial viability. We also expect companies to maintain a focus on the resilience of their business. For example, their customers will be better served if their work force has the right skills to meet future challenges that changes in technology may bring. A company will only know this if it takes an informed view on the skills required, the threats to supply of those skills, and knows how much it needs to do to meet that requirement.

Monitoring and measuring resilience

The Asian Development Bank

Asian Water Development Outlook (AWDO), developed by the Asian Development Bank, provides one of the first national and international sets of resilience metrics – the National Water Security Index. Incorporating eastern Asia and Australasia, the AWDO has developed a methodology to compare and rate different aspects of water resilience, using common metrics, across countries.

Three outlooks have now been published in 2007, 2013 and 2016. The overall aim of each successive AWDO is to provide a better country-level snapshot of the region's water security status and provide guidance on recommended actions to improve resilience. While an index allowing for international comparisons, across a diverse range of countries, is necessarily high level in nature, the index provides a model which could be adapted for use on a range of geographical and operational levels.

Water and Wastewater Resilience Action Group – Resilience Metrics

The Water and Wastewater Resilience Action Group (WWRAG) established a Task and Finish team on resilience metrics in late 2016. This cross sector team developed a set of initial resilience metrics across water supply, wastewater, asset health and the environment. The key criteria the group used were to develop metrics which were forward looking, could be applied consistently and would be meaningful for customers.

The group developed methodologies for drought and wastewater flooding metrics and we discussed the potential for these to play a role as draft common performance commitments or performance measures in the Ofwat 2019 price review methodology consultation, published in July 2017.

Labour Availability Dashboard

Changes in the availability of skills and capacity in the labour market present potential resilience issues for water companies, supply chain and other partners. Energy & Utility Skills are now publishing a dashboard of key labour market metrics to help keep companies informed about trends in the labour market so they can plan and manage appropriately.

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The Board has a strong role to play in understanding and leading strategic thinking on resilience.

Company Boards and resilience

How a company is governed and led plays an important role in the delivery of the service it provides. A lack of strong Board leadership and governance can lead to problems with service delivery to customers and how a company addresses the longer term challenges which it faces.

Resilience is about identifying and managing the risks to the delivery of the vital public services on which customers and society depend. We expect the board of every water company to focus strongly on resilience, through strategic thinking, challenging and supporting company management to deliver, and monitoring performance.

Delivering resilience in the round in the long term may require trade-offs over a range of complex, and potentially conflicting, factors. Ownership and responsibility for meeting this challenge must rest with the Board.

In addition to Boards taking ownership of the issues, strong corporate governance is essential. We seek to support and challenge Boards and companies through a range of tools. These tools help ensure they have robust arrangements in place to deliver the services that customers and wider society require. They help shine a light on what Boards and companies are doing to ensure services are resilient and challenges them to take action to improve resilience in a timely way.

Our Board leadership, transparency and governance principles set clear expectations for companies. These include expectations about the importance of independent Chairs and Non-Executive Directors, and ensuring that Boards comprise high-calibre individuals with a diverse but relevant set of skills and experience.

A Board with the right composition of individuals and the right balance of skills can, with the right assurance processes in place, help deliver corporate resilience as well as challenge executive to deliver operational and financial resilience. The Northern Ireland Water Case Study below illustrates the risks attached to governance processes and Board leadership.

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We encourage greater transparency on the level of financial resilience within regulated water companies, including by requiring companies to produce Long-Term Financial Viability Statements (LTVS) statements in their annual performance reports, which require companies to consider a number of factors consistent with guidance produced by the Financial Reporting Council (FRC) and the UK Corporate Governance Code (September 2014).

Our company monitoring framework encourages water companies to provide high-quality assurance of the information they produce and put processes in place so that the underlying data can be trusted.

We will continue to use these tools to encourage company boards to take ownership of delivering resilience and hold them to account, where it is clear that their approach has been ineffective. But, it would be a mistake for any company Board to see resilience as something they need to do just to satisfy the regulator, they should be engaging with and delivering resilience for all their stakeholders.

For example, the Companies Act 2006 sets out certain expectations on how a company director will act, including considering the long term consequences of decisions. In doing so, they should have regard to a range of factors, many of which are aligned to fundamentals of delivering resilience in the round.

More generally, a company that understands the risks and threats it faces, and develops robust systems and processes to ensure resilience in the long term will be in a strong position to meet and exceed the expectations of all its stakeholders, including investors.

Company Boards and resilience

Northern Ireland Governance

Severe adverse weather in Northern Ireland in 2010 led to significant bursts of water mains and communication pipes across the network. Preparedness and the initial response arrangements were not sufficient in the face of a major crisis which occurred over a holiday period.

Subsequent reviews of the incident emphasised the role governance has to play in ensuring resilience to such events.

The issues identified included ensuring clarity (and appropriate scope) of senior management roles in major events. This included ensuring the right mix of relevant skills and experience within senior management, lessons from previous incidents were captured and acted upon and the importance of a corporate culture that focuses on customer service. These were reflected in a number of recommendations subsequently delivered by NI Water.

Cyber Security Tool Kit

The British Retail Consortium developed a Cyber Security Tool Kit in 2017 to build resilience against cyber security threats.

The tool kit provides comprehensive advice on cyber security issues for the retail sector but importantly incorporates the role of Board ownership and assurance well throughout. The toolkit provides a useful checklist for the Board which clearly help to define the appropriate level Board ownership appropriate to ensure cyber security resilience.

Companies must take ownership of the resilience challenge, and develop on the ideas... to develop their own innovative and integrated plans to bring resilience in the round to life.

Next steps

Resilience is important for customers and in this changing world will remain so in the future. It will continue to be a vital part of Ofwat's work.

Resilience in the round for the long term is a key focus in the 2019 price review. Just as we hope that this document will help to inform water companies' business planning for the 2019 price review and beyond, we also want it to be of use as they consider the corporate, financial, and operational challenges and opportunities presented by the full range of policy initiatives, and economic, social, and environmental trends which are emerging.

We will publish our 2019 price review Final Methodology in December 2017, which will take account of feedback we have received on the draft methodology we published in July. In September 2018, companies will submit their business plans which, subject to our scrutiny, will take effect from 2020-21 to 2024-25.

We will also be engaging with and responding to a range of UK and Welsh Government initiatives in the coming months and years which have a direct bearing on the delivery of resilience in the water and wastewater sectors:

- In line with their established policies, the UK and Welsh Government's forthcoming Strategic Policy Statements for Ofwat are both likely to emphasise the importance of long term resilience of water services and the natural environment;
- The UK Government has commenced the process to bring forward a National Policy Statement for water resources, in 2018 to ensure that the planning system facilitates delivery of nationally significant water resources infrastructure projects;
- The National Infrastructure Commission will also publish a National Infrastructure Assessment in 2018 which will identify infrastructure needs and suggestions for how these needs can be met; and
- The Welsh Government's continued delivery of its Water Strategy for Wales, within the context of its broader focus on sustainable development, places a clear emphasis on the importance of sustainable and resilient infrastructure, communities, and natural resources.

