



Promoting Markets Workshop

30 September 2015

Agenda

Time		Item
1	10:30	Welcome and objectives for the day
2	10.40	The broader policy context <ul style="list-style-type: none">• Holly Yates (Defra)
3	10:55	The potential benefits of making greater use of markets and factors which need to be considered in order to realise their potential
	11:35	Refreshments
4	11:45	Initial thoughts on how the sector could make greater use of markets <ul style="list-style-type: none">• Presentations on potential areas where markets could be used<ul style="list-style-type: none">○ Dave Hinton, South East Water○ Andy Pymer, Wessex Water○ Matt Parr, Tideway Tunnels:
	12.55	Lunch
5	13.20	Further thinking on potential upstream markets <ul style="list-style-type: none">• Frank Grimshaw, United Utilities• Andrew Barroso and Martina Lindovska, Deloitte
6	13:55	Supporting effective markets - Ofwat's Initial thoughts on RCV allocation and access pricing
7	14:50	Next steps and close
	15:00	Close

The broader policy context

Holly Yates - Defra



The potential benefits of using markets – and the key factors we need to consider

Why markets can be “good.”

The benefit...

Markets can help foster innovation and can help create value that benefits customers, investors and the environment.



How...

Because they allow resources to be allocated efficiently, so that buyers / sellers receive and sell goods and services at efficient prices and at an appropriate quality and quantity. Dynamic competition can drive innovation.

Practical examples of the benefits markets could deliver.

Increased optimisation of existing sludge treatment and disposal activities.

Further incentivise technological innovation in sludge.

Allocative efficiency through abstraction trading (Defra leading on abstraction reform).

Allocative efficiency through increased water trading.

More efficient provision of water resources.

Benefits could be material – but equally, reform is not costless

We will discuss initial thinking on market models in the later session.

Why markets sometimes fail to deliver 'good' outcomes.

Why markets can "fail"

Reasons...

Lack of sufficient competition

Externalities

Public goods / missing markets

Imperfect information

Transaction costs

"Pro-market regulation"

Promoting markets is about mitigating the range of impediments that can prevent markets from functioning effectively.

Pro-market regulation is 'wider' than competition.
Competition does not need to be 'perfect' to deliver benefits.

The use of markets is a 'cost benefit' test.

For us, the fundamental consideration is identifying where and when the **benefits** of markets are likely to be greater than the **costs**.

Whether / where to
implement mechanisms
to promote markets?



Benefits: the identified
incremental gains from
improving the functioning
of markets

Costs: the direct costs of
implementing our
mechanism(s) and wider
regulatory failure risks

We have a broad perspective to considering benefits and costs.

Companies recognise potential benefits of markets...

“We consider that competition for the market, for example delivering new investment through independent delivery and financing, would be an interesting area to examine further in considering how market pressures in wholesale could benefit customers” – TMS

“We support and encourage third parties being able to enter the wholesale supply chain” – PRT

“Could be innovative ways for new entrants to contract with the existing monopolies for the use and management of existing infrastructures. Competition in wholesale would be facilitated by the introduction of separation of asset ownership and service provision” – SBW

“Support harnessing market forces, as the largest exporter of water” – WSH

“We agree with the principle that there is value in parties competing to deliver service” – SVT

“Introducing active markets could deliver benefits in terms of driving efficiency and innovation. These benefits may be realised in the longer term for some customers” – YRK

“Supportive of opening up the WRMP process to third parties by allowing third parties to “bid-in” to company plans” – SRN



...but also identify risks and concerns.

“There are potential **quality risks** – both **environmental and human health** – associated with greater use of markets at either end of the value chain and this should be explicitly recognised in the policy debate” – YRK

“**Frequent re-tendering on these activities already drives significant competition.** Attempting to apply the Thames Tideway model to significantly smaller activities, for which delivery functions are already well integrated within companies, **would actually increase management costs**” – SSC

“**Need to make clear what the opportunities for investors are rather than the risks**” – SWT

“**Uncertainty over future abstraction rights.** Full trading can only be effective once the abstraction regime is reformed. A joined up approach to removing barriers is needed” - WSX

“**There are significant differences in terms of how active or necessary markets are at a local level**” – YRK

“**Multi-regulator alignment on this issue is key to its enduring success**” – SSC

“**Before introducing additional regulatory requirements, there would be value in further exploring the extent to which there is a problem and then assessing the full range of options (such as changes to cost sharing factors)**” – SVT



The key factors we need to consider.

In order to unlock the benefits of markets – we will need to consider a number of factors – including:

What form / extent of competition might occur and what is the likely benefit of this?

How might competition vary by value chain component / geography?

How might new information be revealed and what benefits might accrue from that?

How might any new approach affect the level / balance of risk?

What might be the extent of asset stranding risk?

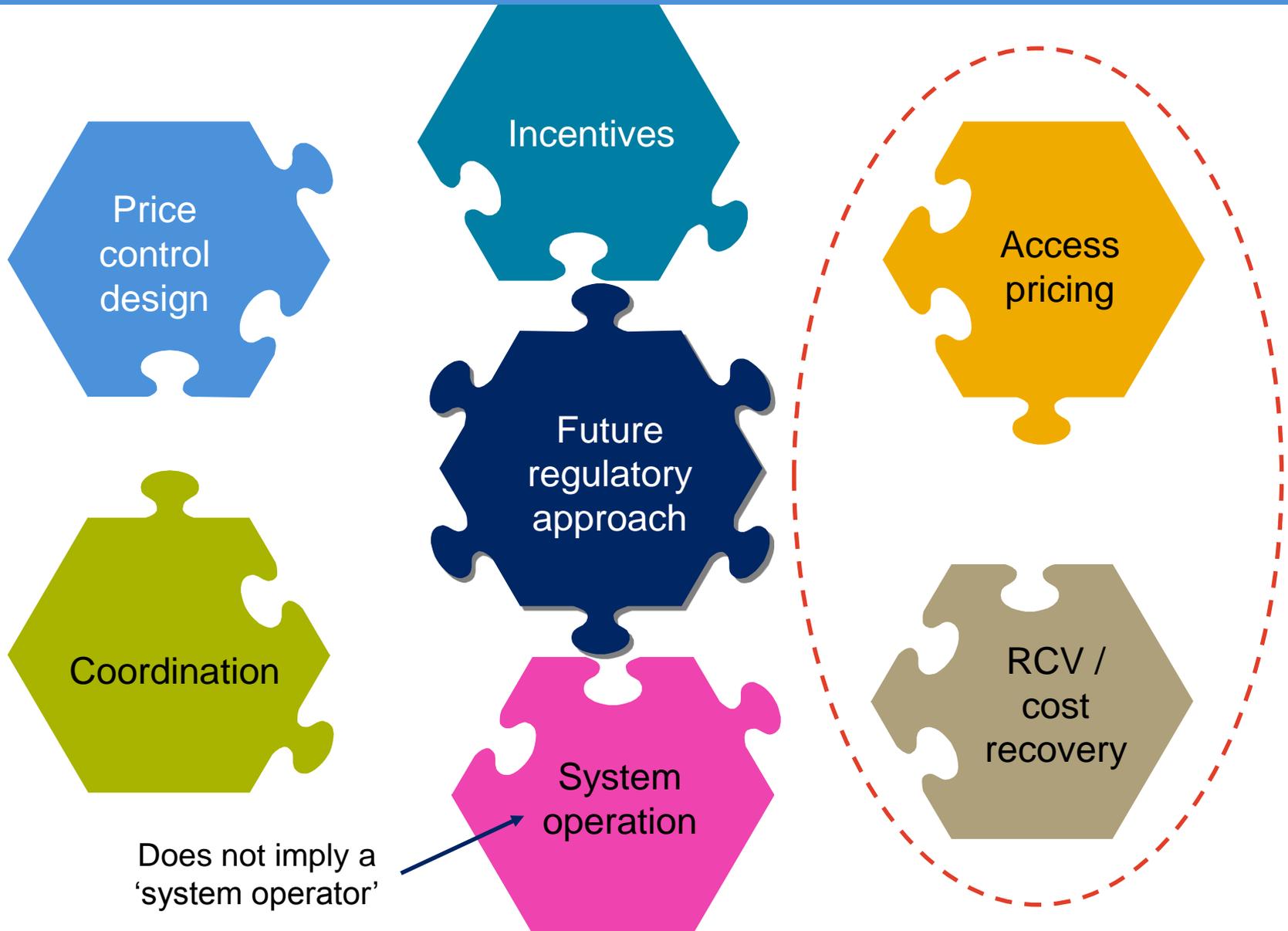
What are the practical / implicational issues that might need to be addressed?

What are the key givens relating to environmental / quality / health considerations?

e.g. would regulatory design be compulsory for 'all' or optional / different by geography?

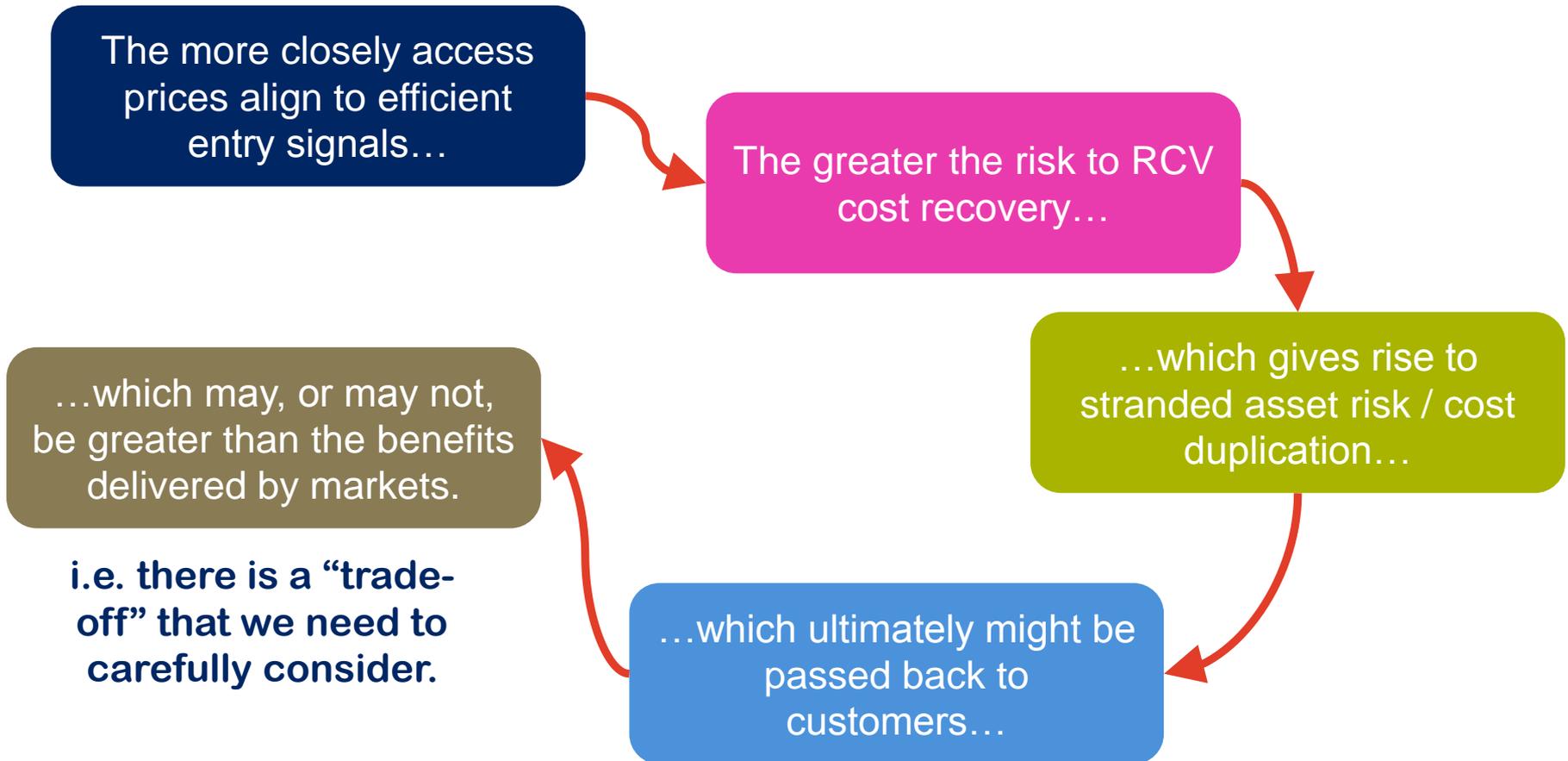
e.g. DWI risk management from source to tap – how would that fit with any approach?

