# PR19 final methodology webinar

13 December 2017

# Agenda

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|---|---|
| 11:00 | Overview – Tim Griffiths |
| 11:15 | Outcomes – Jon Ashley |
| 11:30 | Cost sharing incentive – Ynon Gablinger |
| 11:40 | Balance of incentives and cost of capital – Andrew Chesworth |
| 12:10 | Financial model and data tables – Rob Thorp and Paul Fox |
| 12:20 | Next steps – Tim Griffiths |

## Overview – Tim Griffiths

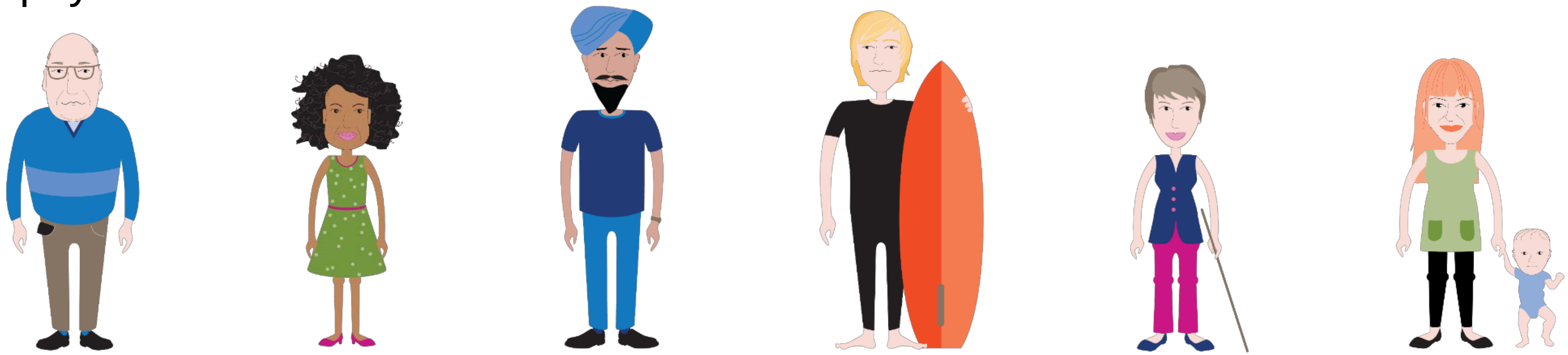
A price review is when water companies and their customers create plans for the future that will deliver customers' wants and needs.

Our role is to:

- set the framework and methodology
- check and challenge the plans
- set out our decisions on the five-year price, service and incentive package for each company

Our price review is an important tool for delivering trust in water.

PR19 provides the blueprint for a resilient long-term future for water, providing more of what matters to customers at a price they can afford and are willing to pay.



## PR19 methodology

Sets our approach to PR19 and our expectations and requirements for company business plans

## Initial assessment of business plans

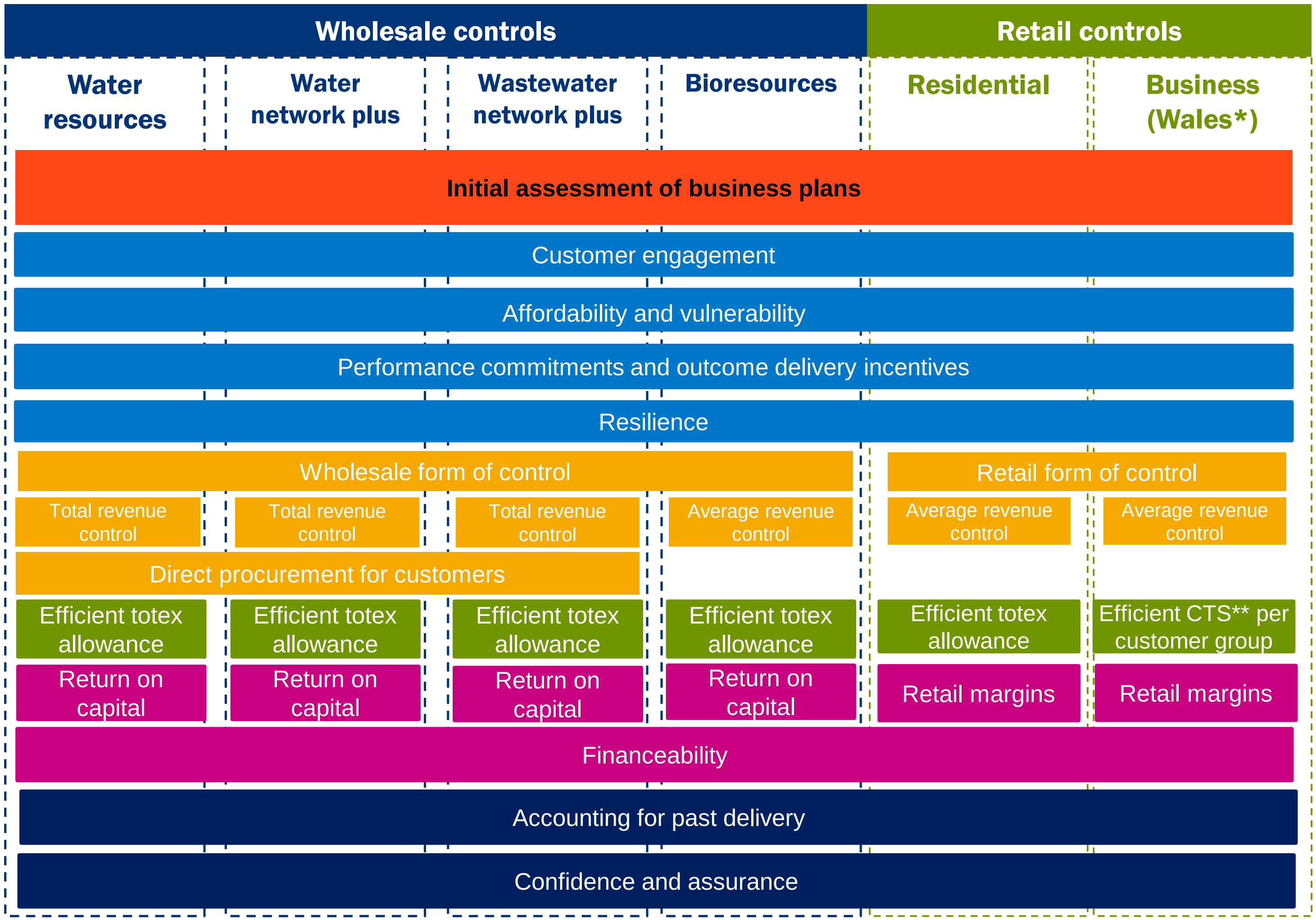
Tests company business plans against our expectations and requirements