Companies have also begun the process of developing their Water Resource Management Plans. This will set out how they will provide a secure supply of water to their customers. These will take effect from 2020. As part of the 2019 price review process, we will be focusing our attention on how companies are addressing resilience of wastewater services, particularly through the Drainage Strategy Framework.

In April of this year we opened the largest retail water and wastewater market in the world. It is still early days only six months on, but we are actively monitoring its development to identify whether new services that are innovative and resilient are emerging that could offer value to all customers.

However, the next steps to be taken by companies are the most important. Companies across the sector must take ownership of the resilience challenge, and consider the ideas and examples in this document, to develop their own innovative and integrated plans to bring resilience in the round to life.

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Ofwat

Trust in water

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales. Our vision is to be a trusted and respected regulator, working at the leading edge, challenging ourselves and others to build trust and confidence in water.

September 2017

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This document is also available from our website at www.ofwat.gov.uk.

Any enquiries regarding this publication should be sent to us at mailbox@ofwat.gsi.gov.uk.

Thames Water, Response to Burst Water Mains
Policy and Performance Scrutiny Review
Project Board

Version	Date
1	22 March 2018

Project Background

The Executive received a report on 28 September 2017 from the Policy and Performance Scrutiny Review Committee on Thames Water's response to Burst Water Mains. The Scrutiny report proposed 28 recommendations to address the following review objectives:

a) To understand the risks we face in Islington and Hackney, as a result of our aging water supply, including but not limited to those caused by climate change
b) To review Thames Water response to reducing those risks and their progress on investment in new infrastructure
c) To understand the impact of flooding on individual residents and businesses in the Angel and identify measures which could be taken to reduce the damage and disruption caused in the future and to liaise with other London Boroughs suffering similar incidents
d) To review the responses to flooding caused by water mains bursts by public bodies, by Thames Water and by private sector bodies, such as insurance companies, covering both the immediate emergency and longer term support
e) To recommend improvements to the long term prevention and short term response to flooding in Islington and Hackney in liaison with other London Boroughs suffering recent flooding incidents
f) To identify any similarities between the recent flood incidents across London Boroughs and to recommend improvements that can be made by Thames Water in order to minimise the threat of flooding in the future
g) To investigate the position of residents/businesses in respect of claims made to Thames Water for uninsured loss and compensation that have suffered as a result of the recent flooding

The Executive response has identified a number to actions required in order to ensure delivery and implementation of the Scrutiny Committee recommendations and a Project Board has been set up in order to monitor manage this process.

Purpose & Role of the Project Board

The Project Manager will report to the Project Board on a monthly basis and provide updates on progress and bring foreseeable problems, issues and risks to the Board's attention.

The Project Board will review project progress at a high level and provide necessary guidance to the Project Manager and make key decisions in order to drive the project forwards.

Specifically, the Board will:

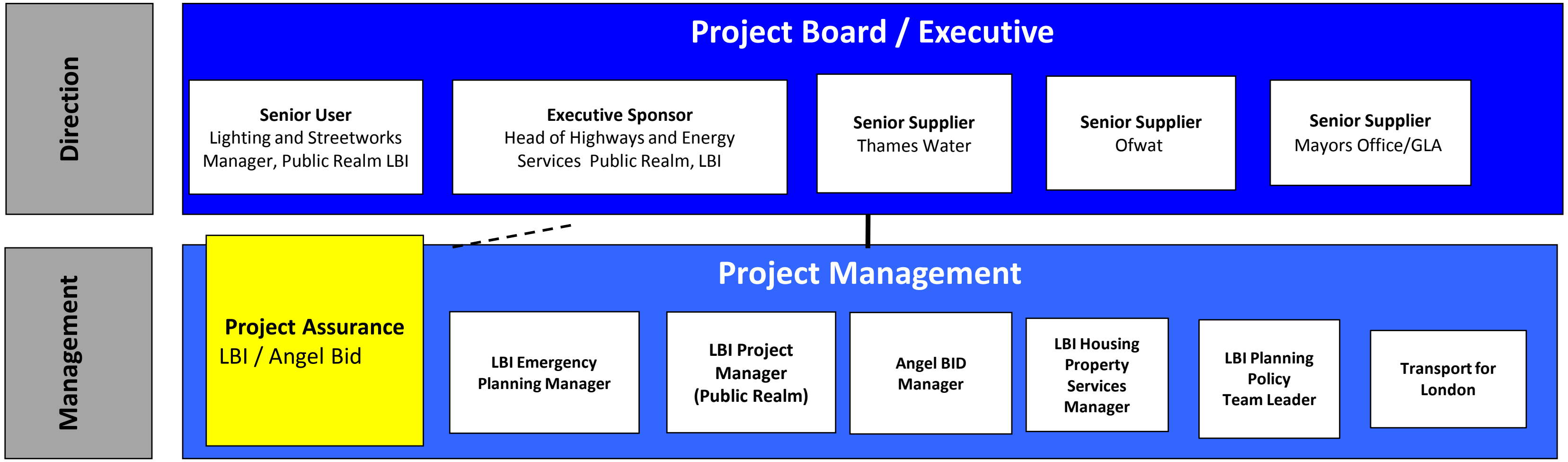
- Interrogate the project programme and review project progress against planned timescales and milestones;
- Provide a senior level steer on escalated issues and take decisions on matters that require a senior input;
- Provide monthly updates to the Executive Member for Transport and Environment
- Provide progress report to the Policy and Performance Committee in September 2018.

Key Stakeholders

There are a number of key stakeholders in this project as follows:

- Thames Water
- London Borough of Islington (Highways/Emergency Planning/Housing/Planning)
- Transport for London (TfL)
- Mayor of London / Greater London Authority (GLA)/London Fire Brigade
- Metropolitan Police
- Angel BID

Thames Water, Response to Burst Water Mains
Project Governance Structure



ISLINGTON

Thames Water, response to Burst Water Mains - Policy and Performance Scrutiny Review Committee's recommendations:

Monitoring of Delivery and Implementation Programme

	Month	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18		
Task											
Thames Water											
Recommendation (b) (d) (e) (f)											
Recommendation (c)											
Recommendation (a) (g) (h) (i) (j) (k) (l) (m) (n)											
GLA, TfL and London Fire Brigade											
Recommendation (p)											
Recommendation (o) (q) (r)											
Recommendation (s) (t) (u)											
Islington Council											
Recommendation (v)											
Recommendation (w) (x)											
OFWAT											
Recommendation (y) (z)											
Recommendation (bb)											

ISLINGTON

Environment and Regeneration
Town Hall, Upper Street, N1

Report of: **Executive Member for Economic Development**

Meeting of:	**Date**	**Ward(s)**
Executive	19 April 2018	All

Delete as appropriate		Non-exempt

THE APPENDIX TO THIS REPORT IS EXEMPT AND NOT FOR PUBLICATION

SUBJECT: AFFORDABLE WORKSPACE ARRANGEMENTS: DELEGATION OF AUTHORITY TO GRANT UNDER-LEASES

1. Synopsis

1.1 Islington is one of the most economically dynamic and successful parts of London. However, many local people and small businesses are unable to access the opportunities delivered through economic growth. Many local residents experience unemployment or insecure and low–paid employment. Furthermore, whilst Islington's economic prospects are critically reliant upon micro and small businesses, high rents and rising business rates mean that many micro and small businesses struggle to survive and remain in the borough.