Which in turn go to practical regulatory design considerations.



There is a trade-off at the heart the approach to markets.

In addition to broader considerations relating to coordination and environmental impacts, as the economic regulator, a key consideration for us is the trade-off between 'efficient entry' and 'stranded asset risk' – which is linked to the RCV discount – and is fundamental to our approach to access pricing and the RCV.



The balance depends on a number of key factors.

The trade-off is greater where...

Because...

1

...asset lives are longer.

...if an asset is displaced by an entrant, 'on average' less of its value will have been recovered by the incumbent.

2

...existing investment is sunk.

...in the event of the asset being displaced, its value cannot be recovered through any alternative use.

3

...potential dynamic efficiency gains are smaller.

...if entry drives down costs over time, through innovation, this dynamic benefit could offset the cost recovery risk. Therefore, the trade-off is greater where the scope for these dynamic gains is less.



Questions

How great is the potential to realise benefits from a greater use of markets in upstream activities?

Relatedly, what are the key risks and costs associated with making a greater use of markets?

Given some uncertainty regarding these costs and benefits, what is the most appropriate approach to reform?

Are the key considerations we have identified the right ones?
Are there any material additions?



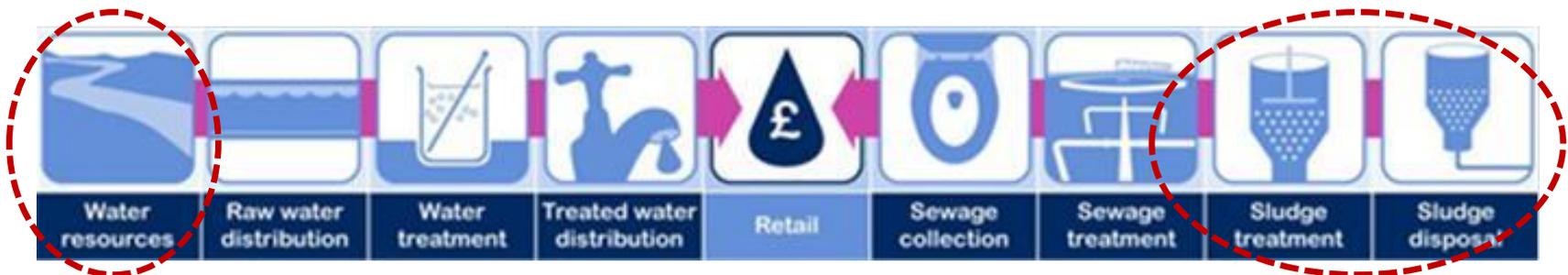
**Where and how we could make greater use of markets:
Ofwat's initial thinking**

In July, our proposed focus was on sludge and water resources.

In our **July document** we said that we considered there to be most scope to make more use of markets in relation to: sludge treatment and disposal; and water resources.

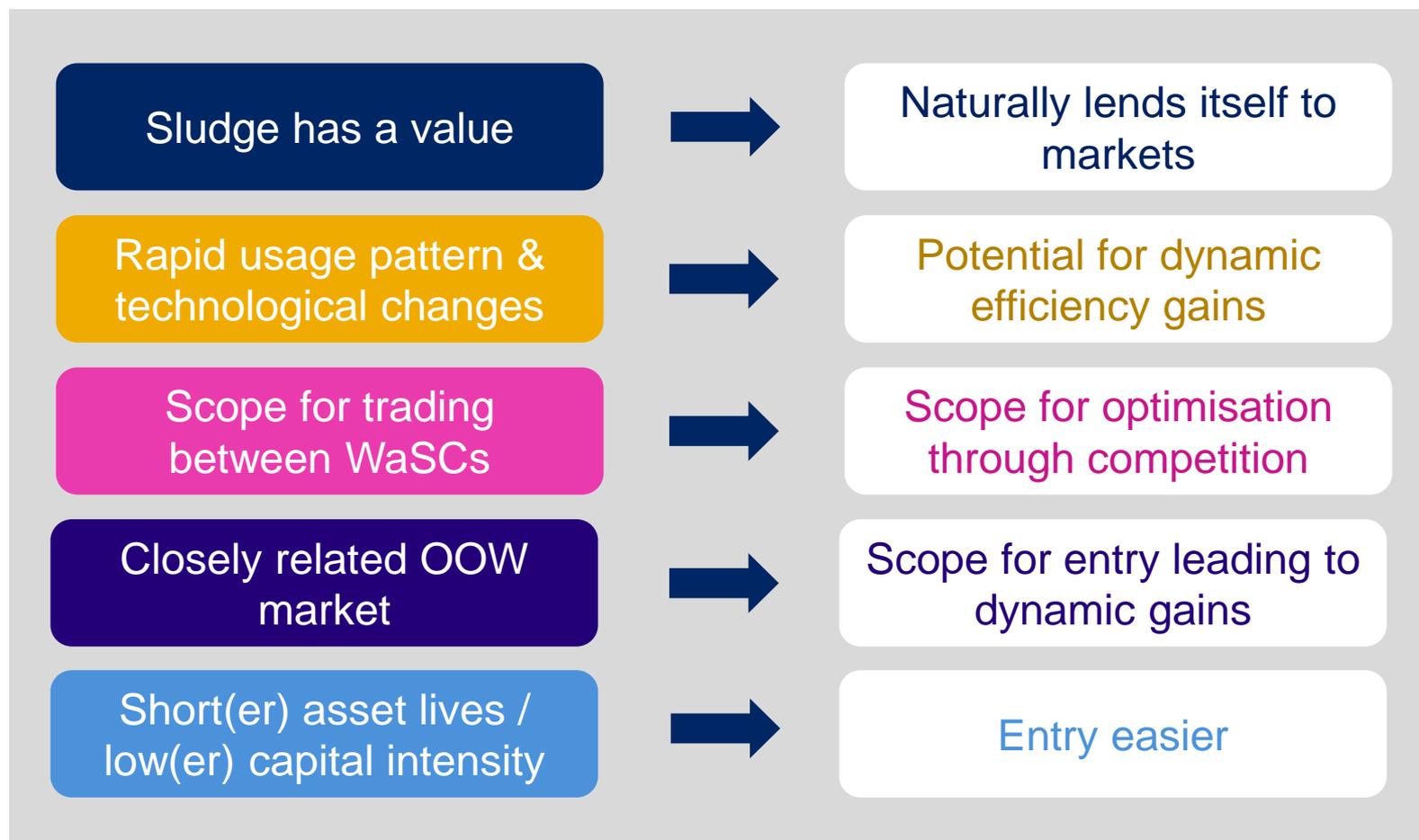
“The current regulatory framework incorporates sludge as part of the wider wastewater price control, based on the assumption that cost minimisation will be incentivised for sludge as part of the integrated network. The development of markets could reveal information on available capacity and costs and allow optimisation between regions, as well as provide incentives to maximise value from sludge.”

“Water trading is not yet realising its potential. Since privatisation, companies have made significant investments in integrating their own water supply networks within their own company boundaries, but the volume traded between companies has remained fairly constant...”



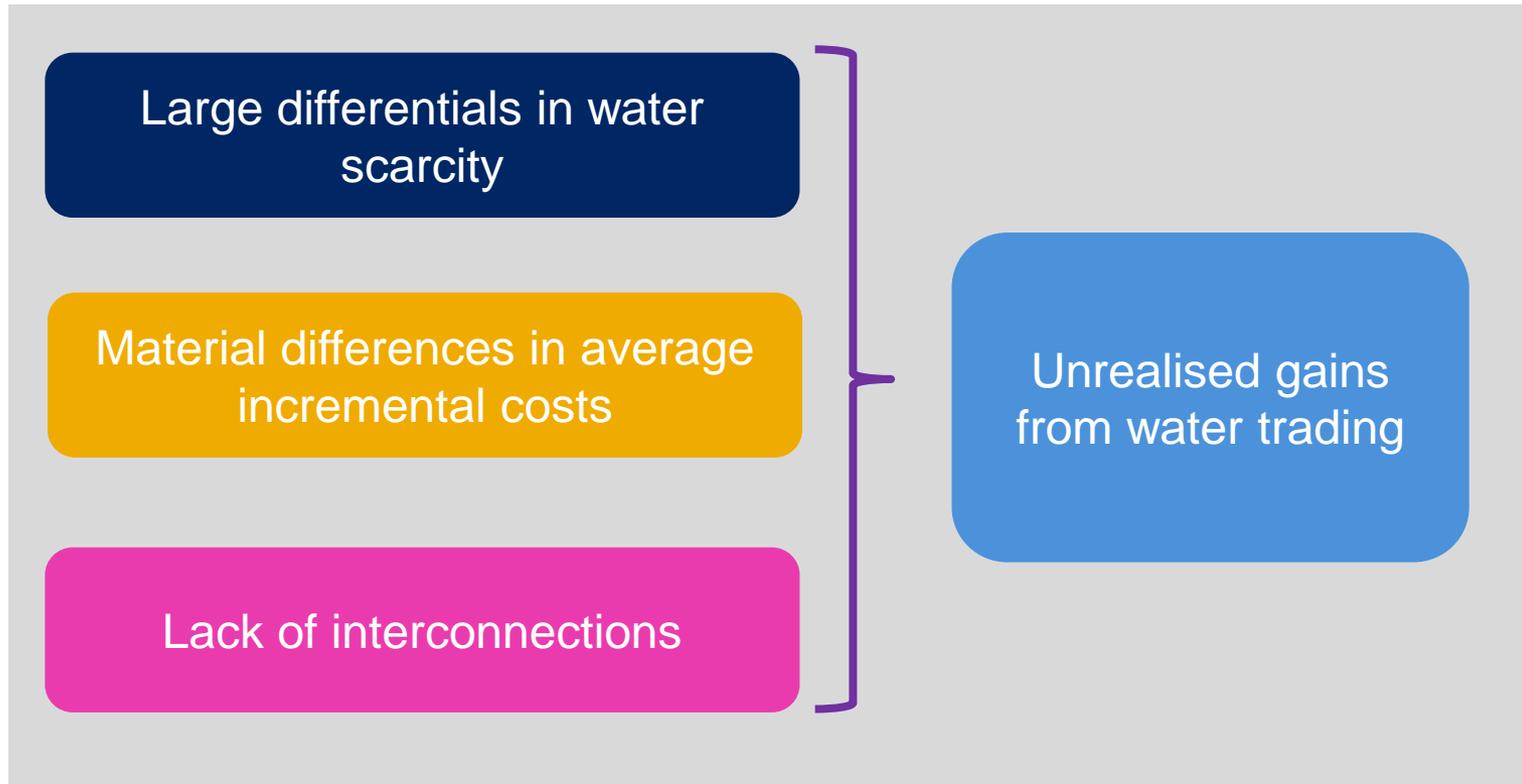
Evidence points strongly to markets playing a role in sludge.