## Draft and final determinations

Price, service and incentive package for each company. Based on company business plans, with our interventions to protect customers


Customer service
Long-term resilience
PR19
Affordable bills
Innovation

# The structure of the PR19 final methodology remains the same




* 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

# We will continue to categorise business plans into four categories

## Business plans

A **high quality** business plan will be efficient, resilient and affordable, and include stretching performance commitments that really deliver for customers.

An **ambitious** business plan will push forward the efficiency and delivery frontier for the sector, setting a new standard for the future.

An **innovative** plan will show capacity and readiness to innovate and reflect a culture that embeds innovation throughout the business.

We will categorise business plans into the following four categories:

| Exceptional | Fast tracked | Slow tracked | Significant scrutiny |
|---|---|---|---|
| High quality plans with significant ambition and innovation customers that push the boundaries of the industry and set an example for others. | High quality plans with limited intervention required, but not ambitious or innovative enough for exceptional status. | Plans that require a level of material intervention to protect customers – partial resubmission or additional evidence required. | Plans that fall well short of quality required where extensive material intervention is required to protect customers. |

# Our IAP test will continue to cover 9 test areas

| | |
|---|---|
| Initial assessment of business plans: test areas | Initial assessment of business plans: key test areas, characteristics, categories and incentives |
| Engaging customers | Enhanced customer engagement; customer participation; engaging customers on long-term issues including resilience |
| 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. |
| Delivering outcomes for customers | Stretching performance commitments, including new customer experience measures; powerful outcome delivery incentives |
| Securing long-term resilience | Resilience 'in the round'; clarified principles; focus through business plan tests and outcomes |
| Targeted controls, markets and innovation | Four separate wholesale revenue controls<br>Encouraging use of markets with clarity on post 2020 investments where markets apply<br>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 |
| 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 |
| 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<br>CPIH as a legitimate measure of inflation |
| | Financeability |
| Accounting for past delivery | 2015-2020 reconciliation; confidence in business plans |
| Securing confidence and assurance | Business plan expectations: data and assurance |

# There are some key changes in the PR19 methodology

Some key changes set out in the following slides:

- **Outcomes**
- **Cost sharing incentive**
- **Balance of risk and return**
- **Early view on the cost of capital**

Other key changes include:

**Bioresources:** We have modified the average revenue control so that when measured volumes vary from forecasts, revenues better reflect company incremental costs.

**Retail controls:** We'll set five-year price controls (rather than three years) and have encouraged water companies to tackle gap sites and voids.

**Confidence and assurance:** We've introduced a new IAP test, requiring Board assurance on customers' trust and confidence through transparency and engagement on issues such as its corporate and financial structures.

# Outcomes – Jon Ashley

# Outcomes are the high-level objectives that matter to customers

We still have **14 common performance commitments** covering customer service, asset health and resilience .

We still expect companies to set **stretching performance commitments**, but have revised our approach in relation to the use of comparative information (see right).

Our **challenges for leakage** remain the same (upper quartile, 15% reduction and best achieved by a company in current period).

We still expect **in-period ODIs** as the default .

We are still removing the aggregate cap on ODIs and have an **indicative range of ±1% to ± 3% of RoRE for ODIs.**

We are still encouraging **enhanced outperformance and underperformance payments** for frontier-shifting performance on the common, performance commitments.

