

# PR24 cost assessment working group

Draft for discussion

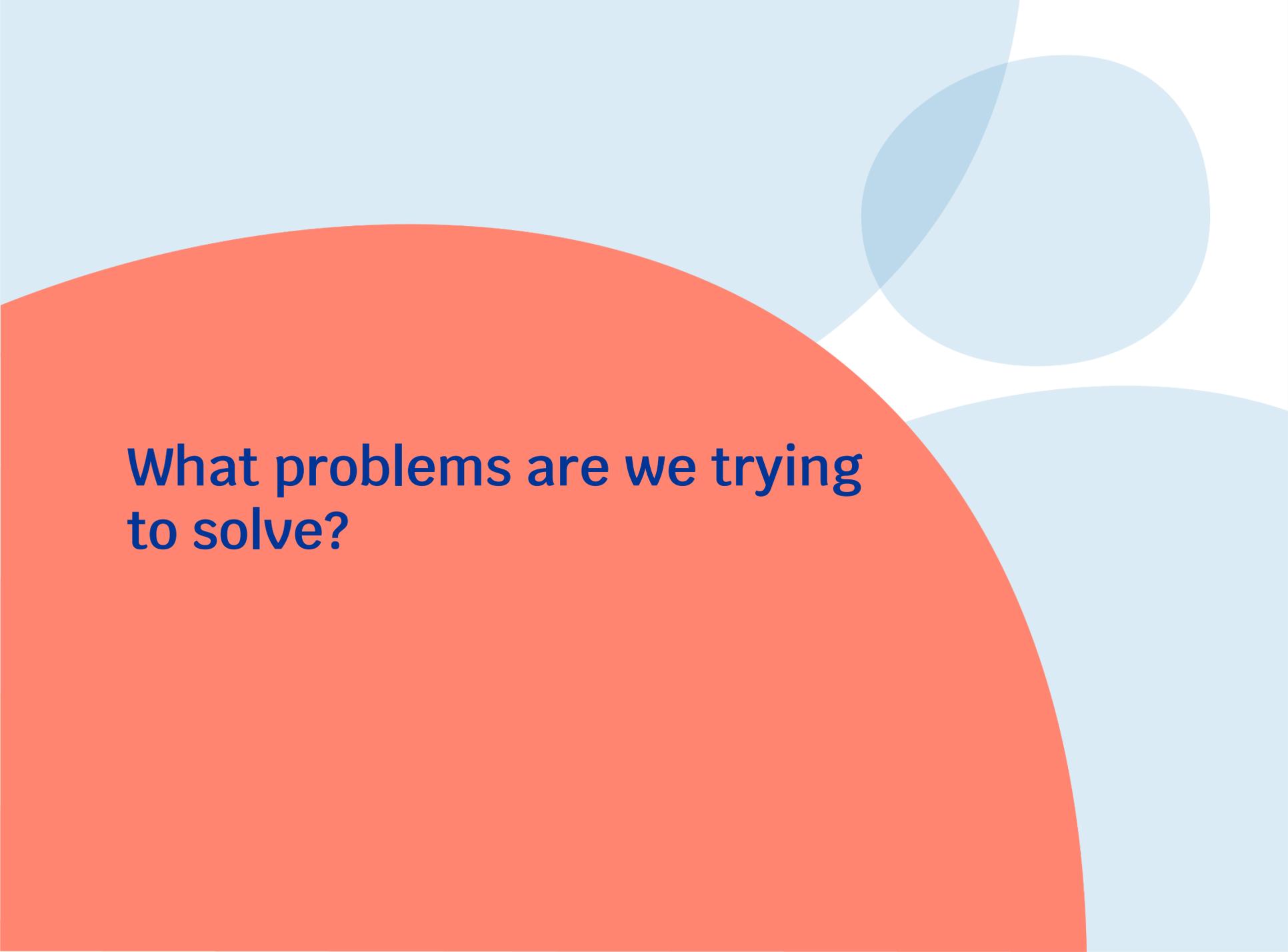
April 2021



# Contents

Welcome and housekeeping	2
Introduction: What problems do we need to solve?	3
Terms of reference	5
Base/enhancement split	7
Water resources control costs	10



The background features a large, solid orange shape on the left side, which is partially overlapped by a light blue circle on the right. Another light blue circle is positioned above the first one, overlapping it. The overall design is minimalist and modern.