Since July we have been gathering additional evidence and undertaking analysis.



Still of the view that markets can play a role in water resources.

Evidence supportive of market models designed to help unlock benefits of water trading.

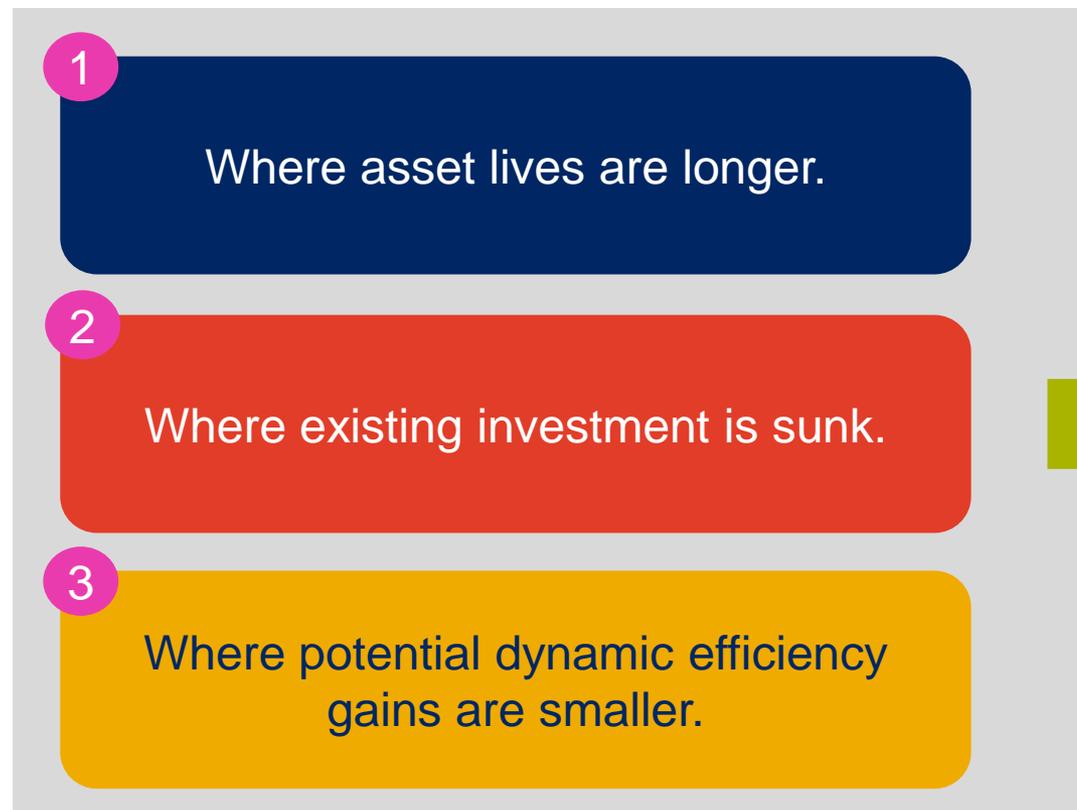


Potential to use markets to facilitate competition for the resource itself? More challenging (see later)

Our design approach will reflect the trade off described earlier.

Whilst we are of the view that markets have an important role to play in sludge and water resources, in developing our regulatory approach we need to be mindful of the trade-off (discussed in the earlier session) in terms of efficient entry and stranded asset risk.

This trade-off is more pronounced where:



Features of sludge treatment / transport / disposal indicate the trade off is less critical, relative to water resource.

Possible picture of a sludge market...

Value chain component

Possible market interactions

Pre-treated
sludge
separated

Incumbent WaSCs

No gains in trade:
incumbents
undertake all
activities.

Gains in trade: highly localised

Transport

Market operator

Purchase pre-treated sludge
from incumbent WaSCs

Sludge
treatment

Rival WaSCs

Third party
waste firms

Undertake transport,
and treatment

Disposal

Farmers

National grid

Discharged
or disposed

...which in regulatory design terms might imply the following.

Possible regulatory tool

A means of revealing and sharing information (sludge capacity, transport and treatment costs etc).

A framework and process to ensure trades / bids were assessed appropriately.

Potentially a separate sludge price control.

Rationale

Currently a lack of pricing signals necessary to identify profitable trades.

To address potential concerns relating to discrimination.

To mitigate cross subsidisation and create right incentives

Implemented in a way so that....

Incumbents have right incentives to explore revenue opportunities.

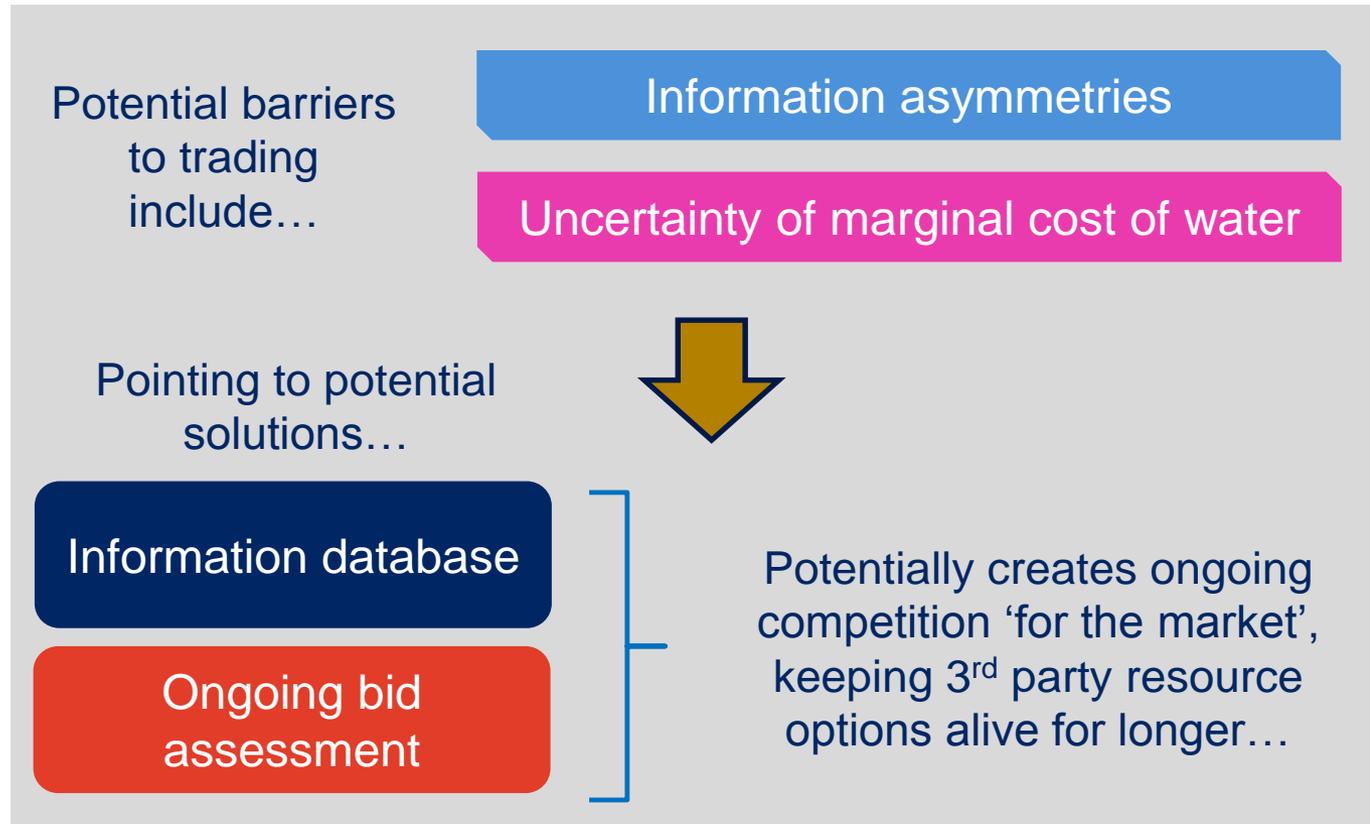
Relatedly, appropriately balances risk so that market share gains / losses creates upside and downside (and manages stranded asset risk).

Allows for market evolution over time (i.e. not overly prescriptive and does not “force” market engagement).

We think a market model could further promote water trading.