1.2 In response to these challenges, the Council is committed to promoting inclusive economic growth within the borough. It will do this by intervening whenever it can to ensure that economic growth benefits the borough's most disadvantaged residents, and that micro and small businesses are supported to remain in the borough and grow. An Affordable Workspace Strategy that will help guide future work to support inclusive economic growth in the borough is being developed and will be submitted to a future meeting of the Executive for approval.

1.3 Since 2014 the Council has secured nine new affordable workspaces through legal agreements with developers (known as s106 agreements) – with hopefully more to come. In addition, the Council has secured Good Growth funding from the Mayor of London. This funding will deliver four new affordable workspaces in Finsbury Park. At least four new affordable workspaces are either complete or near completion, and likely to become available in 2018/19. The Council intends to commission affordable workspace operators to manage these spaces on its behalf.

1.4 This report describes the commissioning process that the Council will use to secure operators to manage the new affordable workspaces. This process will require the affordable workspace operators to deliver real and substantial social benefit for local people and local micro and small businesses. In exchange for the right to lease the affordable workspace at a peppercorn rent, the operators will be required to provide:

- sub-market rents of up to 80% of market rent for their tenants (variable according to the needs of the tenants),
- jobs, apprenticeships and training for local people,
- support for local entrepreneurs who wish to start up or grow a micro or small business, and,
- other social benefits.

1.5 Once a decision has been made to commission an affordable workspace operator, a concession contract with that operator will be drawn up. In addition, the operator will be granted an under-lease that will set out the terms on which it can occupy the space. The granting of such leases is normally a function of the Executive. However, in this instance, the Executive is asked to delegate its powers for granting these leases to the Corporate Director of Resources following consultation with the Executive Member for Economic Development.

2. Recommendations

2.1 To note the process and criteria for the award of concession contracts to affordable workspace providers of any affordable workspaces that become available in the period up to the end of March 2019, as set out in paragraphs 3.3 to 3.5.

2.2 To authorise the Corporate Director of Resources to grant under-leases of affordable workspaces to those affordable workspace providers that are awarded concession contracts in respect of those spaces following consultation with the Executive Member for Economic Development.

3. Background

Context

3.1 In 2014 the Council adopted its Affordable Workspace Guidance. This guidance forms part of the Local Plan that sets out the Council's planning policies. Since 2014, the Council has secured nine affordable workspaces (with a total floor space of approximately 3,700sqm). These spaces have been secured via s106 agreements with developers. These sites are secured under the following conditions:

A. B1 office use;

B. peppercorn rent to the Council although the Council is responsible for any service charges and other charges such as utilities;

C. for a period ranging from 10 to 20 years; and

D. to be fitted out to a high Category A standard.

Four of these affordable workspaces are either complete or nearing completion and are likely to become available during 2018/19. A schedule of these sites is provided in exempt Appendix 1 (exempt for reasons of commercial confidentiality). Once the spaces are ready for occupation, the Council will sign a sub-lease with the owner and will become liable for service charges and other charges such as utility bills.

3.2 The Council has previously developed a process to enable potential affordable workspace operators to join a list of Council approved providers. This list remains open and new operators can join the list. The framework was set up for four years and expires at the end of March 2019. However, at the time that it was developed, this process did not include any procedures that would enable the Council to appoint operators for any new affordable workspaces. These procedures have now been developed, are set out below, having been approved by the Corporate Director of Resources. A new process will be developed for the period after March 2019.

Affordable Workspace Providers Concession Award Process

3.3 When an affordable workspace becomes available, the Council will contact each of the providers on its list and will invite them to apply to operate the workspace. The workspace providers will be invited to apply by clearly demonstrating the social outcomes that they will deliver against each of the following criteria:

a. rent affordability (25%)
b. development of support programmes for micro and small businesses (20%);
c. delivery of employment outcomes for local residents (20%);
d. development of education and skills initiatives to engage local young residents (20%);
e. equality and diversity (5%);
f. promoting the development of local business clusters (5%); and
g. other social value initiatives that could be considered for the benefit of the local community (5%).

The operator who performs best against these criteria will be awarded a concession contract and under-lease.

This approach is based on the principles of a social value procurement framework. This allows the Council to accept less than best consideration for the grant of the concession contract and under-lease. In exchange for this, the operators will be required to deliver well-defined social value outcomes as listed above.

The contract will set out the social outcomes that the operator has agreed to provide. The concession contract will form the basis for monitoring the affordable workspace operator who will be subject to quarterly monitoring performance reviews. The concession contract established with each operator will contain provisions enabling the Council to terminate the contract in the event of underperformance by the operator.

Grant of Under-lease

3.4 As referred to above, the Council has secured at least four affordable workspaces that will become available in the period up to end of March 2019. The Council will be taking a sub-lease on each completed affordable workspace from the developer for a term of 10 to 20 years (depending on the provisions in the s106 legal agreement) at a peppercorn rent. The Council will be required to pay any service charges and other charges such as utility bills until such time as it hands the space over to the operator. As indicated above, the Council will award an under-lease to the affordable workspace operator in tandem with a concession contract.

3.5 The grant of leases for a period of more than six months at less than best consideration is an Executive function. To avoid paying service charges and other costs, the Council needs to be in a position to grant the under-leases to the providers as soon as the concession contracts are awarded. For reasons of timeliness, is therefore recommended that authority to grant the under-leases to providers is delegated to the Corporate Director of Resources following consultation with the Executive Member for Economic Development.

4. Implications

4.1 **Financial implications:**

Through the section 106 process the Council has negotiated the provision of workplace accommodation on a peppercorn lease basis, as detailed in Appendix 1. The market rental value of these properties over the period of availability is between £10.77m and £12.78m

The concession contract will allow us to transfer these properties to affordable workspace operators on an under-lease at a peppercorn rent for a duration of between 10 – 20 years as detailed in Appendix 1. As the disposal of the lease interest is less than best consideration this will need the necessary approvals as detailed in the legal implications below.