We have changed…

- One common performance commitment has changed to ‘treatment works compliance’ and we have amended three definitions.
- Our approach to setting **stretching** performance commitments. We were expecting companies to achieve upper quartile forecast performance for 2024-25 in 2020-21. We now expect forecast upper quartile performance for each year of the price control.
- Our **terminology** :
  Rewards = outperformance payments
  Penalties = underperformance penalties
- We are commissioning work with Water UK to improve the **consistency in the reporting and the definitions** of the common performance commitments.
- We now expect companies to consider **protections for their customers** if their ODI performance turns out above the top of their expected ODI ranges.

# The 14 common performance commitments

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Customer experience measure | 2. Developer services experience measure | 3. Water quality compliance | 4. Customer water supply interruptions | 5. Leakage | 6. Per capita consumption | 7. Customer property sewer flooding (internal) |
| 8. Wastewater pollution incidents | 9. Risk of severe restrictions in a drought | 10. Risk of sewer flooding in a storm | 11. Asset health: mains bursts | 12. Asset health: unplanned outage | 13. Asset health: sewer collapses | 14. Asset health: treatment works compliance (WASCs only) |

Customer experience Day to day performance Future performance/resilience

Area of focus

1 to 6 and 9, 11 and 12 apply to WoCs and WaSCs
7, 8 and 10, 13 and 14 apply to WaSCs only

# Customer & Developer Services Measures of Experience (C-MeX & D-MeX)

C-MeX and D-MeX are mechanisms to incentivise companies to provide **a better customer experience**. C-MeX replaces SIM **for residential customers.** D-MeX is a new incentive for PR19 applying to **developer services customers** (developers, SLPs and NAVs)

## Customer Measure of Experience (C-MeX)

**What is the same – C-MeX will:**

- Be based on both a customer service and a customer experience survey - each with an equal weighting.
- Include an element of cross sector-comparison and offer higher rewards for strong performance relative to other sectors.

**What has changed:**

- Instead of applying a purely reputational incentive on complaints performance, we are adding a 'gate' that switches off the higher C-MeX financial rewards for poor performance on complaints.
- We will pilot the Net Promoter Score (NPS) in the C-MeX survey to test whether it is a better measure of the customer experience than satisfaction.

## Developer Services Measure of Experience (D-MeX)

**What is the same – D-MeX will:**

- Promote better customer service rather than competition in the new connections market (we enabling competition in other ways)
- Be based on customer feedback.

**What has changed:**

- We will include a quantitative element in D-MeX, based on a subset of existing Water UK metrics, following feedback from the consultation.

We are not making final decisions on the detailed design of either incentive. Our decisions on the detail will be informed by the pilots and the working groups.

# Cost sharing incentive – Ynon Gablinger

# Cost efficiency incentive – stretching further

- The cost sharing incentive is an incentive to submit efficient cost forecasts in business plans.
- In a price control we set an expenditure allowance for each company. If a company overspends or underspends this allowance, cost sharing rates specify the proportion of the overspend that they have to bear, or the underspend that they get to keep.
- The incentive works such that more efficient plans (relative to our assessment of costs) will get more favourable cost sharing rates.
- What has changed since draft methodology? We have adjusted our proposed cost sharing rates to provide a stronger incentive for companies to submit efficient business plans and to ensure the scheme better protects customers against inefficient business planning and against perceived risks around gaming.

More efficient business plans ←

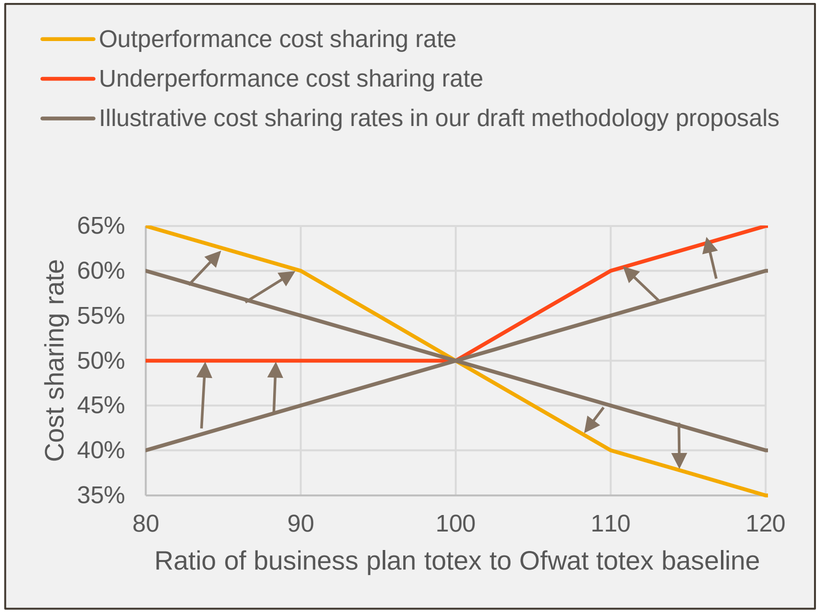
| Totex ratio[1] | 70 | 80 | 90 | 100 | 110 | 120 | 130 |
|---|---|---|---|---|---|---|---|
| Cost sharing rate for outperformance[2] | 65% | 65% | 60% | 50% | 40% | 35% | 35% |
| Cost sharing rate for underperformance[3] | 50% | 50% | 50% | 50% | 60% | 65% | 65% |

[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.

