

Water 2020 - RCV allocation – sludge workshop

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2 March 2016



Item	Time
Introduction and recap from W2020 consultation: <ul style="list-style-type: none"><li>- separate price control for sludge</li><li>- RCV allocation</li></ul>	1:45pm
Protection of RCV at 2020 - how the guarantee could work in practice: <ul style="list-style-type: none"><li>- Thames's illustration</li><li>- Alternative asset based strawman</li></ul>	1:55pm
MEA valuation: <ul style="list-style-type: none"><li>- Costs of asset valuation</li><li>- Valuation challenges: different approaches and limitations</li></ul>	2.55pm
End of session	3:15pm



- We have proposed separate price controls for sludge (and water resources) in the W2020 consultation
- Customers can benefit from efficiency and innovation through enhanced competition
- We anticipate the following benefits from these separate controls:
  - Improved cost information (clearer focus of costs for each market)
  - Better information:
    - supports company decision making;
    - mitigates against cross-subsidy concerns;
    - encourages commercial and managerial focus;
    - allows targeted regulatory incentives.
  - Delineation of costs and revenues for sludge activities help identify and realise efficiency savings for the benefit of:
    - customers;
    - investors; and
    - the environment.



- The December consultation proposed to allocate RCV for sludge activities using a focussed approach
- We believe the benefits of this approach are:
  - Creation of a **level** (cost based) **playing field** for all market players in appointed and unappointed markets (dependent on MEA valuation)
  - **Avoids over-recovery** of RCV if sludge assets are sold (at MEAV)
  - Establishes a **link between underlying costs and prices** charged to customers
- A few respondents to the W2020 consultation suggested that actual RCV allocation is not necessary to achieve the benefits set out above
- Some suggested a shadow RCV allocation as an alternative
- The benefits of a shadow RCV allocation were presented as:
  - Maintaining stability of the RCV
  - Not having to commit to RCV allocation (giving flexibility in the future, but less regulatory certainty)
  - Preferable approach if there is a risk that an RCV allocation undermined existing financing arrangements

## Point for discussion

If we opted for a shadow RCV, how would it work and what are the advantages and differences over RCV allocation?

# **Sludge Working Group – 2 March 2016**

**2020 RCV Guarantee**

**Peter Trafford**



# Overall Approach

- In our Water 2020 response we welcomed the principle of the RCV guarantee.
- However, at this stage the RCV guarantee is not clearly enough defined for its effectiveness to be assessed
- We therefore set out a simple approach, at the principle level, to aid its further development. The suggested approach:
  - Translates the RCV guarantee into a guaranteed revenue amount
  - Annually, or at end of the price control, compares collected revenue (adjusted for relevant movements) against the guaranteed revenue
  - With any shortfall collected against the Network+ control

# Guaranteed Revenue

- RCV is in effect an IOU
- If the March 2020 RCV is guaranteed then the income from it must be guaranteed
- For each price control a guaranteed revenue level can be set at the outset comprising:
  - Allowed depreciation; plus
  - Allowed return (for the sludge control)
- For example, with a £1,000 RCV and 10-year depreciation period

(Constant prices)		2020-21	2021-22	2022-23	2023-24	2024-25
Revenue from "guaranteed assets"						
Allowed return	3.60%	34.2	30.6	27.0	23.4	19.8
Depreciation		100.0	100.0	100.0	100.0	100.0
Guaranteed income		134.2	130.6	127.0	123.4	119.8
<b>Total Guaranteed amount</b>						<b>635.0</b>

# Sludge price control determination

Allowed revenue	AMP7 Amount (£)
RCV Guarantee	635
Opex etc	552
Enhancement	184
Exports	(125)
<b>Allowed Revenue</b>	<b>1246</b>

- Price cap - so allowed revenue changes in line with volume changes
- A 20% reduction in volumes leads to around a £250 fall in revenues
- Cannot simply compare resulting revenue, of around £1000, to guaranteed revenue
- Need to adjust to remove revenue properly attributed to new assets and opex