Landlord responsibilities and costs associated with this will remain with the council until the under-lease is granted to the AWPs.

4.2 **Legal Implications:**
The Council has established an affordable workspace dynamic purchasing system framework. The framework expires at end of March 2019. Accordingly, concession contracts may be awarded to affordable workspace providers for affordable workspaces that become available prior to that date following the undertaking of a mini competition between the affordable workspace providers on that framework.

The Affordable Workspace DPS framework provides for the successful affordable workplace provider to be awarded a concession contract and to be granted an under lease of the affordable workspace at a peppercorn rent for the term of the concession contract.

The decision to grant a lease for a term of more than 6 months at less than best consideration is a matter which is reserved to the Executive by the Council's constitution. However, notwithstanding such reservation, the Executive may delegate the decision to grant an under lease of an affordable workspace at less than best consideration to the Corporate Director of Resources.

The Council may grant under leases of the affordable workspaces to the successful affordable workspace providers (section 123(1) of the Local Government Act 1972) for the duration of the concession contracts, as the under leases will be in excess of 7 years, the Secretary of State's consent will be required as the rental is less than best consideration. However, Local Government Act 1972: General Disposal Consent (England) 2003 provides a general consent for the disposal of land where the use of the land after disposal will promote or improve the economic, environmental or social well-being of its area and/or its residents and the undervalue for the disposal does not exceed £2,000,000 (two million pounds).

The under leases of the affordable workspaces will be ancillary to the concession contract. Therefore, the leases will need to be contracted out of the statutory business security of tenure provisions comprised in Part II of the Landlord and Tenant Act 1954.

4.3 Environmental Implications
The main environmental implications of appointing Affordable Workspace Providers to manage the Council's affordable workplaces will be the manner in which the appointed providers manage the premises, particularly the heating and cooling systems (which will use energy), the provision of waste facilities for tenant businesses (which will influence the level of recycling and food waste composting), and management of the building-related waste (e.g. disposing of light bulbs and other consumables). There will also be environmental impacts related to the providers' own office functions, namely energy, resource and water use and waste generation.

4.4 Resident Impact Assessment:
The Council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The Council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The Council must have due regard to the need to tackle prejudice and promote understanding.

The Council completed a Resident Impact Assessment (RIA) in February 2018. A summary of the findings is given below.

The key findings of the RIA indicate that overall the implementation of the Affordable Workspace Arrangements would deliver positive impacts in terms of bringing long term social value benefits for Islington residents and for the local community of small and micro businesses

The activity generated from the operation of the new affordable workspaces will create low cost workspace that is accessible for local residents and businesses; will enable small and micro businesses to receive specialist support from experienced workspace providers; will generate new direct and indirect employment opportunities for Islington residents; and will enable the Council to work closely with the affordable workspace providers to secure education and skills outcomes for those furthest from the labour market, economically disadvantaged or with protected characteristics. The commissioning process specifically requires the operators to demonstrate how they promote equality and diversity by ensuring that the occupants of the building reflect the demographic make-up of the local community.

5. Reason for recommendations

5.1 Delivery of the Council's affordable workspace strategy is integral to the achievement of the Council's vision of inclusive economic development. The Executive is asked to note the process that has been adopted to commission operators for these workspaces.

5.2 The delegation of the decisions on the granting of leases of affordable workspaces to the Corporate Director of Resources will allow the Council to create new affordable workspace flexibly and quickly, thereby avoiding any liability by the Council to pay service charges and other charges.

Appendices

- EXEMPT APPENDIX 1 - Affordable Workspace Schedule 2018

Final report clearance:

Signed by:

4 April 2018

Executive Member for Economic Development   Date

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ISLINGTON

Children, Employment and Skills
222 Upper Street, N1 1XR

Report of: **Executive Member for Children, Young People and Families**

Meeting of:	**Date**	**Ward(s)**
Executive	19 April 2018	All

Delete as appropriate		Non-exempt

SUBJECT: Procurement Strategy and Contract Award for the commissioning of regulated placements-foster care and residential care

1. Synopsis

1.1 This report seeks pre-tender approval for a procurement strategy to commission regulated foster care and residential care placements in partnership with the West London Alliance (WLA) in accordance with Rule 2.5 of the Council's Procurement Rules.

1.2 Islington Council is intending to collaborate with the West London Alliance (WLA) sub regional commissioning group for the commissioning of care services (regulated foster care and residential care placements). This collaboration will also provide access to Special Education Need and Disability placements (SEND). The arrangement offers access to an electronic brokerage system, Care Place, which will provide an efficient system for managing the purchasing, contracting and the reviewing and monitoring of placements with an emphasis on safeguarding.

This report seeks endorsement of this approach and agreement to proceed with the collaborative arrangement.

2. Recommendations

2.1 To approve the procurement strategy to utilise care services and Care Place for the commissioning of regulated placements for three years with the potential to extend for a further three years.

2.2 To delegate authority to the Corporate Director of Children, Employment and Skills Services to approve the award of contracts from the DPS.

3. Background

3.1 **Nature of the service**

Islington Council wants to procure regulated placements (foster care, residential care and SEND) through a collaboration with the WLA. This will provide access to the WLA commissioning and procurement service through a three-year licence agreement.

The WLA is a partnership between seven West London local authorities Barnet, Brent, Ealing, Hammersmith & Fulham, Harrow, Hillingdon and Hounslow. A successful outcome of the WLA sub-regional approach has been the investment in sub-regional strategic commissioning and market management capability underpinned by the development of a jointly owned system that supports effective market engagement through economies of scale.

The work to inform this procurement has been collaborative and productive with engagement by providers over a four-year development period.

The procurement is not solely to provide placements covering West London Authorities. All Local Authorities south of Birmingham will be named on the tender documentation in order to ensure that the breadth of provision covers London and the South East.

Local Authorities and sub regions have been invited to join this procurement. The key aim is to encourage wider collaboration across Local Authorities in order to ensure effective market management and control which is essential to achieving sufficiency of placements, increasing buying power and financial sustainability going forward.

The partnership will also support local authorities to become intelligent customers working proactively to map and develop services that meet the diverse needs of their care populations.

The financial commitment required by the WLA, for 3 years, is £166k which covers core and e-brokerage services. Costs are confirmed for the initial three years. Islington Council will conduct a best value review towards the end of the third year to inform decision making about the continuation of the contract. The core and e-brokerage services are outlined below.

Strategic Commissioning

- Strategic Commissioning Support to scope new projects to Outline Business Case stage.
- Shared Market Management and Market Shaping Activities.
- Inclusion in West London's strategic commercial negotiations with suppliers to deliver efficiencies.
- The development of future West London shared services, commissioning projects and procurements following Outline Business Case Development (subject to agreed investment by participating local authorities).