Source: Final methodology, Chapter 9, Figure 9.1: cost sharing mechanism for PR19




Source: Final methodology, Appendix 11, Figure 1: The PR19 cost sharing incentive mechanism

# Balance of incentives and cost of capital – Andrew Chesworth

# Balance of risk and return

The 'balance of risk and return' is how the overall package of incentives comes together to get companies to deliver for customers. Our aim is to **align the interests of companies and investors with those of customers** - so that the best cost and service outcomes are delivered to customers.

Maintain our position that:

**Outcomes**

Average performance now is not good enough for the future – and would incur penalties

**Cost of capital**

We'll set a cost of capital based on forward looking cost of equity and we'll index the cost of new debt. Some companies will find this tough.

**Costs (totex)**

We will remove menu regulation and replace with cost sharing scheme to encourage efficient cost forecasts. We expect a step change in efficiency.

**Tax**

Reconciliation for changes in corporation tax rate and capital allowances

But we have changed:

**Outcomes**

Our benchmarks will target upper quartile in each year – customers should not wait for service improvements

**Initial assessment of business plans**

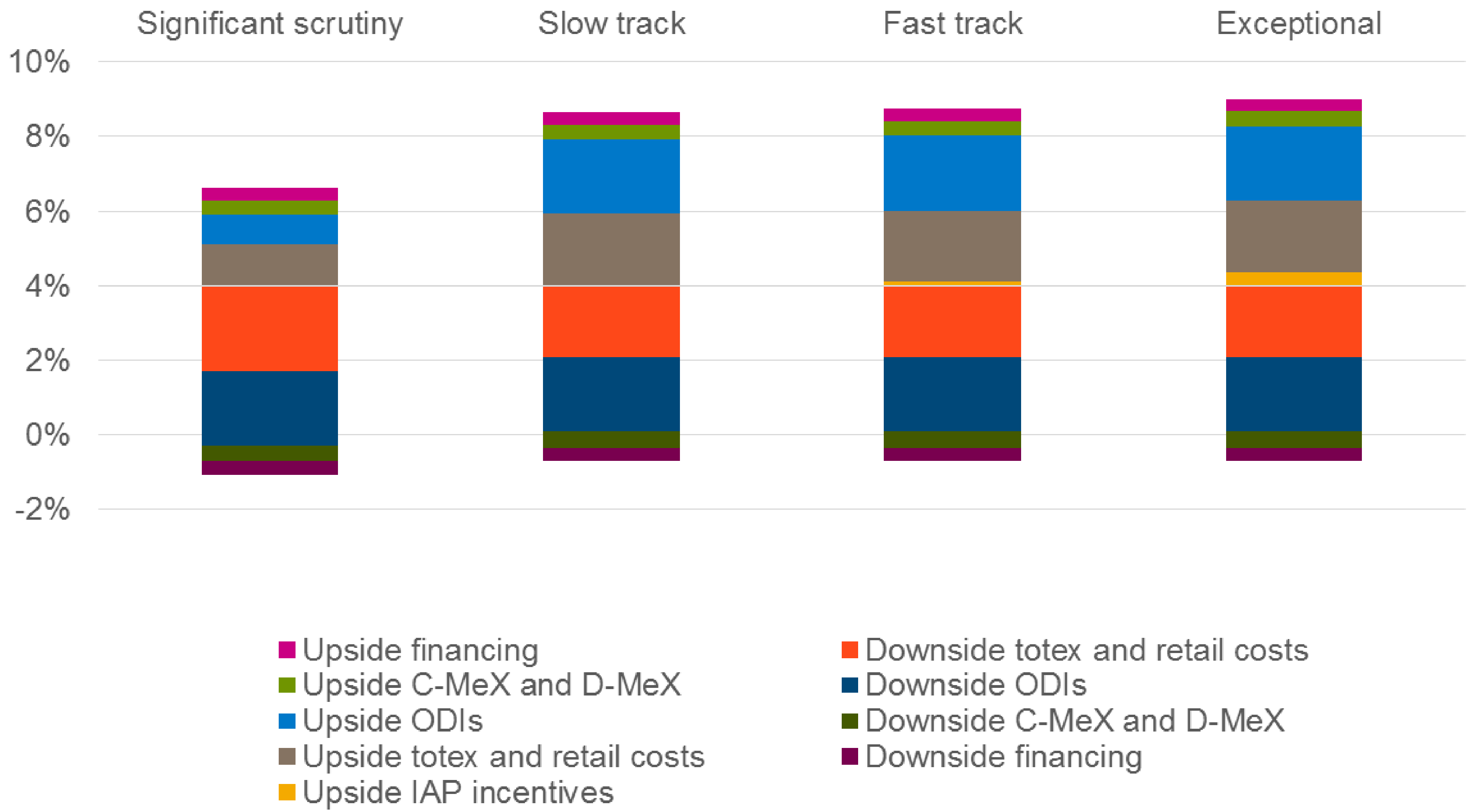
Exceptional companies will receive 20-35bp (RoRE) reward and early certainty

Fast track companies will received 10bp (RoRE) reward and early certainty

Significant scrutiny companies will have tougher cost sharing rates

**It will remain possible - if unlikely - for the whole sector to outperform the regulatory targets and so achieve rewards.**
**Returns are not skewed to the downside.**

# Overall balance of risk and return



# Cost of capital

We have published our initial view of the cost of capital for PR19.