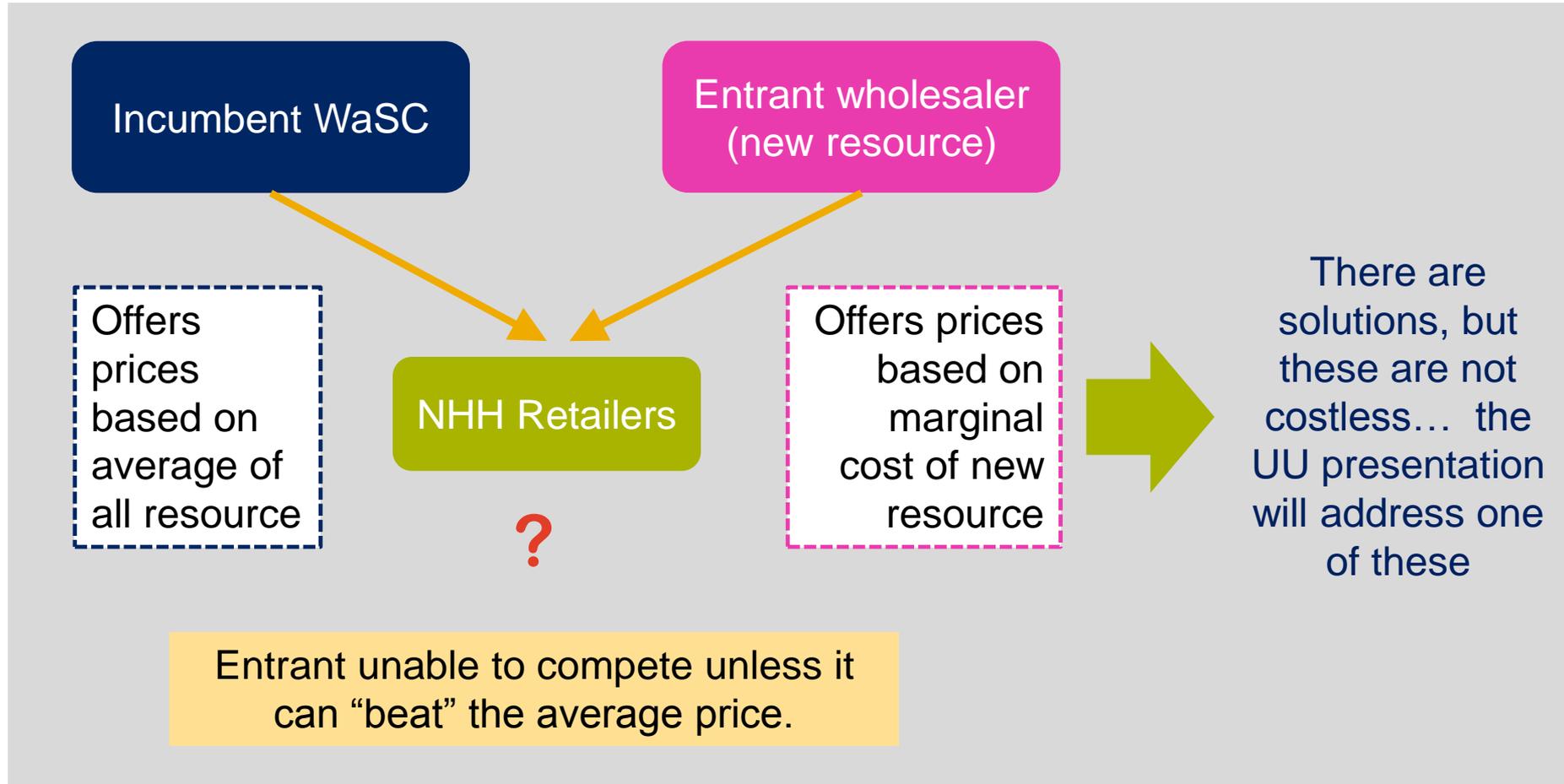
We are exploring ways to further promote water trading.

Deloitte are presenting separately on this – so will not go into any detail here.



But there are challenges with market models in water resources.

As noted earlier, the 'trade-off' is more difficult for water resources. And consequently, an '**in-the-market**' model has challenges.



We are considering competition 'for the market' more broadly.

Outside of our main areas of focus we are continuing to consider the use of 'competition for the market' tools.

In our July document we identified two themes in particular:

Lessons from Thames Tideway regarding large scale investment

What are the pros and cons of this – could such approaches be expanded to smaller scale investment?

To support demonstration of efficiency within business planning



May require consideration of relevant legal framework.

We will consider balance of risk very carefully – some key context

Across all design options under consideration, some common themes regarding balance of risk that are important to emphasise...

Ofwat commitment to pre-2015 RCV

On sludge, **relatively** small (but still important) amount of value chain; but if competition in market, exposure would be localised (i.e. further mitigates risk exposure).

On water resources, NHH only, potentially for the market, most likely for new investment

In December document we will be clear about the approach to RCV under our design options

Questions for discussion today

What is the potential of further markets in water resources?

How might markets develop?

What are the main benefits that could be delivered?

What are the key challenges / risks and costs?

What is the potential of further markets in sludge?

How might markets develop?

What are the key benefits that could be delivered?

What are the key challenges / risks and costs?

How to maintain stakeholder trust and confidence in water regulation?

What is Ofwat's role?

What is water companies' role?

What else is important?

Are there any other questions that we should discuss?

Water 2020 - water resource planning and third party options

David Hinton - Asset and Regulation Director

Outline

- Objective of reform - what are we trying to achieve?
- Understanding the potential benefits
- How is the current process working?
- Impact of recent changes in regulation
- Potential reform option - creating a marketplace for third party options
- How would this marketplace work?

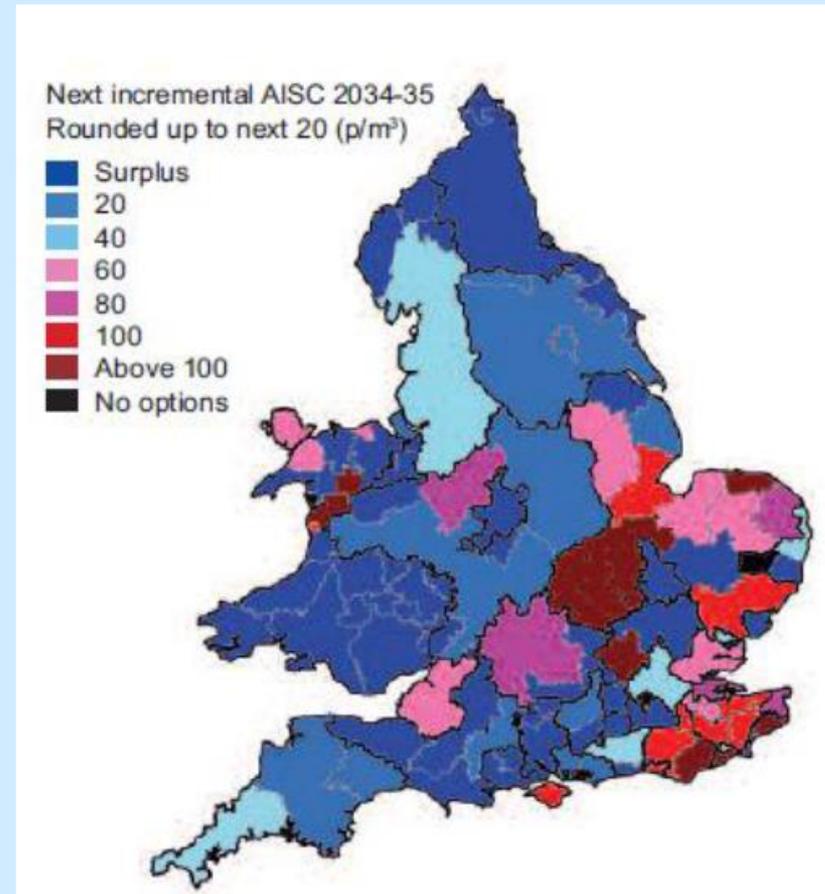
Objective of reform in water resources

- The objective of any reform is to result in better outcomes for customers and society
 - Least cost resource solutions
 - Protecting or improving resilience of supplies
 - Protecting or improving local ecosystems
- Reforms aimed at achieving these outcomes could include some or all of
 - Changes to the water resource planning process or guidance
 - Changes to the methodology for economic regulation
 - Changes to facilitate greater competition from new supplies and between existing supplies
- The debate around reform can focus on competition or trading or innovation - but these are the ‘means to the end’ and the focus should be on achieving better outcomes

What is the potential upside from reform to water resources?

- In areas where water supply deficits are expected
 - benefits could arise from cheaper options for new supply or demand reduction
 - map highlights parts of the country where new resources are most expensive
- In areas of water surplus
 - benefits possible as cheaper options could displace more expensive existing schemes (based on the costs of existing schemes that can be avoided)

Water resource zone incremental costs



Source: Ofwat, *Towards Water 2020 – policy issues: promoting markets*

What is the potential upside from reform to water resources?

- Previous studies have shown significant potential benefits from reform
- Results from these studies are sensitive to assumptions
- Calculations are often based on existing schemes, while more benefits may arise from new options / innovations
- If we can improve efficiency in water resources the benefits will be material
- What is the best way of improving efficiency?



In 2011 EA / WRSE estimated £500 million of savings from sharing resources in the South East of England.



Water today, water tomorrow

In 2010 Ofwat identified £1 billion of savings from water trading between companies.

Independent Review of Competition and Innovation in Water Markets:

Final report

Cave Review estimated benefits of £3.6 billion over 30 years from improved efficiency and innovation in upstream services.

The regulatory and policy framework for water resources has been evolving

- Recent regulatory developments have supported water trading
 - Updated WRMP guidelines - the guidelines for WRMP14 required companies to consult with third parties to identify potentially alternative new schemes
 - Ofwat guidance on bulk supply arrangements - in 2013 Ofwat introduced a framework for negotiating bulk supply of water
 - Water Act 2014 introduced amendments that would facilitate water trading - in particular, it sets terms and conditions to be incorporated in water trading agreements
 - Ofwat introduced several changes to the regulatory framework in PR14
 - two of them affect water trading
 - First, the introduction of totex regulation attempted to tackle any capex versus opex bias
 - Second, Ofwat introduced water trading incentives, allowing water exporters and importers to retain a fraction proportion of the benefits and costs of the agreements

How is the current process working?

- At WRMP14 there was a range of engagement with other companies and third party suppliers
 - Contact through the normal WRMP consultation
 - Direct contact with neighbouring water undertakers, e.g. through WRSE
 - Contacting other abstraction licence holders within the region
 - Advertising through OJEU for interest in providing supply or demand side options
- The outcome of these consultations was limited with companies reporting few or no feasible options from third parties

Barriers faced by third party schemes

- Regulatory incentives and biases
 - Preference for ‘build over buy’ - due to capex bias or concern over control and risk management
 - Disproportionate bias against options with greater uncertainty (demand management)
 - Trading incentives may be insufficient
- WRMP process
 - Complexity and detail of process may bias against third party options
 - Concern about degree of control over third party options
- Information failures
 - Third parties providing insufficient data on costs and risks of options
 - Third parties lack information of company demands and potential prices