Procurement Operations

- Development of market leading procurement vehicles, and the on-going day-to-day management of these.

Strategic Contract Management

- A Contract Performance Management service in line with our contract management approach.

Care Place

In summary Care Place delivers the following:

1. Data Hub – Securely share spend and activity data for children's services placements across multiple local authorities which is used to drive efficiency savings, manage and shape the provider market and inform strategic commissioning.

2. ebrokerage – Electronic purchasing platform used by placements teams and commissioners to purchase placements for Children's Social Care and SEND. Also the electronic platform to purchase from all West London procurement vehicles.
3. Directory – Directory of suppliers providing independent placements for Children's Social Care and SEND as well as public facing area which also contains information, advice and guidance for children and families.
4. Reporting – Integrated reporting suite allowing tailor made reporting of all management information in the system.
5. eContracing – Operational from December 2017, which will enable placements contracts (ICA/IPA's) to be sent electronically to suppliers.
6. eContract Management – Operational from March 2018 and will enable the electronic management of the West London Contract Management Approach for Children's Social Care and SEND Placements.

Islington Council has a statutory duty under Section 23 of the Children Act 1989 to provide care and accommodation services for Children Looked After and Care Leavers. In 2010, Statutory Guidance on the Children Act 1989 and Children and Young Persons Act 2008 placed the 'Sufficiency Duty' upon local authorities to secure, so far as reasonably practicable, sufficient accommodation within the local area.

The need to address the current financial pressures in Children, Employment and Skills Services is one of the key drivers for this approach. Islington Council spends £8.7m per year on external regulated care placements. This reflects a significant pressure against current budget allocations.

The cost of placements in the external placement sector have risen over the last two financial years by 2%. We anticipate that this increase will continue.

As a single agency, Islington Council is in no position to influence the placement sector and control spend through contractual arrangements that would mitigate the impact of inflationary uplifts and secure discounts for placements. The partnership with the WLA therefore offers the potential for cashable and cost avoidance savings. This is difficult to achieve as a single agency and under current partnership arrangements.

The WLA are proposing a series of discounts for foster care and residential placements, which would lead to significant cashable savings based on our analysis of current spend. Our financial analysis shows the potential for long-term cost benefits by utilising the discount framework available on the WLA procurement vehicle.

If the Council were part of the WLA and had access to their discount framework, the Council would have achieved approximately £282k (£141 per annum) of cashable savings on foster care placements based on activity over the last two years. For residential placements, the Council would have achieved approximately £76k of cashable savings based on activity over two years.

The proposed pricing model is designed to be flexible, and drive competition whilst acknowledging that many suppliers have been impacted by holding their fees at 0.4% for the past four years. The pricing framework therefore builds in a ceiling rate of 2% for inflationary uplifts and locks providers into the prices they submit for one year. Inflationary avoidance has been built into this procurement for SEND placements. SEND placements are usually the most expensive packages, with no prior controls on yearly inflationary increases able to be secured at regional and sub-regional level in the past.

The WLA will 'on-board' any suppliers used by member local authorities who join and renegotiate prices for existing placements.

The procurement builds the capacity for customers to negotiate down the cost of placements. However, the procurement will not allow suppliers to increase the cost of placements.

The WLA will seek to mandate the Dynamic Purchasing System (DPS) with a stipulation that where possible, all local authorities and all suppliers use the DPS as the sole procurement vehicle in non-emergency cases. The aim is to focus suppliers and customers to engage with each other in order to achieve the strategic aims.

The emphasis on this procurement is on the quality of services and addressing the issues of supply, which have significantly impacted on customers and suppliers. The evaluation criteria is designed to improve flexibility and address issues of regional and local supply.

Whilst the evaluation and award criteria for safeguarding remains robust the procurement will enable providers with an Ofsted judgement of 'requires improvement' to join the procurement and offer strategic support to these providers to improve their standards aiming for Good or above. An inbuilt safeguarding mechanism will alert local authorities to a change in an Ofsted Judgement and a safeguarding alert system will enable individual local authorities to raise concerns regarding providers. Suspension from the DPS will occur where providers have safeguarding concerns against them.

Over 90 per cent of providers used by the WLA are utilising the proposed DPS. New providers will be invited to join the procurement every three months, which will drive competition. Unlike a framework agreement, a DPS can respond efficiently to sudden demand or supply changes in the sector.

Islington Council currently does not have a procurement vehicle for residential or foster care and current practice is not efficient in terms of cost and worker time. Access to Care Place will ensure compliance with procurement regulations and reduce the resource intensive nature of current commissioning practice (time spent on procurement, contract management and quality assurance) as well as increasing the development of future shared services and commissioning projects and procurement.

Islington Council is a member of the North London Children's Efficiency Programme (NLCEP) sub region. The NLCEP is made up of five London boroughs (Camden, Hackney, Haringey, Enfield and Islington) working together to manage the market and improve services for vulnerable children and young people in need of care placements, with SEND and requiring Alternative Provision. The council pays £17,000 per year towards the cost of NLCEP category management services and associated costs.

The council's engagement in collaborative commissioning as part of the NLCEP aimed to increase the supply of foster care provision available across North London, by 500 beds, and achieve cost avoidance savings in the purchasing of placements.

During 2015/16, Islington Council used 41 Independent foster care providers on this contract, three of which provided 29% of the external foster care placements. Substantial discounts were negotiated through the process of individual commissioning.

Whilst the NLCEP contract increased supply, it has not provided choice of placements. The NLCEP contract has also not met specific requirements for placements for certain groups of children looked after.

The NLCEP sub regional foster care contract ended in 2015. Providers were agreeable to holding the fees agreed, post contract, pending the commissioning of foster care services by the NLCEP. The timescales for commissioning have not been set and is unlikely to take place in the current financial year. Providers have increased their fees thereby increasing the costs of Independent Fostering Agency (IFA) placements of all types.

Any further delays are likely to have a negative financial impact for Islington Council and across the NLCEP as it leaves the council and the sub region exposed to market forces.

NLCEP member authorities are also collectively considering engagement in this procurement as a sub region in light of the above.

Islington Council is a member of London Care Services (LCS) managed under London Councils. We pay an annual subscription of £14,481 to utilise the LCS regional foster care and residential contracts.

Purchasing through the LCS contract offers a safe and efficient way of commissioning services with LCS managing the fee negotiations and contract management and reviewing services on behalf of member local Authorities. Providers signed up to LCS have held their fees at zero percent for the past five years.

Inflationary pressures and the impact of the London Living Wage has resulted in a significant pressure on providers. Requests to LCS for fee increases have been between 2-30% in 2016/17 and 2017/18.