**What problems are we trying  
to solve?**

# Potential topics

Aim is to build on our PR19 approach

## 1 Scope of modelled costs

- Can we improve the boundary of base, enhancement and growth costs?
- Can we benchmark more costs – is there scope for a totex approach?
- Are there other enhancement costs that can be benchmarked?

## 2 Cost drivers and explanatory variables

- How can we improve further our understanding of cost drivers?

## 3 Model disaggregation

- Can we better identify separate models for water resources and bioresources?
- Should costs be assessed from a different viewpoint (e.g., business support costs)?

## 4 Model selection process

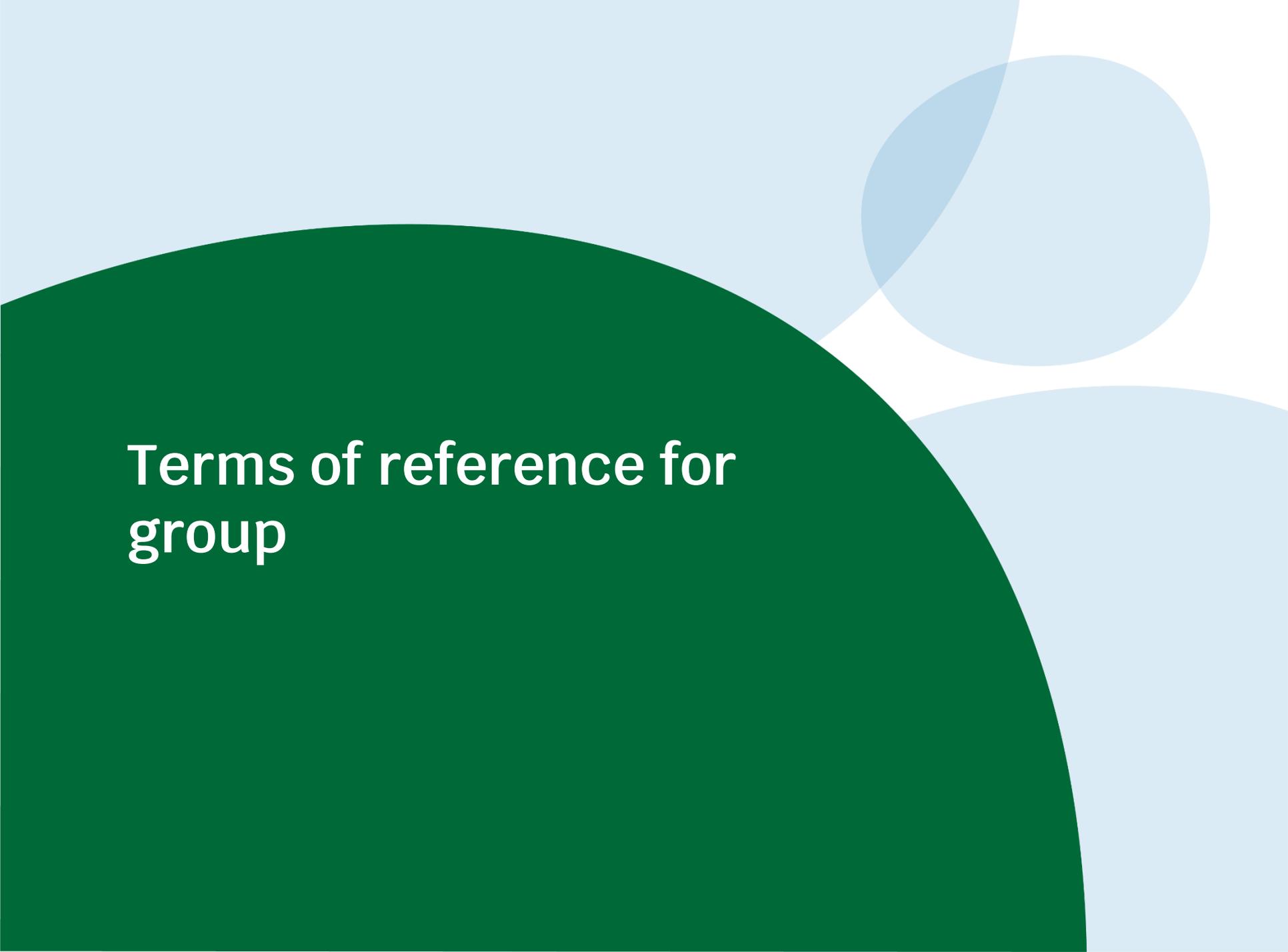
- How can/should the model selection process be improved?