Options for further reform

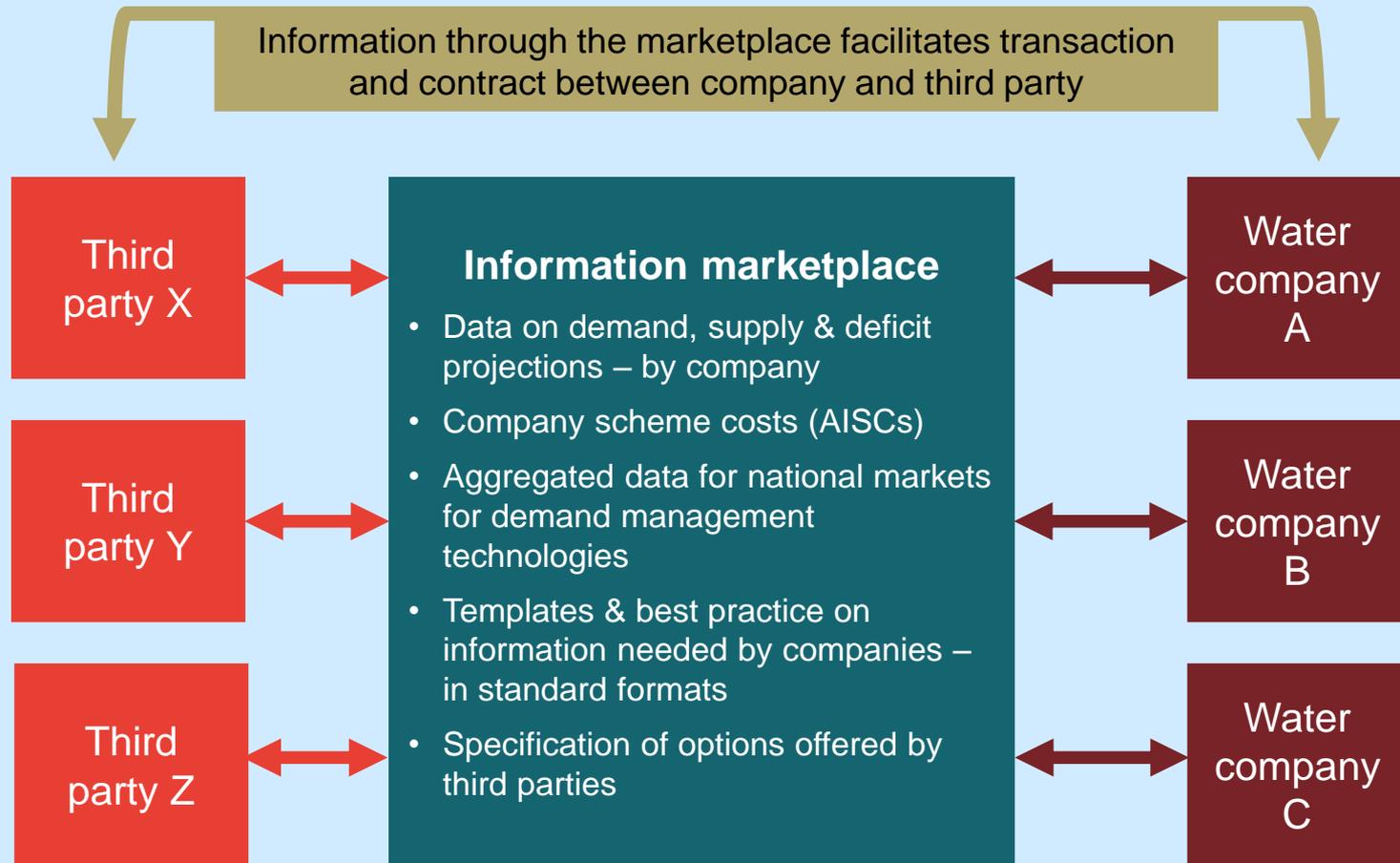
- A number of further reform options can be identified - for example
 - Develop a system operator role - with responsibility for procuring new supplies
 - Introduce greater bilateral competition between existing and new supplies
- Our work has focussed on an option of addressing the information failures through the creation of an ‘information marketplace’
- The aim would be to address this barrier and facilitate the entry of third party suppliers

Creating a marketplace for water resources

- Proposed solution involves the creation of an information exchange or marketplace
- Objective is to eliminate many of the search costs and enable efficient transactions to be identified
- Water companies would provide
 - data on their projections for demand, supply and deficits
 - data on the costs of the companies' proposed supply / demand schemes
 - guidance and templates on the information that companies need in order to evaluate third party options
- Potential third party suppliers
 - Can respond to the company data to offer potential solutions that meet company requirements and with the specific information that companies' need
 - Have greater visibility over the level of national demand - particularly relevant for possible demand management or leakage reduction options
 - Can provide information on potential innovative options for further development with interested companies

Creating a marketplace for water resources

- Schematic shows the flows of information in the marketplace
- The transactions are still bilateral contracts between buyer and seller but in the context of more complete information



Creating a marketplace for water resources

- Specific design of marketplace would address:
 - Treatment of commercially sensitive information - though much of the company information about supply and demand projections is publicly available
 - Formats can be developed that would balance the need to protect pricing or costing data while revealing enough information to encourage entry
 - Commercial arrangements for participating in the marketplace
- The role for regulatory intervention to address this information failure may be limited
 - Once established the benefits should ensure that the marketplace is commercially viable
 - market failure stems from the lack of information and once established it should be self-sustaining
- Therefore any initial resources required to ‘kick-start’ the marketplace could be raised from companies

Concluding thoughts

- There are potential material benefits from greater water trading and involvement of third parties
- A number of changes to the regulatory methodology and WRMP process have already been made to address barriers to these trades
- The effectiveness of these changes is not yet clear and changes to incentive structures may take time to feed through
- The option to create an information exchange could address one of the remaining barriers around search costs - this could complement the regulatory incentives
- This option is less radical than other proposals
 - Easier and cheaper to implement
 - Consistent with the direction of travel of existing reforms
 - Low risk - does not disrupt existing structures that are working well for customers
 - May capture the majority of the benefits available



Tideway

BUILDING FOR 22ND CENTURY LONDON

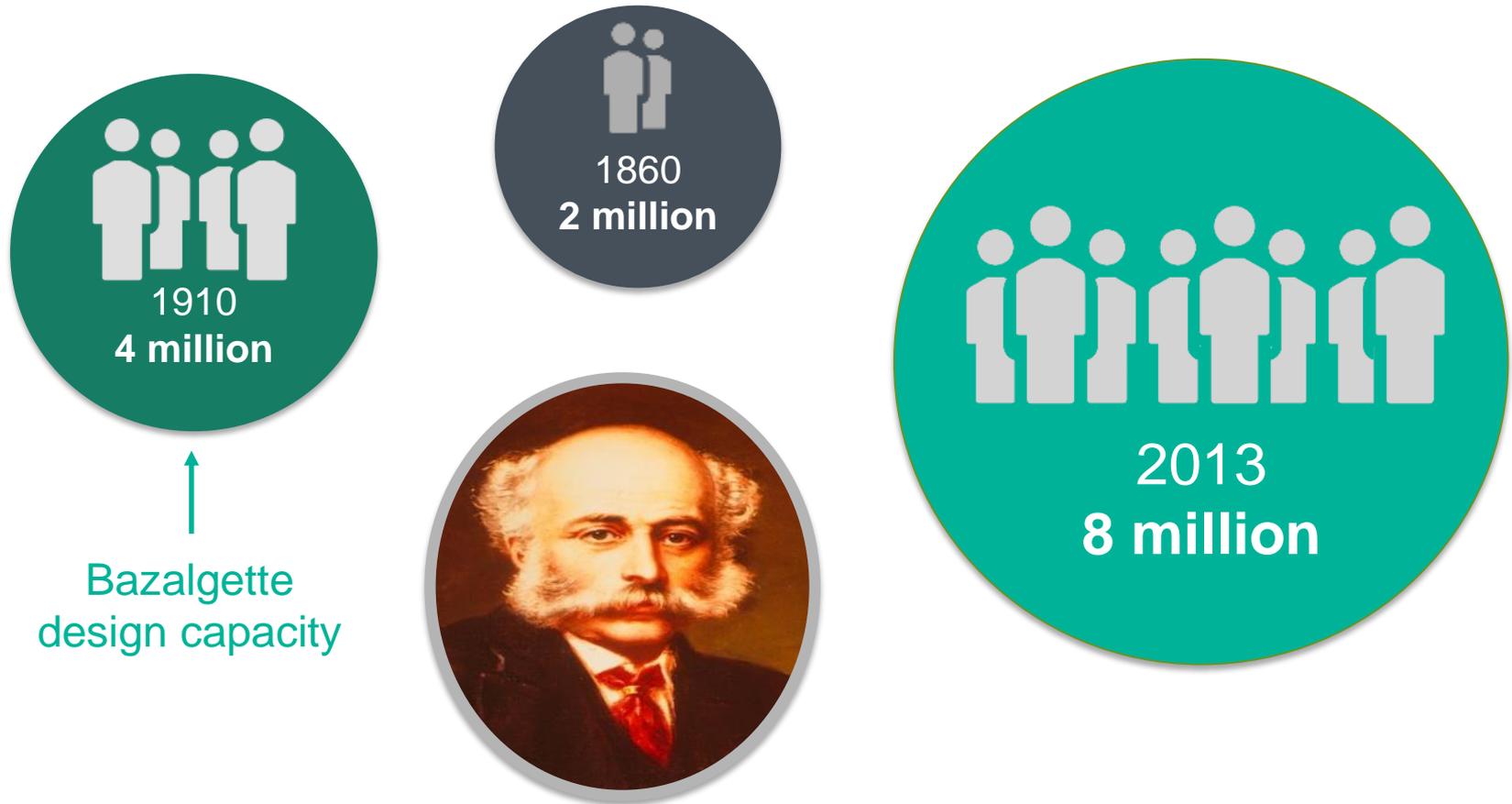
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Tideway – observations on competition for the market

- Introduction
 - The Project
 - The delivery model
- Observations on project development
 - Governance
 - Procurement