Our overall approach has not changed since the draft methodology.

**Cost of equity**

Regulators have traditionally placed the greatest weight on long-run historical evidence.

But equity returns are currently low.

And there is good reason to expect significantly lower returns to persist to 2025.

So we are placing less weight on long-run historical evidence than we have in the past.

**Cost of debt**

A fixed allowance for embedded (existing) debt based on benchmarks and company balance sheets.

The allowed cost of new debt will be indexed to iBoxx indices for non-financial companies with a tenor of 10-plus years, adjusted for CPI(H).

This removes the premium associated with forecast error and provides protection where the cost of debt increases.

Companies can make a case for a company specific adjustment

As we are transitioning to a more legitimate measure of inflation – CPIH - we state the cost of capital and its components in nominal, RPI and CPIH real terms. In RPI terms it is lower than PR14, reflecting a lower interest rate environment and lower expectations of investor returns through 2020-25.

# Our early view of the WACC for 2020-25:

**PR14: 8.61%** **PR14: 5.46%**

| 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% |

**PR14: 6.64%**

The retail margin deduction refers to the adjustment made to the appointee WACC to derive the wholesale WACC, assuming a 1% retail EBIT margin.

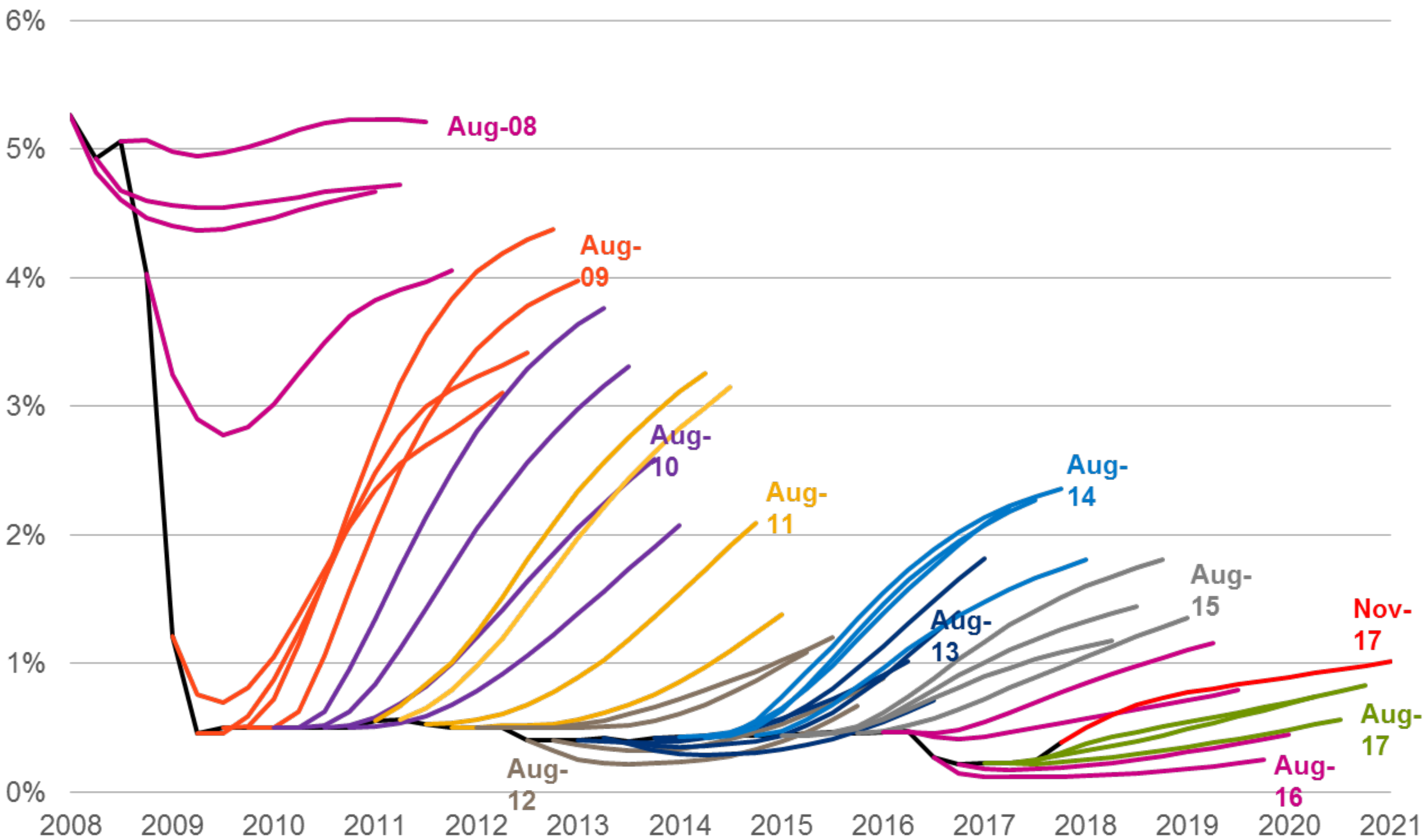
The new WACC represents a bill impact of £15-25 on customer bills for 2020-25. Within range priced in by markets (listed share price impact minimal so far).