The financial scrutiny applied to the recommissioning of the 2017/18 LCS regional contract has limited the scope for providers to charge fee increases by setting robust terms and conditions with 0% fee increases awarded in 2017/18 for providers. Fee increases have been awarded to providers who have evidenced that they have not made a profit in the past five years and have been awarded an increase at less than 1%. Contract management has unified the financial sustainability to ensure that providers would not make a loss.

Some residential and foster care providers have chosen to withdraw from the LCS contract. This has resulted in a reduction of residential and foster care services under this contract. Where placements cannot be made under the regional framework, Islington Council is forced to spot purchase placements.

The average weekly cost of a spot purchased community residential care placement has increased from £2,300 to £3,000 per week. The cost of a therapeutic residential care placement has risen from an average cost of £4,000 per week to an average cost of £4,500. This does not include the cost of providing 1:1 staffing where required. For the packages where additional staffing is required, fees have increased to in excess of £5,000 per week almost similar to the cost of a welfare secure placement.

With the level of spend and risk associated with the number of providers leaving the regional contract, the council must now consider alternative options for achieving savings (cost avoidance and cashable) including joining procurement vehicles via other sub regions.

3.2 **Estimated Value**

The maximum cost of entering into the arrangement with the WLA will be £166k over three years. This will be funded by ‘cashable savings’ via the council’s placement budget.

Through the discount model, we anticipate placement savings of £179,198 per annum over three years. Refer to 4.1 financial implications section.

The table below shows the projected spend on IFA and residential placements over a six-year period should the council continue to use existing commissioning arrangements.

Table one

Area		18/19 Budget	for 3 years	for 6 years
IFA Spend		4,799,200	14,397,600	28,795,200
Residential (non JAP, non secure)		4,224,000	12,672,000	25,344,000
		9,023,200	27,069,600	54,139,200

Projections for 3 and 6 years are based on an analysis of current placement activity and costs. No attempt has been made to forecast any fluctuation in placement type, future need or potential discounts through the WLA.

There is an expectation that moving to the WLA procurement model would achieve resource efficiencies and cashable savings through discounts as reported and a reduction on placement costs.

3.3 **Timetable**

Islington Council wants to join this arrangement by the beginning of the financial year 2018 in order to achieve its projected financial savings targets against the budget.

This proposal has been discussed with the budget holder for placements, the Service Director and the Head of Strategic Procurement.

3.4 **Options appraisal**

Islington Council could continue to utilise the LCS contract pending the procurement of foster care services and further commissioning of residential arrangements via the NLCEP. Whilst Islington Council maintains its commitment to the NLCEP, it recognises that the financial benefits of the work undertaken by the sub region will not achieve the savings that we are seeking within the required timescales particularly as timescales for commissioning care placements have not been set.

1. Commissioning regulated placements as a single agency

Islington Council could engage in a commissioning strategy to purchase services as a single agency. As a single agency, the Council is not in a position to influence the placement sector and control spend through contractual arrangements. In a multi-agency arrangement, the Council could mitigate the impact of inflationary uplifts and secure discounts for placements.

2. Engage in wider collaboration with sub regions as specified in this report

The numbers of children in care in England was at its highest for 30 years in March 2015. It continues to be a challenge for the placement sector to meet the demand for placements generally and for some parts of the sector to meet the needs of specific groups of the population who require specialist services.

The residential sector continues to report on the impact of a robust regulatory framework on business sustainability and the supply of services that meet local authority requirements.

Wider collaboration with a number of Local Authorities will improve market engagement and assist the council to ensure a sufficient supply of regulated placements for Islington's children and young people that also meet the council's value for money objectives.

The benefits of this arrangement for Islington Council can be summarised as follows

- The potential for further cashable efficiency savings through discounts and cost reductions on external placement packages.

- Supports Islington Council to meet its individual priorities within a wider collaborative framework.

- Reduces competition between local authorities across borders.

- The DPS creates a high level of competition with the potential to drive down prices and reduce local authority spend.

- The opportunity for further cost avoidance savings through better management of the market in partnership with the WLA.

- It is likely to ensure a sufficient supply of placements in London with the associated benefit of access to local statutory services.

- Provide a procurement model for Islington Council to purchase both residential and foster care placements.

This approach protects the council from significant fee increases and inflationary uplifts in the short and medium term.

3.5 **Key Considerations**

Market rates are in excess of the London Living Wage LLW for the delivery of these type of services. The procurement mechanism will be held by the West London Alliance and published to ensure transparency. Placements will be drawn based on the ability of providers to meet safeguarding and cost and quality requirements.

This approach will improve community cohesion by providing services to the most vulnerable children and young people within London reducing the number of placements made more than 20 miles away from the authority.

There are no expected TUPE or immediate staffing implications.

3.6 **Evaluation**

Ranking of Providers into Tiers
Providers offering services within each of the Service Levels will be ranked by their core costs. These are the costs that were submitted by the provider for their services when they joined the DPS or at the annual re-price (whichever is the most recent). The lowest cost provider will be ranked first and the most expensive provider ranked last.

Providers will then be assigned a tier based on their price ranking. The number of tiers may change throughout the period of the DPS but initially there will be three for each Service Level. Providers will be divided proportionally between the tiers. As such, the cheapest third of providers will be assigned to tier one; the second third of providers into tier two and the most expensive third into tier 3. Providers will be ranked by price within each of these tiers.

If a provider offers multiple services that vary in cost, each service will be tiered and ranked separately. For example, a residential care home provider may have their services on multiple tiers if they have multiple homes with different pricing structures.

As new providers join the DPV and/or providers adjust their prices it will mean that existing providers may therefore be moved between the tiers.

Local Authority Decision Making

The Authority will carry out an assessment of provider responses to placement requests and ascertain which provider can best meet the needs of the child. This assessment will be based on the Criteria.

When reviewing options, Local Authorities will first review all options that were submitted from within tier 1 (i.e. the cheapest placements). If none of these options fully meet the needs of the child/young person, then options from providers within tier 2 will be considered. If none of these options fully meet the needs of the child/young person then options from tier 3 will be reviewed. This process will continue until all options have been reviewed.

Where the Local Authority determines that more than one placement offer meets its requirement it shall award the contract (where it chooses to award an IPA) to the provider that is highest ranked within the relevant tier.

The evaluation criteria set by the WLA is set out below. Quality / Price ratio = **60**% quality, **40**% price.

Table 1: Weighting

Quality	
The ability of the Provider to meet the needs and deliver the outcomes as outlined in the individual child / young person's Education Health & Care Plan and other relevant plans.	
Total	**Up to 60% of the total score available**
Price	
Total Placement Price – Inclusive of all costs including assessment if necessary Best (lowest) price	
Total	**Up to 40% of the total score available**

3.7 **Business Risks**

There is no guarantee that this approach will meet all of the demand for placements particularly local placements or for emergency placements. The NLCEP authorities will focus their work on engagement with smaller local providers to meet the needs of children and young people locally. We will maintain our membership to the NLCEP at least in year one pending progress made in defining future commissioning and developing procurement models.