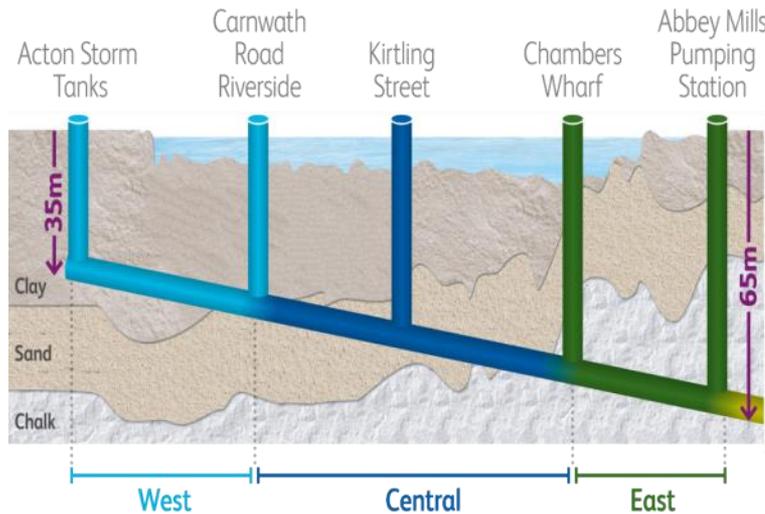
Population of London



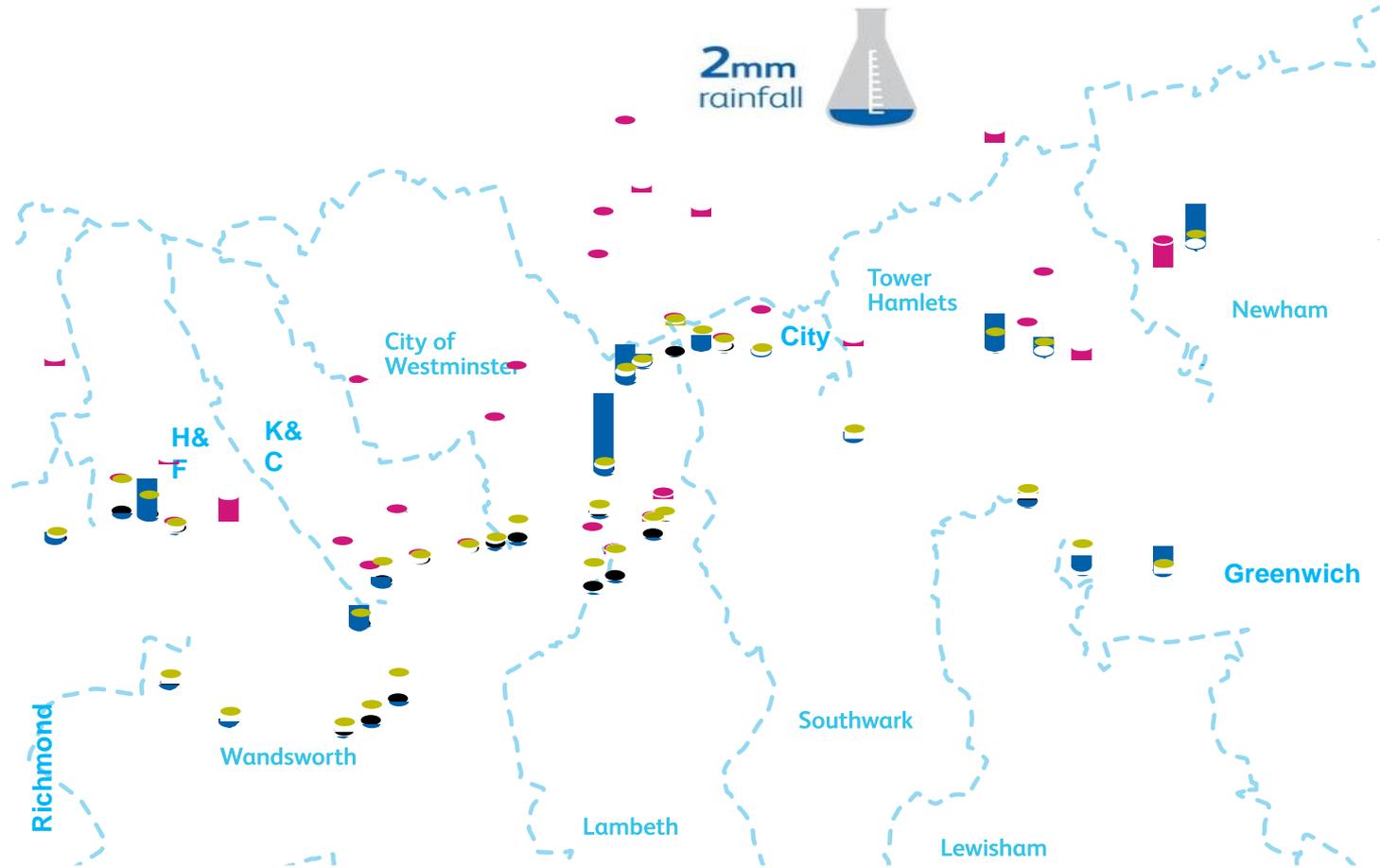
- In 2014, **62 million** cubic metres of sewage discharged to the tidal River Thames.
- 50 discharges on average in a typical year

London Tideway Improvements

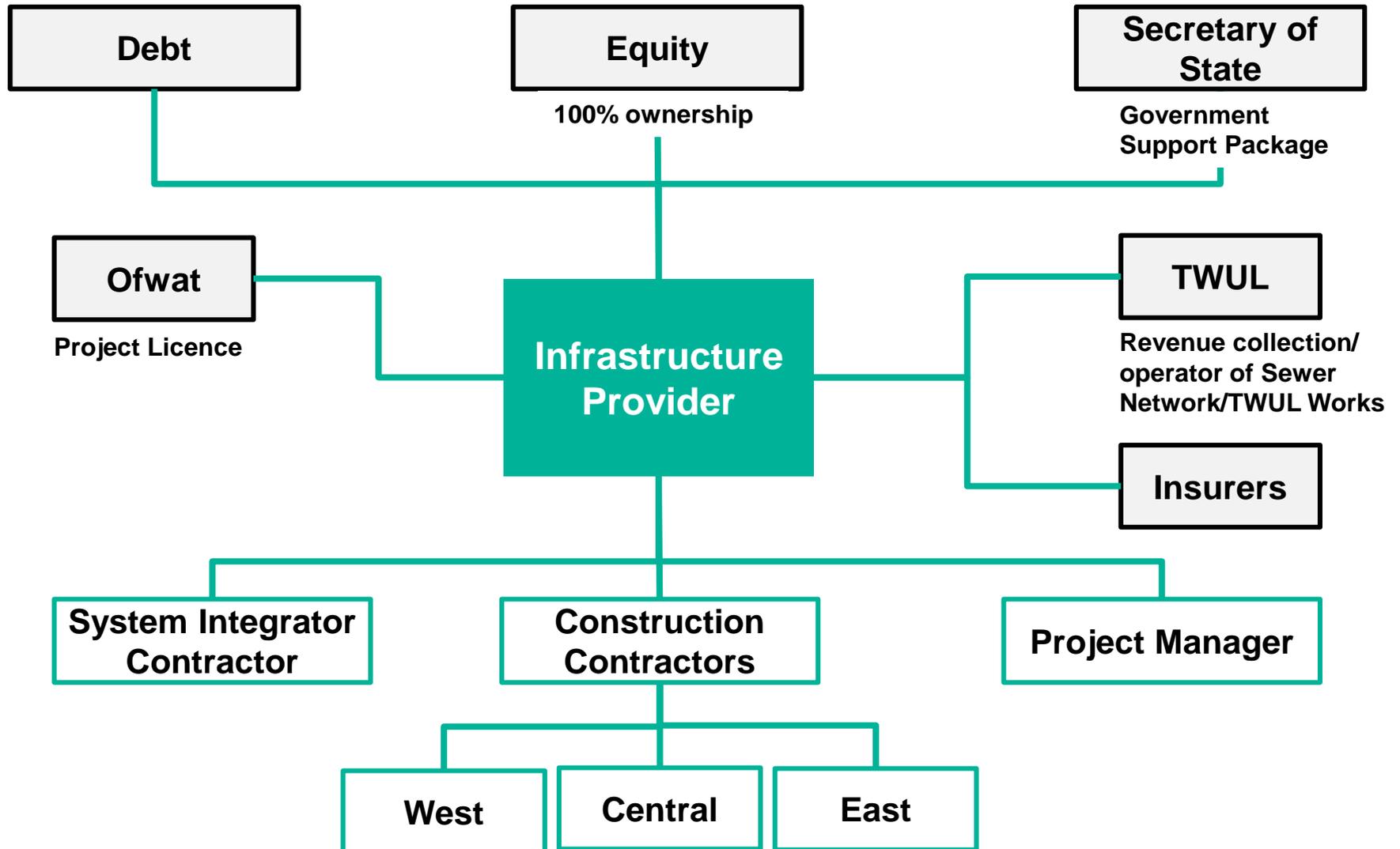
- Sewage Works Upgrades
- Lee Tunnel
- Thames Tideway Tunnel



Impact of London Tideway Improvements



Contractual structure

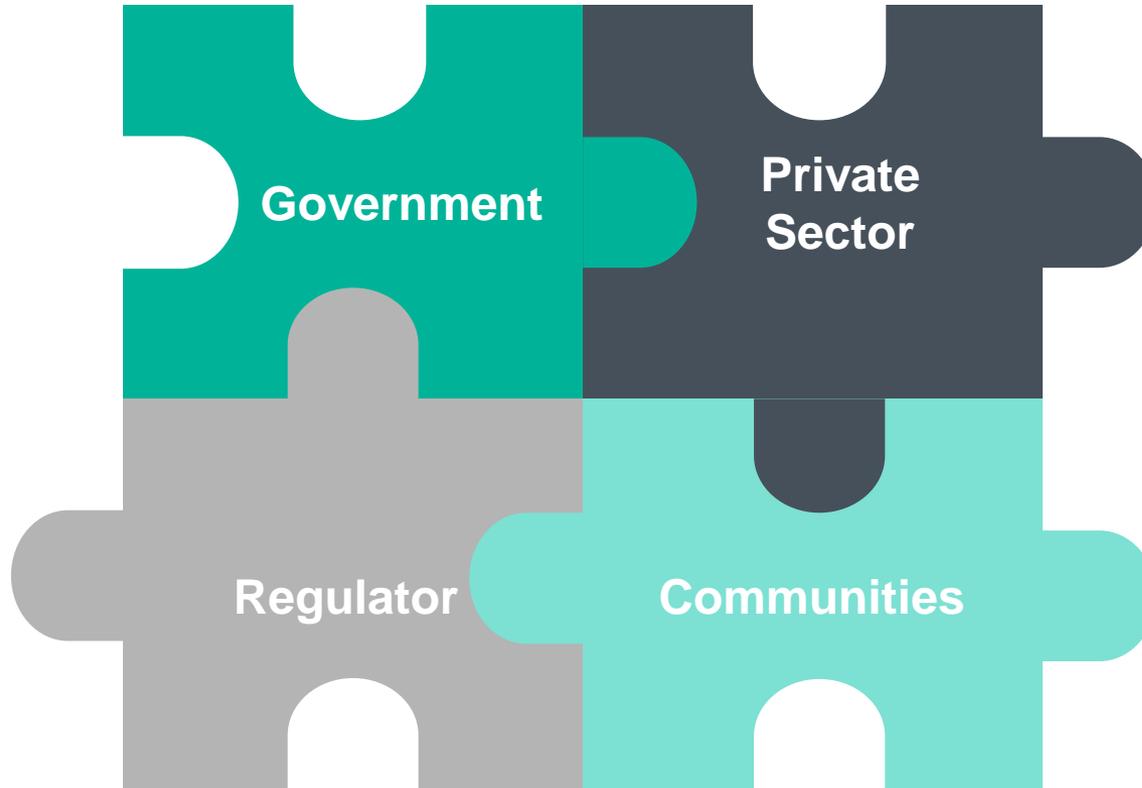


TTT regulatory regime

	Typical WaSC	TTT IP
Duration of price control	5 years	Construction period
Cost of capital	Ofwat sets WACC	Bid WACC with CoD mechanism
Incentives	Various including c. 50/50 cost sharing, outcome delivery incentives	WACC delay incentive 70/30 < P50 > 60/40 PLUS Alliance (cost and time) and main works contractual incentives (cost)
Re-openers	Provisions for in-period reopeners	Possible only if cost exceeds Threshold Outturn (P50 cost +30%) Base case resets for scope changes (e.g. Specification, Fixed Requirements)