# Comparison to Guarantee

Comparison	AMP7 Amount (£)
Collected Revenue	997
Less adjustments for revenue attributable to:	
Enhancement	147
Opex etc	442
Exports	(100)
<b>Collected revenue for comparison to guarantee</b>	<b>508</b>
Guaranteed revenue	635
<b>Claim on guarantee</b>	<b>127</b>
<b>Total under collected amount</b>	<b>(249)</b>

In this example, attributions are pro-rata to determination

# Issues to consider

- This approach uses regulated allowed revenue. Need to consider how it will work when competition is sufficient, in enough places, for the market to set prices
- Guarantee does not, in itself, preserve investment incentives; these incentives will depend on the approach to regulation of Sludge (and Water Resources) post-2020
- Identification of revenue directly attributable to new investments
- Treatment of market movements in export prices - power



## Summary of the volume based approach

- Companies should be exposed to volume risk associated with gains or losses in market share and so the control should include a volume element
- PR19 ex-ante:
  - Establish MEAV of sludge assets at March 2020
  - Maintain a separate RCV for pre- and post-2020
  - Set sludge price control using standard building blocks based on pre- and post-2020 assets
  - Determine baseline volume for price control and use this to calculate effective unit prices and expected recovery for sludge treatment volumes
- Ex-post:
  - Volumes of sludge treated split by appointed / unappointed activities
  - Actual appointed volumes against ex-ante assumptions
  - Reimburse any shortfall of cash contribution that relates to pre-2020 RCV and associated volumes



## **Primary questions for today**

- Are the problems with the illustration presented by Thames Water, what are they and how can we mitigate them?
- Should the protection cover just revenue/price or should it factor in cost savings?
- Should our primary focus be on instances where the present value of cash costs to consumers decrease, are there alternatives?

## **Other questions to be addressed**

- Should our primary focus be on instances where the present value of cash costs to consumers decrease? Are there alternatives?
- Should we distinguish between volume taken by another WaSC and volume taken by an OOW service provider?
- How should ex-ante volume forecasts be estimated?
- pre-2020 RCV returns guaranteed against all market volume risk (market share and total market size)? How should the benefits of unappointed income be shared between customers and investors?



## Alternative RCV protection strawman for discussion – case by case asset approach

- Companies identify stranded assets that should benefit from RCV protection from MEA revaluation asset inventory
- Companies put forward claims for asset that are stranded
- Ofwat assesses company claims against predefined criteria
- Stranded assets are then protected at their net RCV value (i.e. MEA revaluation less sludge RCV run-off rate)

### Point for discussion

What are the pros and cons of this approach compared with the previous proposition?

MEAV

Greg Tate, Andrew Mcgeoghan  
2 March 2016

ofwat



**1. Background to MEAV**

**2. Draft Objectives**

**3. Issues to be addressed**

**4. Costs of a revaluation exercise**

**5. Other options**

## MEAV definition (RAG 1.04)

What it would cost to replace an old asset with a technically up to date new asset with the same service capability allowing for any difference both in the quality of output and in operating costs.

The net MEA value is the depreciated value taking into account the remaining service potential of an old asset compared with a new asset, and is stated gross of third party contributions

Is the definition still applicable or do we need to consider amendments/alternatives?  
(Replacement cost, NRV?)

Focus on previous reviews was different – serviceability, CCD

GMEAV by asset stock and life categories reported at previous price reviews but not required at PR14

Did any companies revalue at PR14, kept data up to date?