The demand for placements may fluctuate thereby reducing the impact of discounts available under this model. All external placement referrals would initially go through this procurement vehicle in order to ensure that it meets the majority of the Council's demand.

Islington Council may be locked into an agreed baseline fee that may be greater than it is able to achieve independently. The contract will renew on an annual basis with new fees set each year thereby driving competition. The WLA will renegotiate the cost of existing placements with providers who engage in this procurement.
We believe that this approach will have a positive impact on service users by ensuring a sufficient supply of placements in London.

3.8 The Employment Relations Act 1999 (Blacklist) Regulations 2010 explicitly prohibit the compilation, use, sale or supply of blacklists containing details of trade union members and their activities. Following a motion to full Council on 26 March 2013, all tenderers will be required to sign the Council's anti-blacklisting declaration. Where an organisation is unable to declare that they have never blacklisted, they will be required to evidence that they have 'self-cleansed'. The

Council will not award a contract to organisations found guilty of blacklisting unless they have demonstrated 'self-cleansing' and taken adequate measures to remedy past actions and prevent re-occurrences.

3.9 The following relevant information is required to be specifically approved by the Executive in accordance with rule 2.6 of the Procurement Rules:

Relevant information	**Information/section in report**
1 Nature of the service	Procurement Strategy – Contract for the Commissioning of regulated placements-foster care and residential care. See 3.1
2 Estimated value	The estimated value to utilise the DPS is £166k over the initial three year agreements. The agreement is proposed to run for a period of 3 years with an optional extension of 3 years. See 3.2
3 Timetable	The WLA procurement was launched on the 24 November 2017.Call off contracts are expected to commence 1 April 2018 See 3.3
4 Options appraisal for tender procedure including consideration of collaboration opportunities	The recommended option is to engage in wider collaboration with sub regions by partnering with the WLA to commission regulated placements. See 3.4
5 Consideration of: Social benefit clauses; London Living Wage; Best value; TUPE, pensions and other staffing implications	There are no expected TUPE or immediate staffing implications See 3.5
6 Evaluation criteria	The criteria is as follows The ability of the Provider to meet the needs and deliver the outcomes as outlined in the individual child / young person's Education Health & Care Plan and other relevant plans. Up to 100% of 60% weighting quality Total Placement Price – Inclusive of all costs including assessment if necessary Up to 100% of 40% weighting quality Best (lowest) price
7 Any business risks associated with entering the contract	Business risk assessment concluded that there are limited risk in engaging in this procurement because Islington Council retains the control of spend and allocation of spend.
8 Any other relevant financial, legal or other considerations.	

4. Implications

4.1 Financial implications:

The maximum cost of entering into this arrangement will be £166k for the initial three years. Costs of extending the contract will be confirmed in year 3.

There is an expectation that moving to the WLA procurement model would achieve resource efficiencies and cashable savings through discounts as reported.

This has been estimated at a cashable saving of £372k over three years (see table below). Islington Council would retain all financial responsibility for the payment and procurement of services. Financial control would remain with Islington; this would mitigate against the risk of financial mismanagement.

Table 2

Cost Benefit Analysis	2018/19	2019/20	2020/21	Total
Cost of WLA Procurement Vehicle	67,820	49,126	49,126	166,072
Cashable Savings				
i. Discounts				
Fostering	-140,936	-140,936	-140,936	-422,807
Residential	-38,262	-38,262	-38,262	-114,786
	-179,198	*-179,198*	*-179,198*	*-537,593*
Net cost / (saving)	**-111,378**	**-130,072**	**-130,072**	**-371,521**

The council's annual subscription to LCS is £14,481 and £17,000 is paid towards the cost of category management services and associated costs under the NLCEP.

If this WLA proves successful there is a possibility that Islington Council could review the above arrangements in year two.

4.2 Legal Implications:

The Council has a statutory duty under Section 23 of the Children Act 1989 to provide care and accommodation services for Children Looked After and Care Leavers. In 2010, Statutory Guidance on the Children Act 1989 and Children and Young Persons Act 2008 placed the 'Sufficiency Duty' upon local authorities to secure, so far as reasonably practicable, sufficient accommodation within the local area. The council may join in collaborative procurements with other local authorities under section 111 of the Local Government Act 1972 which provides the power for the Council to do anything which is calculated to facilitate, or is conducive or incidental to, the discharge of any of its functions. The council may enter into contracts for the provision of regulated placements (foster care, residential care and SEND) under section 1 of the Local Government (Contracts) Act 1997.
The report contains proposals for two separate contractual arrangements:

The first is to enter into an agreement with the West London Association (WLA) for procurement and contract management services conducted on a collaborative basis. The cost of this arrangement would be £166,000 for the first 3 years with the potential to extend the arrangement for a further 3 years. This arrangement is likely to fall outside the scope of the Public Contracts Regulations 2015 since it is likely to be a contract to implement co-operation between contracting authorities under Regulation 12(7). The WLA is a partnership between seven West London local authorities Barnet, Brent, Ealing, Hammersmith & Fulham, Harrow, Hillingdon and Hounslow. The

Executive in approving this proposal should be satisfied that the council is obtaining value for money in entering into this contract.

The second is to award contracts for regulated placements (foster care, residential care and SEND) using the Dynamic Purchase System (DPS) established by the WLA. These services fall under the light regime set out in the Public Contracts Regulations 2015. Given the value of the services to be purchased through the DPS it would need to be advertised in the Official Journal of the European Union (OJEU). Providing this is done, and the tender documents indicate that the DPS will be available for use by all Local Authorities south of Birmingham (as indicated in the report) the DPS should be available for use by the council. In deciding to award contracts to suppliers from the DPS the Corporate Director must be satisfied that the contracts represent value for money.

4.3 Environmental Implications

There are no environmental implications for this procurement. The WLA has completed its Environmental impact assessment with no implications issues raised.

4.4 Resident Impact Assessment:

The council must, in the exercise of its functions, have due regard to the need to eliminate discrimination, harassment and victimisation, and to advance equality of opportunity, and foster good relations, between those who share a relevant protected characteristic and those who do not share it (section 149 Equality Act 2010). The council has a duty to have due regard to the need to remove or minimise disadvantages, take steps to meet needs, in particular steps to take account of disabled persons' disabilities, and encourage people to participate in public life. The council must have due regard to the need to tackle prejudice and promote understanding.

The arrangement offers access to an electronic brokerage system, Care Place, which will provide an efficient system for managing the purchasing, contracting and the reviewing and monitoring of placements with an emphasis on safeguarding. The partnership offers the potential for immediate cashable and cost avoidance savings. Our financial analysis shows the potential for long-term cost benefits, a reduction in the resource intensive nature of current commissioning practice and an increase in the development of future shared services and commissioning projects and procurement.