- Ofwat economic and enforcement guidance

Governance



Competition for the market – dual procurement

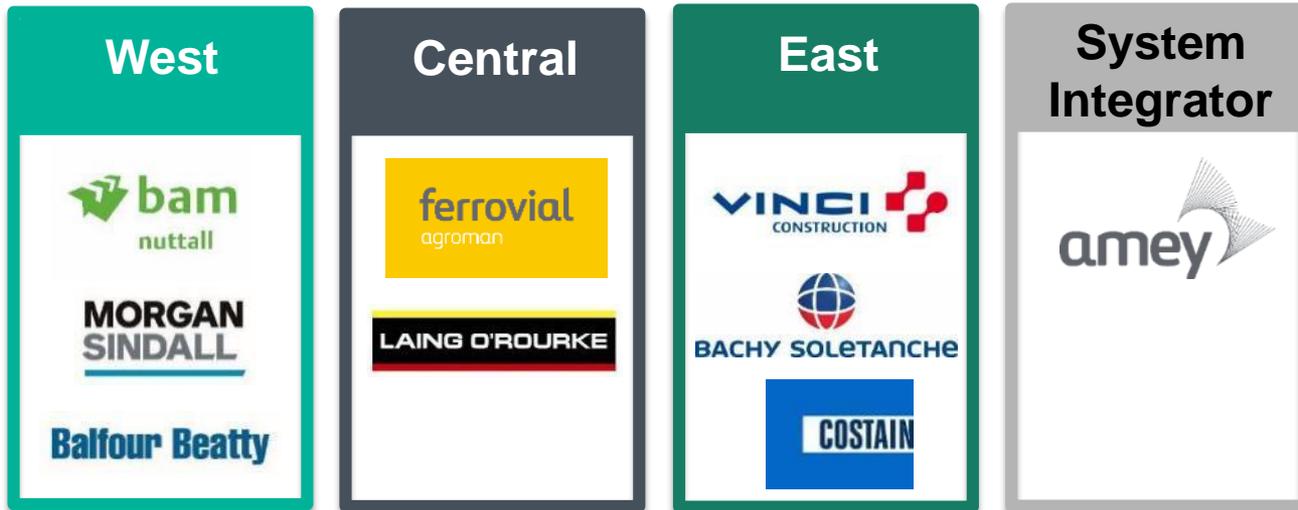
Delivering Value for Money

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 DALMORE CAPITAL

AMBER
INFRASTRUCTURE

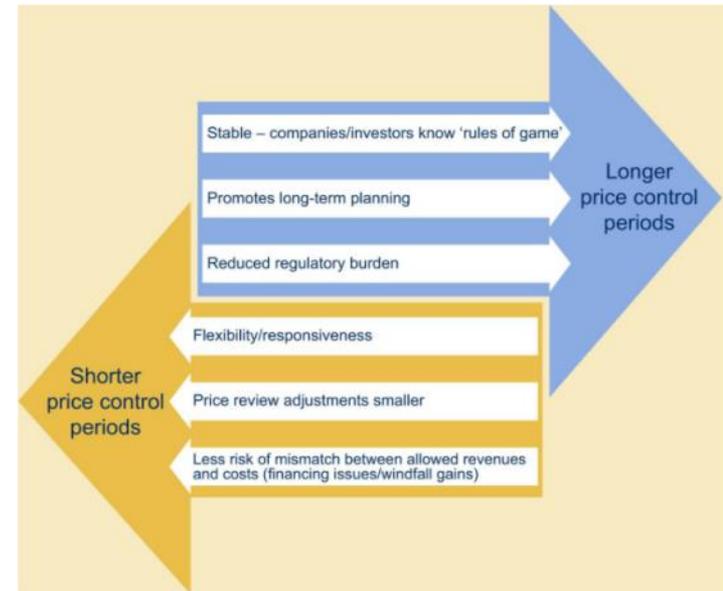
DIF 



Expected to be approximately £20-£25 (in 2011 prices) to Thames Water's waste water charge

Questions

- Are there lessons that can be drawn from the approach for either regulation of monopolies or in promoting markets?







30 September 2015

Upstream pricing

Frank Grimshaw

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The need for disaggregated upstream pricing

Potential reasons for upstream pricing	What might be required
Competition – selling to retail customers	Network access prices which allow an efficient competitor to enter
Trading e.g. for water resources through WRMP process	A price to beat to have trade accepted
Greater transparency of costs and prices	Separate price controls for each part of the value chain

We have looked at an approach which would enable all of these to be implemented, on a consistent basis.

Not all elements of upstream pricing might be required in the short-term – a step-by-step approach is appropriate.

Our proposed framework is a potential long-term direction.

The approach to splitting upstream prices

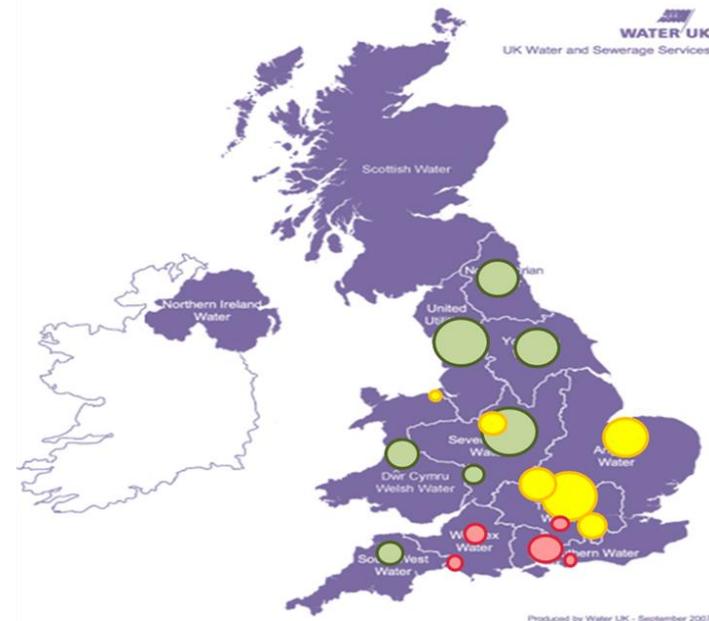
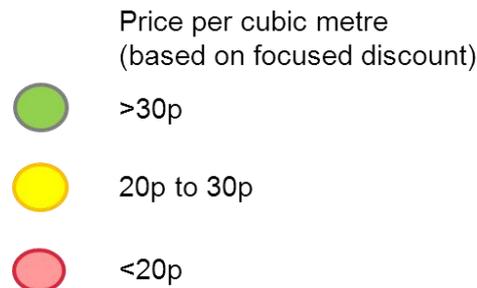
- Disaggregating prices based on the average cost of each component of the value chain is Ofwat's "baseline" approach, since this is in line with the average cost approach currently used for wholesale prices in total.
- This approach needs to be reviewed to determine whether it produces prices which are compliant with competition law and permit efficient competitive entry.
- Comparisons with incremental costs for adding to capacity are the main basis for reviewing compliance and whether efficient entry is possible.
- The effects of an average cost pricing approach depend partly on how the RCV is split.

Potential pricing impacts based on split of the RCV

- If the RCV were to be split, then the approach to the split could be:
 - In proportion to asset values (unfocused discount)
 - Attributing full asset value to potentially competitive areas, with the residual RCV attributed to the monopoly element (focused discount)
- Either approach will lead to water resource prices which are not compliant with competition law in some areas (principally in the south and east), and will permit inefficient entry and asset stranding in others (principally the north and west).
- Companies with a high proportion of resources from impounding reservoirs tend to have high asset values and therefore high average costs – but this is unrelated to the incremental costs of resources.
- This is an issue specific to water resources – because of scarcity in some areas and rising incremental costs.

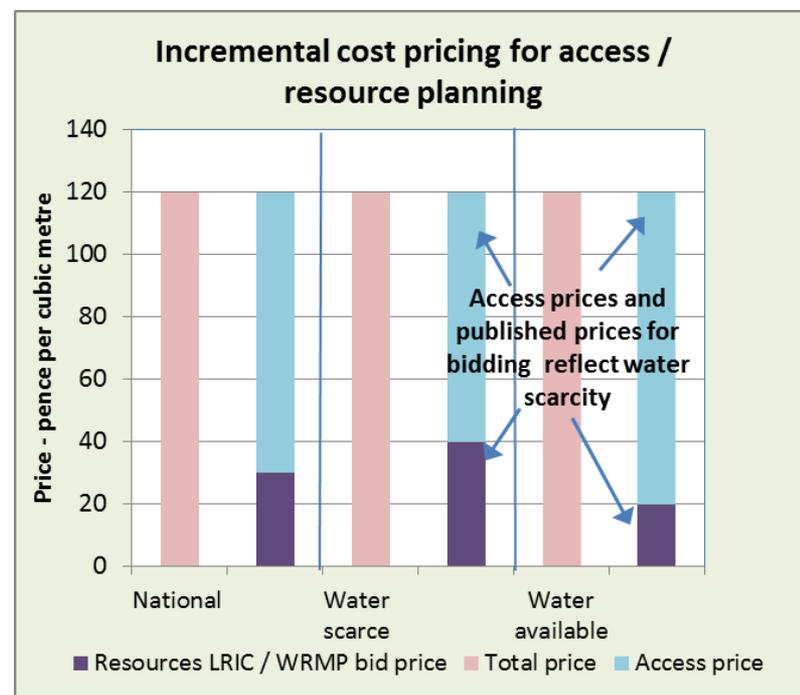
Average cost pricing would not promote efficient trading of water

- The pattern of water supply and demand in England and Wales is that there are excess supplies in the North and West and supply shortages in the South and East.
- There are potential gains from trade in water supplies between regions – but an average cost price approach, splitting the RCV, would not promote this – prices would be highest in the North and West.



Applying an incremental cost approach to access prices

- Resources need to be priced at incremental cost for economic efficiency and competition law compliance – for water resources incremental costs are available in WRMPs.
- Overall water pricing needs to be at average cost (to enable companies to recover their costs).
- Therefore access pricing for the network needs to be at total average cost less incremental cost for resources in each Water Resource Zone. This does not require an RCV split.
- Access prices will be low where incremental resource costs are high, and high where incremental resource costs are low.
- Incremental costs for resources could also be published and used to invite bids for Water Resource Management Plans - prices for inviting bids will be higher where water is scarce.



Applying an incremental cost approach

– a full split of upstream prices

- Going beyond setting access prices, and developing a full split of upstream prices, raises issues relating to:
 - How can an overall wholesale price based on average cost be reconciled with at least one component of the value chain being priced at incremental cost?
 - Will the RCV be split? If so, how?
 - If the RCV is split what would the financing implications be?
- A split of the RCV to align incremental cost pricing with average costs is not a sustainable option. This would put all the RCV into the competitive market for some companies. The impact of this on financing would be likely to outweigh any benefits of greater competition.
- Pricing resources at incremental cost but not splitting the RCV would result in price increases of up to 20% where incremental costs for resources are relatively high.

Pricing options – implications of splitting the RCV

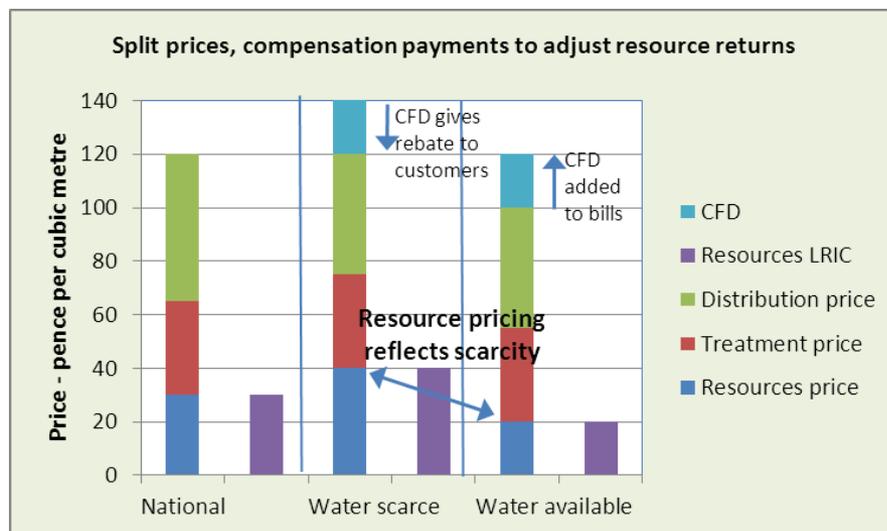
- Allocation of RCV to contestable activities, where it is uncertain whether a return can be earned, would affect confidence in the stability of the regulatory regime, as finance has been provided at low rates on the basis of relatively low risk. Investors have made their investments on the basis of a relatively certain return.
- Changes involving allocating large amounts of RCV to contestable activities would require renegotiation of financing in a number of companies.
- Increasing competition will inevitably have some effect on risk and therefore on the cost of capital.
- Changes which might have a more limited effect, because they preserve the confidence in returns on previous investment, include:
 - Changes which only affect future investment.
 - Changes replacing the RCV approach with long-term contracts.