# Our early view of the Cost of Equity for 2020-25

| Component | Real RPI<br><br>(long-term RPI 3% | PR14 comparison (long-term RPI 2.8%) |
|---|---|---|
| Total market return (TMR) | 5.44% | 6.75% |
| Risk free rate (RFR) | -0.88% | 1.25% |
| Equity risk premium (ERP) | 6.31% | 5.50% |
| Unlevered beta (no debt beta) | 0.32 | 0.30 |
| Debt beta | 0.10 | 0 |
| Asset beta (including debt beta) | 0.37 | 0.30 |
| Equity beta | 0.77 | 0.80 |
| Cost of equity | 4.01% | 5.65% |

## The BoE base rate is low – and the market expects it to remain low:

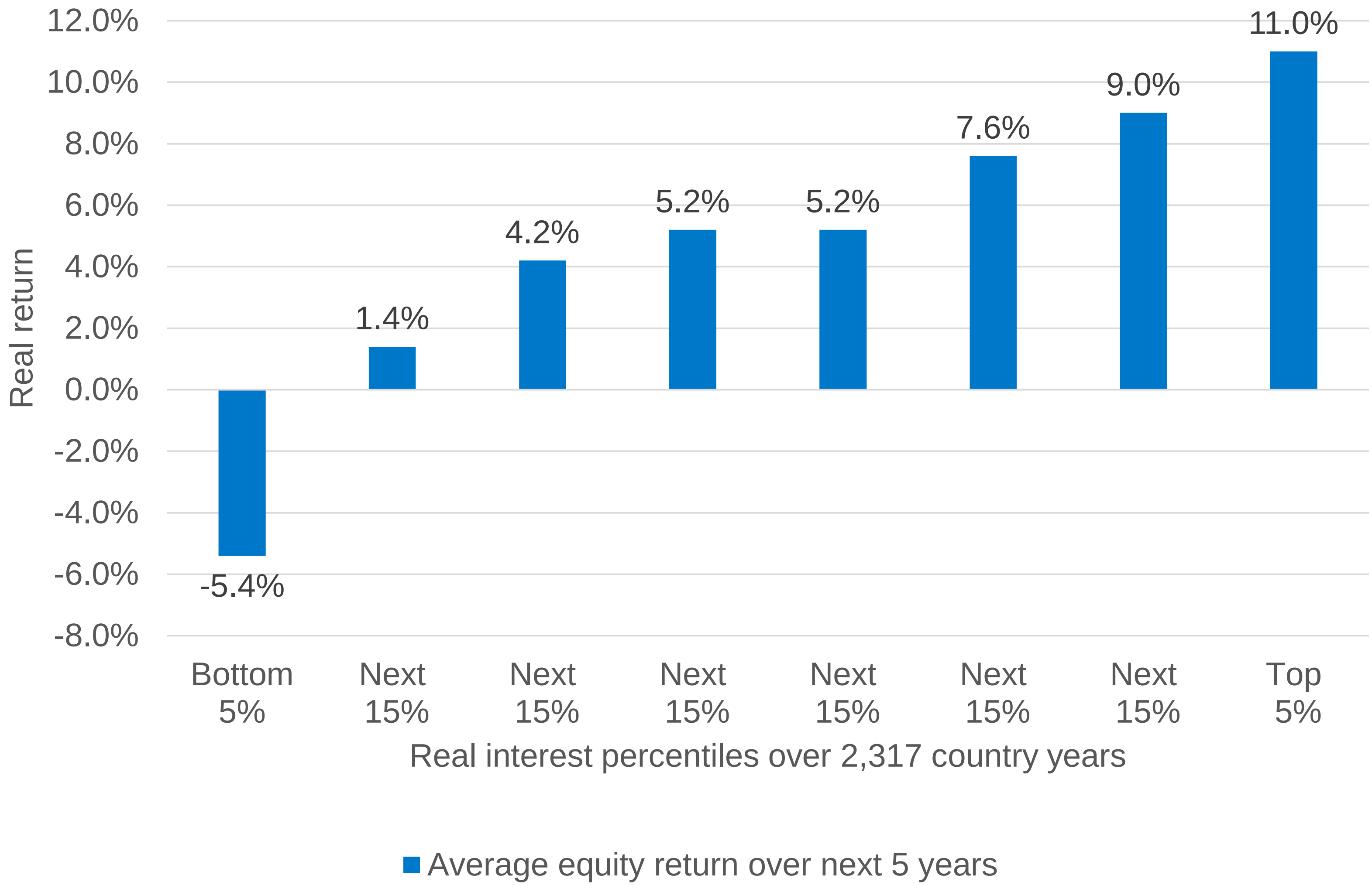
**Market-implied paths for the BoE base rate inferred from pricing of financial instruments:**