5. Reason for recommendations

5.1 The need to address the current financial pressures in Children, Employment and Skills Services is one of the key drivers for this approach. Whilst Islington Council maintains its commitment to the NLCEP it recognises that the financial benefits of the work undertaken by the sub region will not achieve the savings that the council is seeking within the required timescales particularly as timescales for re-procurement have not been set.

Any further delays are likely to have a negative financial impact for Islington Council and across the NCLEP as it leaves us and the sub region exposed to market forces.

Equally, market management and control is essential to achieving sufficiency of placements, increasing buying power and financial sustainability going forward. The partnership with the WLA offers the potential for immediate cashable and cost avoidance savings. This is difficult to achieve as a single agency and under current partnership arrangements.

Our financial analysis shows the potential for long-term cost benefits by utilising the discount framework available on the WLA procurement vehicle.

Access to Care Place will reduce the resource intensive nature of current commissioning practice and increase the development of future shared services and commissioning projects and procurement.
Add the reasons why you are recommending this particular course of action and other options considered.

Appendices

- Resident Impact Assessment.

Background papers: None

Final report clearance:

Signed by:

Executive Member for Children and Families Date 3 April 2018

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Resident Impact Assessment

Contract Award for the commissioning of regulated placements- foster care and residential care

Service Area: Children, Employment and Skills

1. What are the intended outcomes of this policy, function etc?

Islington Council is intending to collaborate with the West London Alliance (WLA) sub regional commissioning group for the commissioning of care services (regulated foster care and residential care placements). This collaboration will also provide access to Special Education Need and Disability placements (SEND). The arrangement offers access to an electronic brokerage system, Care Place, which will provide an efficient system for managing the purchasing, contracting and the reviewing and monitoring of placements with an emphasis on safeguarding.

The need to address the current financial pressures in Children, Employment and Skills Services is one of the key drivers for this approach. Equally, market management and control is essential to achieving sufficiency of placements, increasing buying power and financial sustainability going forward. The partnership with the WLA offers the potential for immediate cashable and cost avoidance savings. This is difficult to achieve as a single agency and under current partnership arrangements.

Our financial analysis shows the potential for long-term cost benefits by utilising the discount framework available on the WLA procurement vehicle.

Access to Care Place will reduce the resource intensive nature of current commissioning practice and increase the development of future shared services and commissioning projects and procurement.

2. Resident Profile

Who is going to be impacted by this change i.e. residents/service users/tenants? Please complete data for your service users. If your data does not fit into the categories in this table, please copy and paste your own table in the space below. Please refer to **section 3.3** of the guidance for more information.

		Borough profile	Service User profile
		Total: 206,285	**Total: 344**
Gender	**Female**	**51%**	**40%**

	Male	49%	60%
Age	Under 16	32,825	223
	16-24	29,418	121 (Ages 16 and 17 only)
	25-44	87,177	N/A
	45-64	38,669	N/A
	65+	18,036	N/A
Disability	Disabled	16%	8%
	Non-disabled	84%	92%
Sexual orientation	LGBT	No data	
	Heterosexual/straight	No data	
Race	BME	52%	60%
	White	48%	39%
Religion or belief	Christian	40%	44%
	Muslim	10%	16%
	Other	4.5%	4%
	No religion	30%	18%
	Religion not stated	17%	19%

3. Equality impacts

With reference to the guidance, please describe what are the equality and socio-economic impacts for residents and what are the opportunities to challenge prejudice or promote understanding?

- The vision for Islington is to improve the quality of life of vulnerable children young people through the delivery of high quality care placements and associated services.

- In the five years from 2011 through to 2015, the total number of children looked after by the Council increased by 7% from 329 to 353 children. The biggest increase is attributed to the numbers of UASC which has doubled in the last three years along with the numbers of young people aged 16 and over. The rate of children looked after in Islington has remained consistently higher than our statistical neighbour and London average. Islington is ranked second highest out of our statistical neighbours and the highest in London.

- This procurement is designed to meet the diverse needs of the looked after population which includes children with disabilities, with Special Education needs those who are Unaccompanied Asylum Seeking Children (UASC).
- This proposal will have no impact in terms of equality. Eligibility for services is enshrined within the legislation ensuring fair access for all. Services are being commissioned based on the current assessment of needs local knowledge and evidence.

- The service is not specifically targeted at young people from a particular race, refugees or migrants, any particular religion or LGBT groups. No individual will be excluded or discriminated against on the basis of their religion or belief. The service will not be targeted as being exclusively for LGBT people. However, no individual will be excluded or discriminated against on the basis of their sexual orientation.

- The specification and contract will state that the provider must be able to work and retain engagement with service users from diverse backgrounds. The service will be monitored to ensure that fair access, fair exit, diversity and inclusion are embedded within the culture of the service and there is demonstrable promotion and implementation of the policies. This will be monitored through the scheduled programme of contract reviews.

- Residential service and foster agencies who will tender for this procurement are already established in communities across London. There is likely to be minimal provision in borough as a result of this procurement.
-

4. Safeguarding and Human Rights impacts

a) Safeguarding risks and Human Rights breaches
Please describe any safeguarding risks for children or vulnerable adults AND any potential human rights breaches that may occur as a result of the proposal? Please refer to **section 4.8** of the guidance for more information.

There are no safeguarding risks for children inherent in this proposal. The services commissioned are regulated by Ofsted and services are responsive to young people who present with risks to themselves and others.

The specification requires services to be delivered In London and within North London thereby ensuring that young people who cannot be safely accommodated in Islington receive the same high quality services and interventions when placed outside of the borough.

Whilst the evaluation and award criteria for safeguarding remains robust the procurement will enable providers with an Ofsted judgement of 'requires improvement' to join the procurement and offer strategic support to these providers to improve their standards aiming for Good or above.
An inbuilt safeguarding mechanism will alert local authorities to a change in an Ofsted Judgement and a safeguarding alert system will enable individual local authorities to raise concerns regarding providers. Suspension from the DPS will occur where providers have safeguarding concerns against them.

If potential safeguarding and human rights risks are identified then **please contact equalities@islington.gov.uk to discuss further**:

5. Action

How will you respond to the impacts that you have identified in sections 3 and 4, or address any gaps in data or information?
For more information on identifying actions that will limit the negative impact of the policy for protected groups see the guidance.

Action	Responsible person or team	Deadline

Please send the completed RIA to equalites@islington.gov.uk and also make it publicly available online along with the relevant policy or service change.

This Resident Impact Assessment has been completed in accordance with the guidance and using appropriate evidence.

Staff member completing this form:	**Head of Service or higher:**
Signed: Angela Elliott	Signed: K. Gibbings
Date: 22/02/2018	Date: 12/03/2018

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A of the Local Government Act 1972.

Agenda Item 12

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