## 5 Catch-up efficiency challenge

- Are there alternative ways to set the catch up challenge?

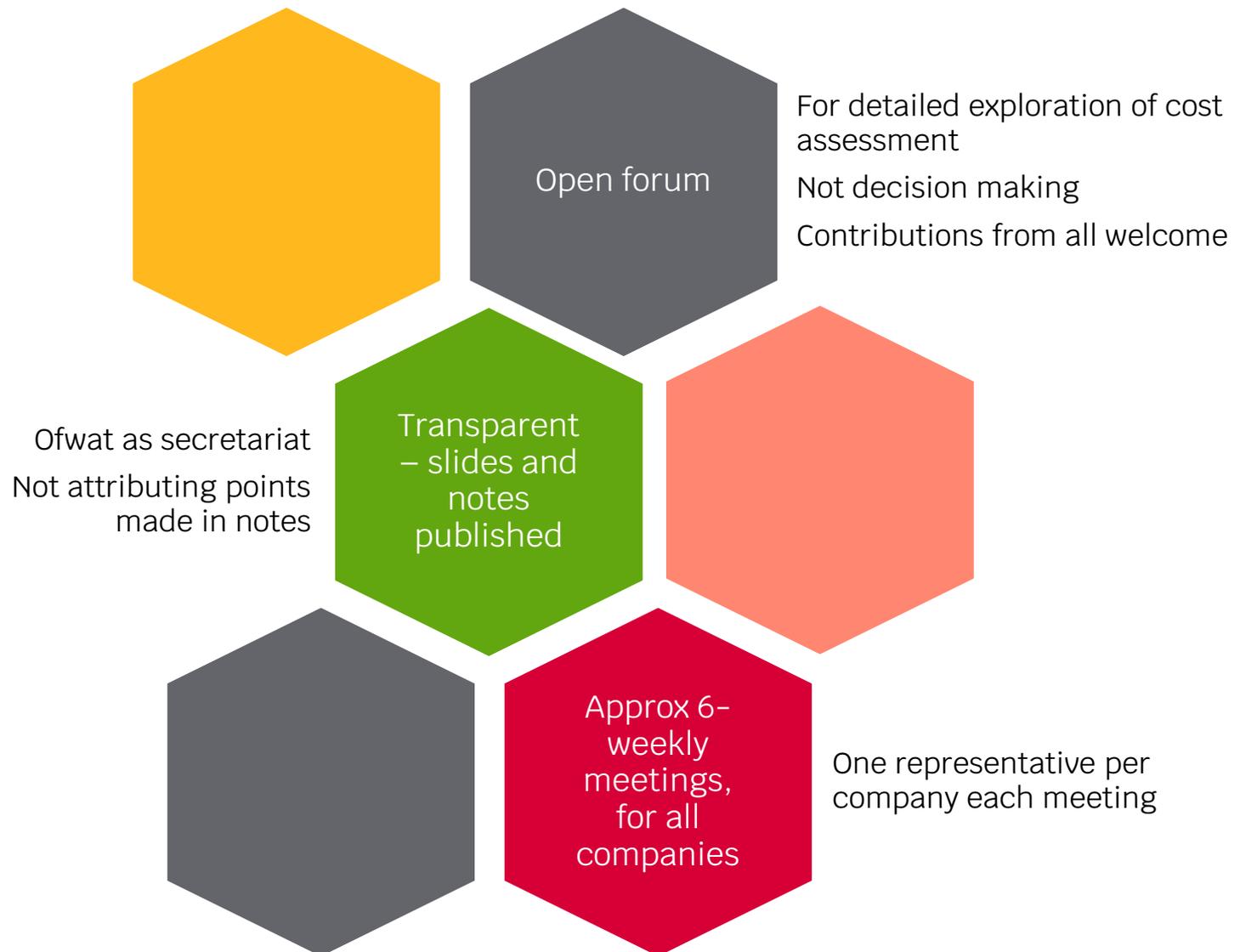
## 6 Cost adjustment claims

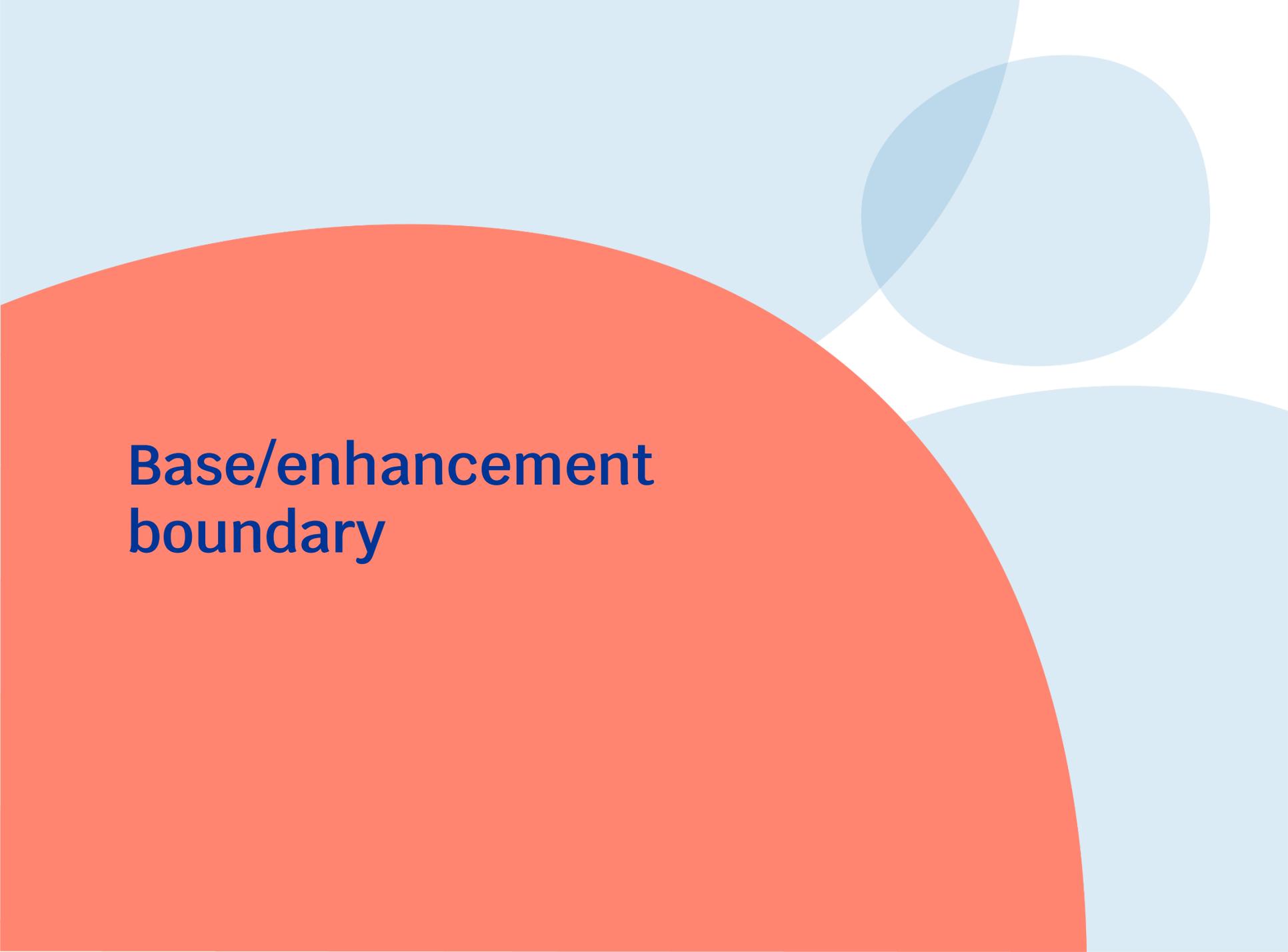
- Is there scope to further improve the cost adjustment process?
- What issues are outside the models where (symmetric) adjustments need to be considered (eg growth in PR19)



# Terms of reference for group

# Terms of reference





**Base/enhancement  
boundary**

## PR19 approach

Broadly, **base expenditure** is required to maintain the current level of service to customers. Base expenditure will include costs relating to the day-to-day running of the business and expenditure on maintaining the long-term capability of assets, as well as expenditure to improve efficiency.