Source: Bank of England, Interest rate conditioning path

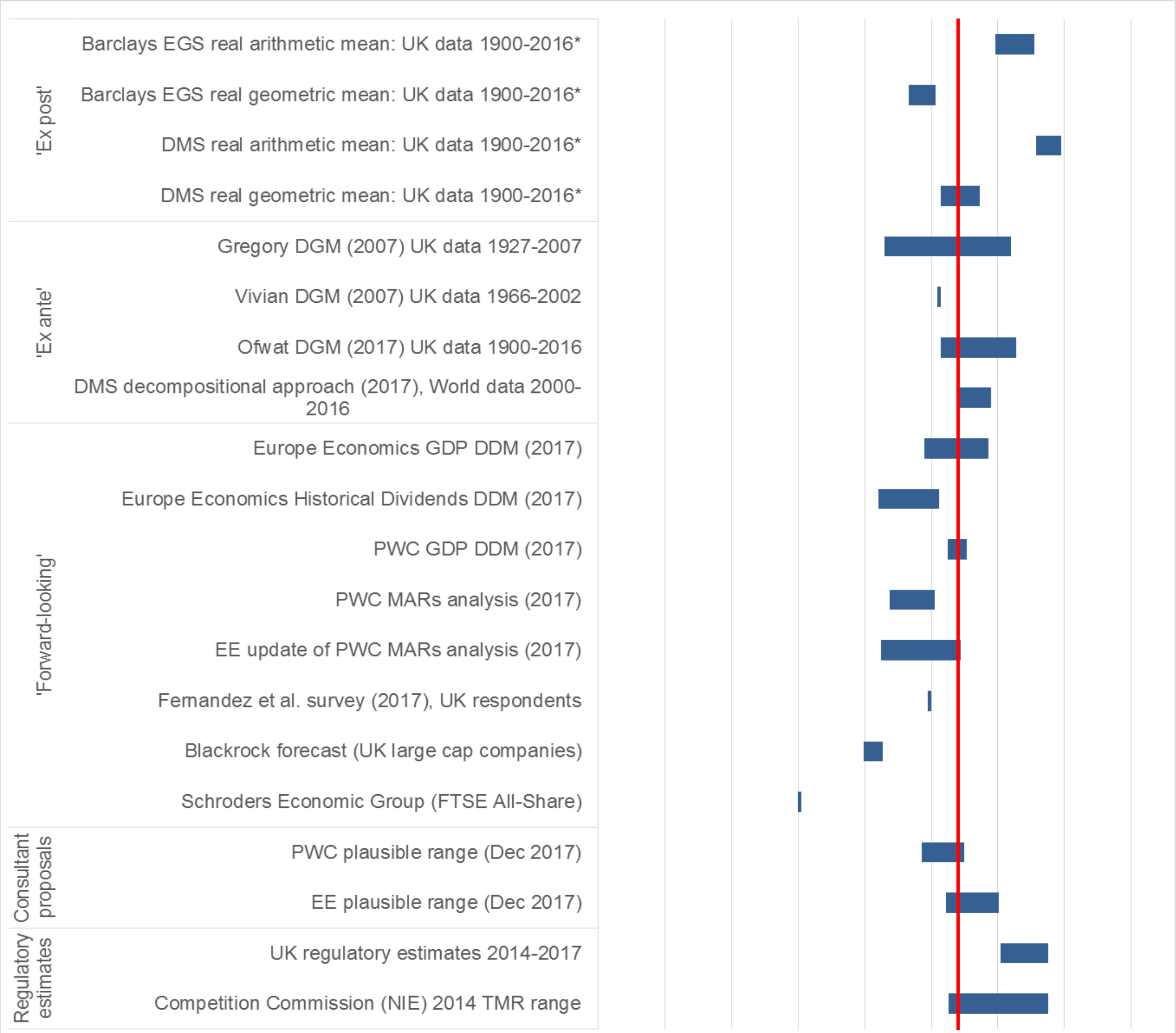
# Low interest rates have historically meant low equity returns:

## Relationship between real interest rates and real equity returns:




Source: Credit Suisse Equity Returns Yearbook 2017 – slide deck

# Total Market Return – evidence and our point estimate:




Source: Ofwat analysis

# Cost of debt– an overview

| Component | Real RPI (long-term RPI 3%) | PR14 comparison (long-term RPI 2.8%) |
|---|---|---|
| Cost of embedded debt | 1.59% | 2.65% |
| Cost of new debt | 0.38% | 2.00% |
| Ratio of new to embedded debt | 70:30 | 75:25 |
| Uplift for issuance and liquidity costs | 0.10% | 0.10% |
| Cost of debt | 1.33% | 2.59% |