## Draft objectives of any valuation

- Market entry – RCV is allocated to ensure a level playing field of any future sludge market
- Customer protection – Minimise risk of inappropriate value being transferred out of the regulatory business
- Price control – Ensure RCV is allocated to cover reasonable costs of the sludge business

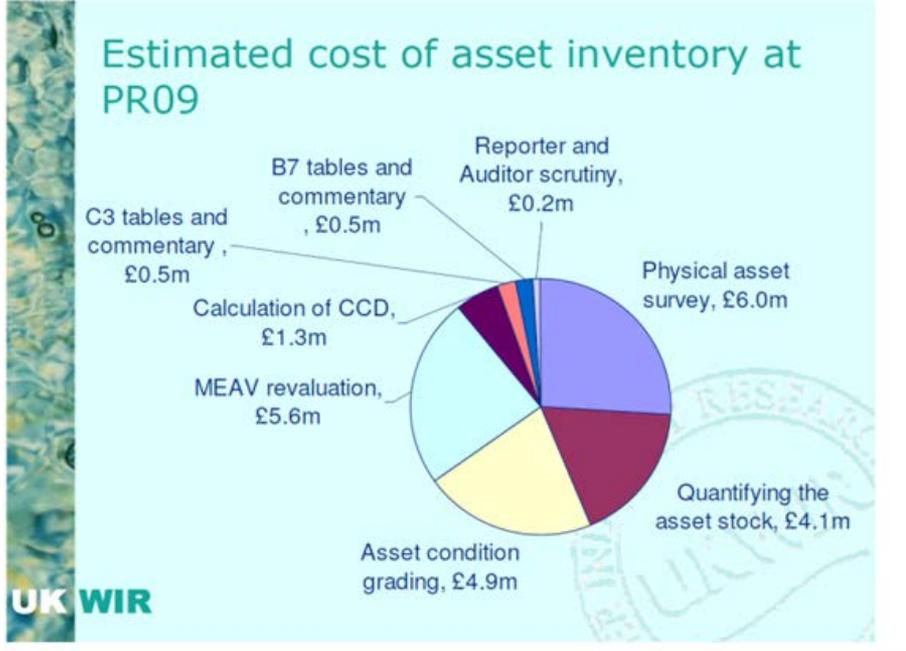
### Additional considerations

- Consistency - ensure consistent application across the sector
- Proportionate - minimise regulatory burden

Issues	
<b>1. Greenfield Vs Existing site?</b>	<p>Historic guidance suggests focus on existing configuration.                      What approaches have been adopted in the past? Would existing basis or greenfield provide a level playing field?                      Is existing sites more realistic, more auditable?</p>
<b>2. Process or asset level</b>	<p>Process level approach appears to have been used for some parts of the value chain, used at PR09 where asset info not available.                      Is it reasonable to assume that asset information would be available for sludge? Views on asset level approach?</p>
<b>3. Technology</b>	<p>What approaches have been used in the past? Should we adopt a like-for-like approach, or use current design standards? Does the pace of change mean need for free reign approach? – How would we ensure consistency?</p>
<b>4. Decommissioned/ Mothballed/ Abandoned Assets</b>	<p>How should they be treated?                      Customer protection on possible gains from future asset disposals - is a clawback mechanism required?</p>
<b>5. Timing</b>	<p>Value at 31/3/2020 – assurance on business plan                      Assets at 31/3/2018 as base for submission although recognise assets may change</p>

Other issues ?

Estimated cost at PR09



According to the UKWIR project in June 2011 report 11/RG/05/30 'The Asset Inventory: A simplified alternative approach' the overall cost to the industry of the PR09 Asset Inventory was £23m. The Asset Inventory included asset stock reporting, condition grading of assets and MEA valuations.

Costs at PR19?

- Improved quality of asset inventory data
- Large proportion of assets built post privatisation – cost data should be available
- If new tech, cost available in the marketplace
- Ability to utilise data and rules from companies deterioration & intervention modelling
- Is it reasonable to expect costs of valuation to be lower than previous exercises?
- Views on costs for a revaluation exercise?

## Alternate approaches

- 1 Assess the asset capital maintenance requirements & OPEX with a return
- 2 Using asset inventory information from the companies, develop a standard industry unit cost approach
- 3 Allocation based on some other variable - tonnes of dry solid produced
- 4 Thought on other options

Q: Are there any other points, issues you would like us to discuss?