**Developer services expenditure** is that required by developers to provide the same current level of service to newly connected customers. It also includes expenditure to divert water mains and sewers in connection with property developments, road improvements etc.

**Enhancement expenditure** is generally where there is a permanent increase or step change in the current level of service to a new “base” level and/or the provision to new customers of the current service level.

At PR19, we assessed base costs alongside the costs of developer services and some other routine activities (‘botex plus’) using econometric models. For enhancement expenditure we generally assessed each category separately and either used benchmarking or a risk based approach of shallow and deep dives where benchmarking was not possible.

## PR24

For PR24 we are seeking to clearly define the boundary between base and enhancement expenditure so that:

- Companies report consistently between categories of expenditure.
- We retain flexibility so that we are not tied as to which activities we will model together.
- We minimise any perceived capex bias in the assessment of enhancement schemes.

# Breakout room discussion

## Breakout room discussion

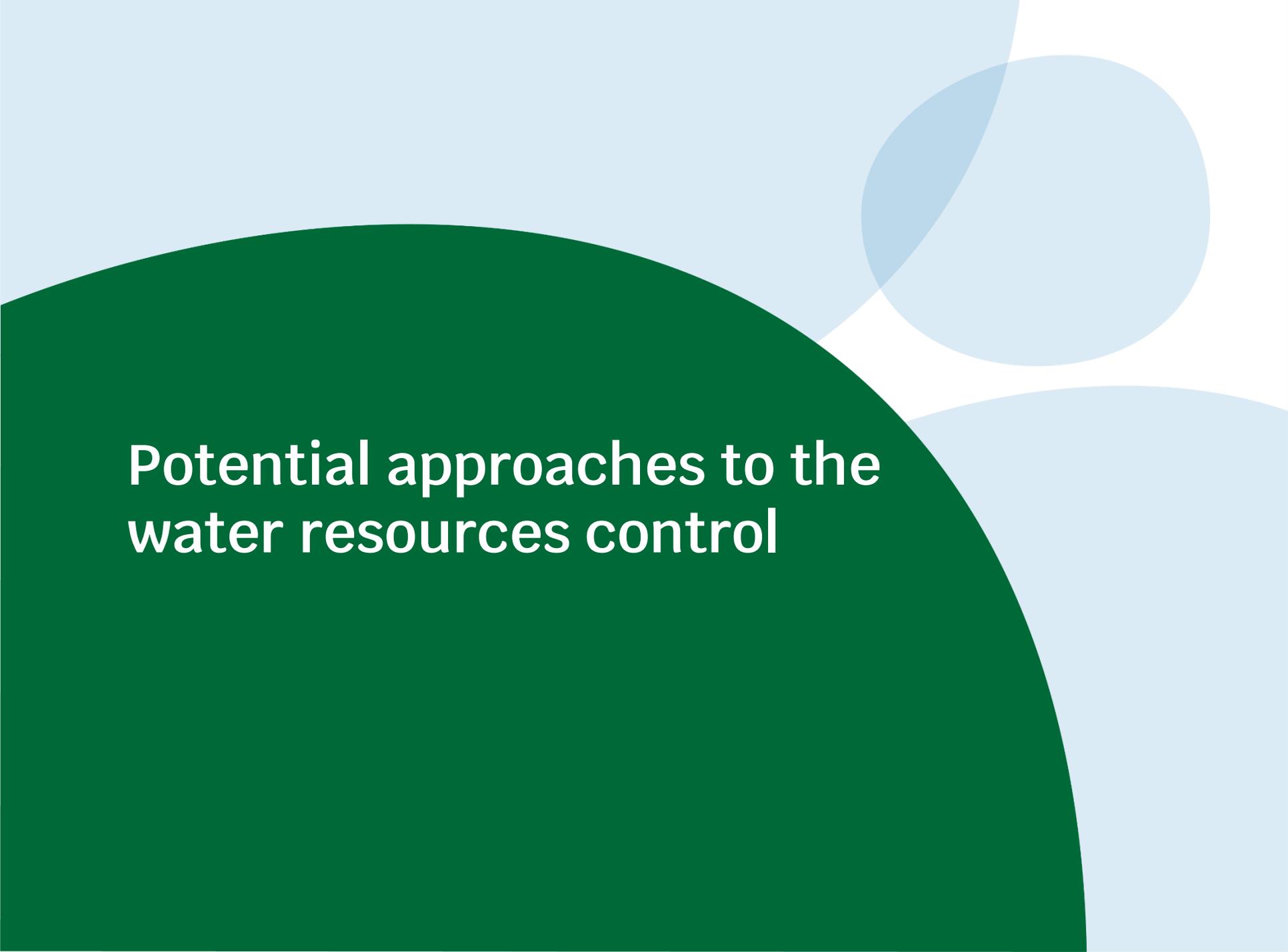
We welcome views on this area. Possible questions to consider are:

What issues are there in defining the boundary between base and enhancement?

Where do you consider that there is inconsistent reporting across the industry?

Are the principles for cost allocation in RAG2 sufficient for companies to allocate costs between base and enhancement?





# Potential approaches to the water resources control

# Has separate water resources control achieved what it set out to?



Increased management focus

- **Unclear that companies see water resources as a 'separate business'** in the way the targeted bioresources control has achieved. WR has received more attention.
- Struggled to get separate WR **cost models** to work (see next slide), **limiting** Ofwat's **ability to set targeted efficiency trajectory and incentives**. Could be due to differences in **company cost reporting**. Need to undertake further work on cost reporting.



Facilitate development of water markets

- **Water markets not developed as expected**, particularly bilaterals, which were a key component of the 'at risk' nature of new WR investments.
- Little change in **water trading since PR14**. Water trades do not always fall within the WR control (as currently defined), sometimes overlapping with RWD and WT.
- **Bid assessment frameworks** published, but will **take time to assess impact** on 3<sup>rd</sup> party competition.



Address limitations of single control

- **Difficult to assess** whether **cross-subsidisation** has declined (and extent of issue pre-PR19).

# Key issues to address

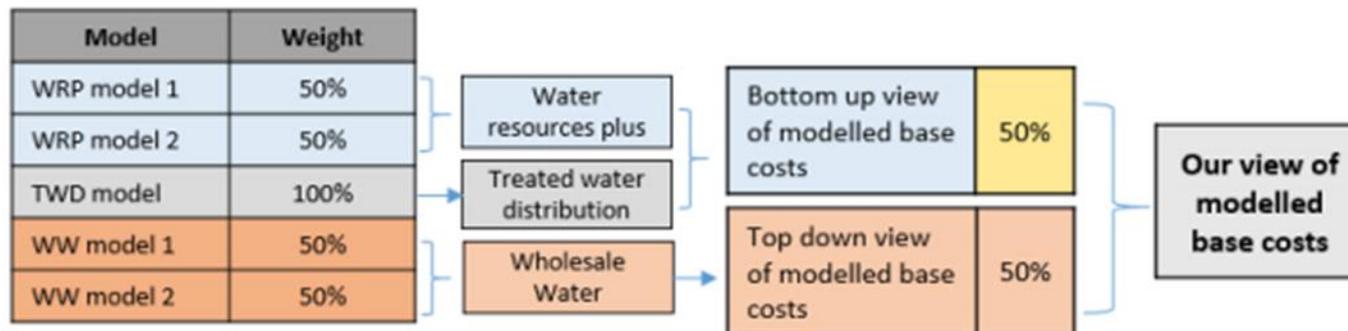
## Cost models

- For PR19 cost assessment, **several granular models for water resources were tested** (covering water resources only).
- Attempted a single-driver model, using **number of connected customers** as the variable, but was **not adopted due to wide range of efficiency scores**.
- **CEPA** analysis **attempted alternative models** that controlled for **multiple cost drivers**...
- ... which worked well from statistical perspective, but some cost drivers **did not behave as expected from engineering perspective**.
- Crucially, **pumped storage** and **impounding reservoirs**, theoretically the most and least expensive sources of water respectively, **did not have noticeably different results**.
- As a result, **PR19 cost assessment used aggregated 'water resources plus' models**, covering water resources, raw water distribution and water treatment (see chart).

## Operational issues from asset overlaps

- Key issue is **overlap of assets** between water resources and network plus control boundaries.
- Some pumps perform **both raw water abstraction and raw water transport activities** and this has led to confusion over which control these assets should fall under.
- Some **borehole pumps also perform treatment activities** (so moving WR control boundary to incorporate RWD may not entirely solve issue), but this issue is **less common**.
- **Water treatment costs** are also **very dependent on the initial water resources asset**, but fall under separate controls.