# Financial model and data tables – Rob Thorp and Paul Fox

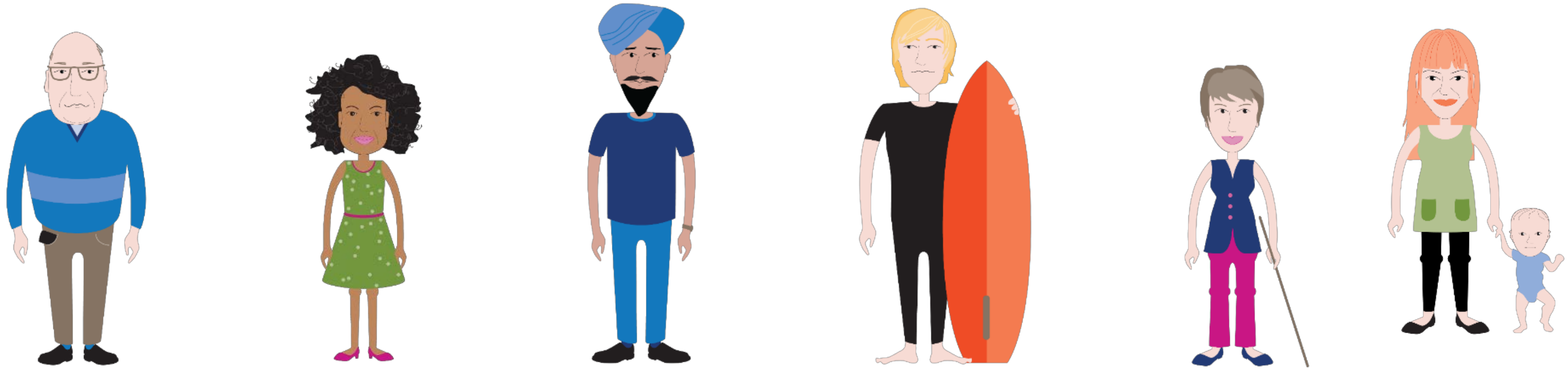
The PR19 financial model has been published alongside the final methodology.

This model is now subject to independent external review by Grant Thornton. This review will conclude by the 28 February 2018. Ofwat will publish the Grant Thornton review report on our website, along with details of any amendments to the model.

A ‘mapping tool’ has been developed that illustrates the main linkages between the business plan tables and the financial model. This will help companies populate the model.

An illustrative model showing RCV indexation in the RCV feeder model and the financial model has also published.

The final date for issues and clarifications on the financial model is 30 March 2018.



# Business plan data tables

- You identified almost 700 issues with the draft tables – **we have published our responses to each of these** and made changes where necessary
- We have improved the **number and clarity of definitions, linkages between tables and the financial model** and **allocated item references**
- A key issue was that you wanted an **open and transparent clarification process** after publication of our final methodology – we will run this process, but **do not want to make any changes to definitions or guidance beyond April 2018** (queries need to be sent to us by end of March 2018)
- We have **reconsidered our request for historical data** in a number of the cost assessment tables – we will require further assurance on the July 2017 data and will progress this early in 2018
- We have **reviewed and improved definitions of the industry-wide data** removing duplication with other tables
- We have looked again at the data we need for the **PR14 reconciliation, for water resources and developer services** and included a new table on **void properties.** We have incorporated lines and tables for a dummy price control - the net effect is an increase from 100 to 102 tables, with an additional 9 tables for the dummy control
- We plan to **release a version of the data capture system portal in 2018** to allow submission of APRs for 2017-18 – we will release minor updates after this submission

# Next steps – Tim Griffiths

| | |
|---|---|
| **2017** | |
| **11 July** | Draft PR19 methodology consultation published |
| **12 July** | City briefing |
| **July-August** | Continued engagement through consultation period |
| **30 August** | PR19 draft methodology consultation closes |
| **13 December** | Final PR19 methodology published |
| **2018** | |
| **3 September** | Companies submit business plans to Ofwat |
| **2019** | |
| **January** | Initial assessment of business plans |
| **March** | Draft determinations (exceptional and fast track plans) |
| **April** | Companies submit revised business plans (significant scrutiny and slow track) |
| **July** | Draft determinations (Slow track and significant scrutiny) |
| **December** | Final determinations published |

# More immediate next steps up to the submission of business plans

| | |
|---|---|
| **January** | Ofwat publishes feedback on company bioresources RCV allocation proposals. |
| **31 January** | Companies propose their own allocation of historical RCV for water resources. |
| **March** | Ofwat publishes report on the external review of the financial model and a revised model (incorporating changes recommended by the review). |
| **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:<br>• definitions of their performance commitments; and<br>• information on their expected cost adjustment claims.<br>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:<br>• Annual performance report;<br>• their populated PR14 reconciliation models |
| **3 September** | Companies submit business plans to Ofwat. |

**Following publication of the final methodology, we are changing our approach to engagement with water companies**

We want to ensure all companies have the same information on which to develop their business plans. We are therefore making some changes to how we engage with water companies on PR19:

- We will have a queries process which you will be expected to use for PR19 queries and clarifications. All substantive questions should be channelled through PR19@ofwat.gsi.gov.uk.

- If we think the query requires an answer that is relevant to all water companies, we will publish the query and the answer on our website and circulate to water companies. **We've asked each company to give us an email address to which we can direct these answers when they become available.**

- To ensure our engagement is appropriate, we will **favour one to many communication over one-to-one.** Meetings between Ofwat and companies will be focused on workshops and other events or be as part of one-to-one meeting programmes that include all water companies.