PR19 cost assessment model weighting



## Key areas of feedback

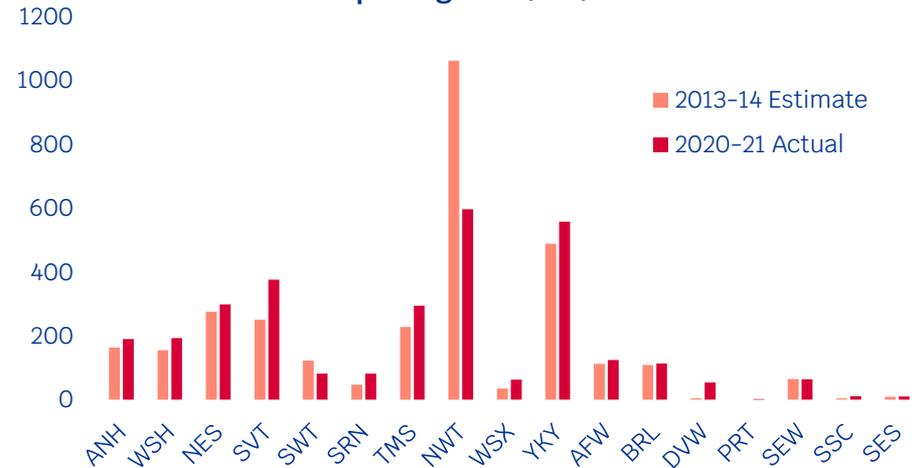
- 1 – Is there scope to improve cost allocation guidance to allow separate water resource cost models to be estimated?**
  
- 2 – Would amending the boundary to include raw water distribution assist in allowing separate models to be estimated? What are the issues involved?**
  
- 3 – Would we need to amend the boundary to include water treatment to allow separate models to be estimated? What are the issues involved?**

# RCV allocations

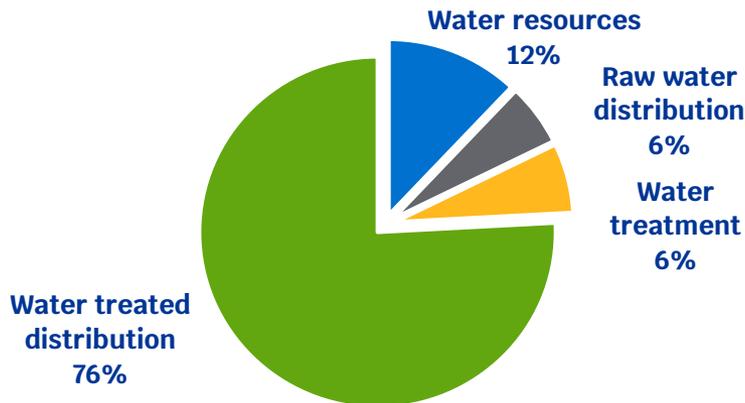
## RCV at stake

- Have **MEAVs** and **RCVs** for each incumbent for **2009-2014** from Ofwat data.
- Across the 18 incumbent water companies, **water resources** formed a **weighted average of 12% of the water value chain** (i.e. excluding wastewater).
- Sum total of **£3.2bn of RCV value across all companies**.
- Extending the control to cover **raw water distribution** would have added a further £1.5bn to combined RCV, average of **£84m per company**.
- Incorporating **water treatment** would have added a further £1.7bn to combined RCV, or **£94m per company**.
- Note that **majority of WR RCV** attached to **Northern utilities** (NWT, YKW), while **majority of need** for additional WR assets **lies in the south**.

Water resources RCV allocation, 2013-14 estimate v. 2019-20 actual opening RCV (£m)



Water RCV allocation by activity (2013-14 estimate, unfocused, industry average)



Water RCV allocation by activity (2013-14 estimate, unfocused, industry total)



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**Future meetings**

## What's next?

Date of next meeting: 26 May, 11:00 – 13:00

Feedback on today's meeting and the topics of discussion can be:

- Through responding to May 2021 PR24 discussion paper; or
- Emailing us at [CostAssessment@ofwat.gov.uk](mailto:CostAssessment@ofwat.gov.uk)