Potential solution – Contracts for difference

- A solution is needed which allows existing resources to be priced at current prices while new resources from the incumbent or a new entrant are priced at incremental costs.
- In the energy market, low-carbon generation is encouraged by “Contracts for difference”, which compensate generators of renewable energy for the difference between generation cost and market price. The arrangement could involve:
 - Retailers / customers paying the market price for resources to a Market Operator
 - Wholesaler, for existing resources, receiving the lower price based on average cost pricing
 - An independent body (a Market Operator) pays back the difference to customers
- For the monopoly network prices would be set using the approach currently applied at price reviews for wholesale prices in total, including a return on RCV. Charging for access to the network would use the prices set in the price review.
- Standard access prices would be on the basis that the network has capacity to deal with the input of water from a new entrant at the proposed location of input. If additions to network capacity are required, then there would need to be an additional charge.

Operation of contracts for difference

- Where incremental costs are high, the contract for difference will involve a rebate to customers
- Where incremental costs are low, the contract for difference will, involve an additional payment.

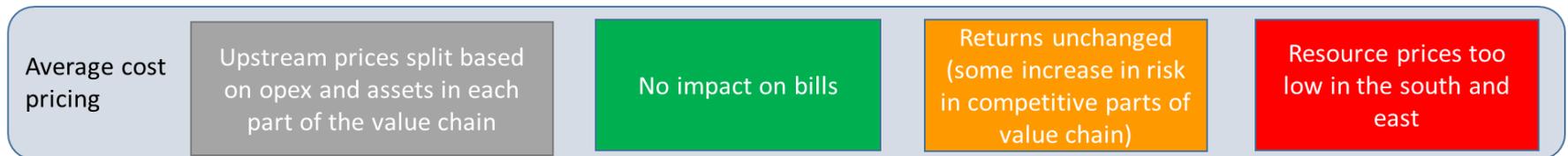


Contract for difference operation - example

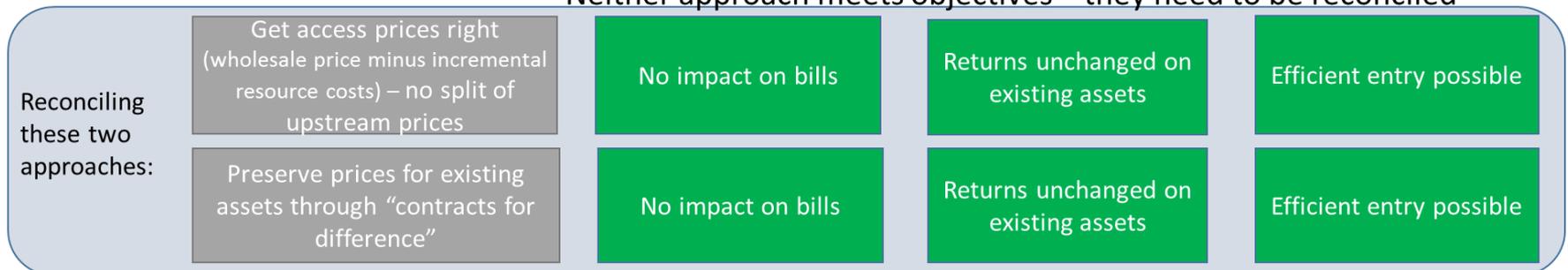
- The operation of contracts for difference is illustrated below for an area where incremental cost (40p per cubic metre) is above average cost (25p per cubic metre).
- There is a contract for difference (CFD) for existing resources of -15p per cubic metre.
- The incremental price of 40p per cubic metre is charged to all retailers for resources (if new entrants have a lower price this could eventually change the assessment of market price)
- The 15p per cubic metre contract for difference for existing resources is paid by the incumbent to the Market Operator (total of £60m).
- This is spread across all water supply inputs, and returned by the Market Operator (MO) to all retailers to give a rebate on bills (this averages 13.3p per cubic metre).

	Million cubic metres	£ per cu m		Contract for difference	£m				
		Price	Cost		Charge to retailers	CFD to MO	Net company revenue	Rebate spread by MO	Charge to customers
Existing resources	400	0.40	0.25	-0.15	160	-60	100	-53	107
New resources	50	0.40	0.40		20		20	-7	13
	450				180	-60	120	-60	120
Per cu m (£)					0.400	-0.133			0.267

Upstream pricing – how can prices be split to meet objectives?



Neither approach meets objectives – they need to be reconciled



Conclusions

We think it is possible to achieve a pricing regime which:

- Provides the right economic incentives for efficient entry
- Protects customers in terms of the overall price of water
- Allows Ofwat to meet its commitments in relation to the RCV
- Can be further developed to work in different parts of the value chain
- Is capable of practical implementation



Initial thoughts on RCV allocation and access pricing
30 September



Initial thoughts on RCV allocation



Purpose: To set out the potential issues with allocating the RCV

Structure of the presentation

- What we said in July 2015
- Why RCV allocation is important
- Key considerations when allocating the RCV
- Options for allocating the RCV
- Potential impacts of RCV allocation
- Questions



Our July document stated that:

We will consider [our] approach to RCV as part of our December consultation including interaction with access pricing and whether binding price controls are required in order to facilitate development of markets and better outcomes and consequently the impact on the RCV.

... there is a link between our approach to access pricing and whether to allocate the regulatory capital value (RCV) to specific wholesale services. We will need to consider this link when developing our charging rules and the feasibility of a cost-plus approach given the significant RCV discount when compared to the cost of replacing assets with those of similar capabilities.

Why the RCV allocation is important

Cost transparency and efficiency

RCV allocation can increase the focus on individual parts of the value chain and could incentivise efficiency if it allows costs to be benchmarked across companies.

Link to access prices

If there is competition for existing assets then prices would need to reflect the capital costs of those assets (which impact on RCV allocation) otherwise incumbent water companies could undercut new entrants, preventing effective competition.

Capital costs are significant in water resources and sludge with capex/opex ratios of ~40% and 60% respectively.

Basis for price/revenue caps

RCV allocation will be important if using a RCV approach (or other historical cost based approach) to setting price/rev caps.

RCV allocation does not mean RCV at risk

We committed to protect the 2015 RCV.

There are a range of measures that could be used to protect the RCV if it is allocated to potentially contestable areas

Key considerations when allocating the RCV

1. The RCV is around 12% of the Modern Equivalent Asset Value.

- The value of the initial RCV was based on the initial market value of the companies.
- While capital additions can be attributed to market segments, depreciation is based on MEAV, which reflects the value of all assets rather than just those added to the RCV.

Therefore it is difficult to allocate the RCV to individual assets.

2. Concerns with MEAVs

The MEAV is 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. [RAG 1.04].

In PR09 implementation varied and proposed CCD adjustments (based on MEAV) not made for a number of companies.

3. Allocation to water and wastewater

Altering RCV allocation between water and wastewater could have a significant impact on customers bills.

4. Not allocating the RCV could create issues

If the RCV is not allocated - unlikely to be possible to allocate assets. This could constrain the commercial decisions of companies.

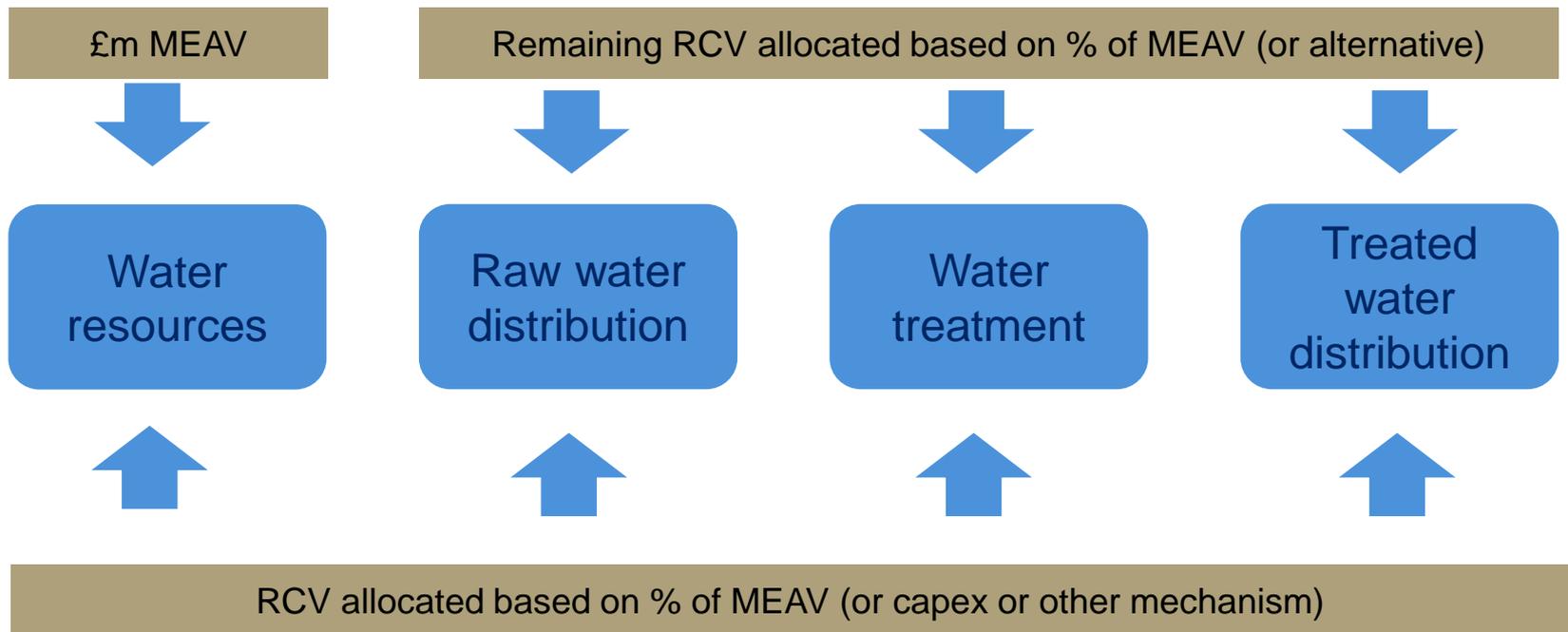
Long term contracts could be less flexible than RCV based regulation

Even if RCV not formerly allocated, likely to need to be attributed, for cost transparency/access charges

Options for allocating the RCV

Option 1: Focused approach

This option may provide better price signals as the replacement costs of assets will be reflected in cost allocation but it may leave little RCV in non-contestable parts. The MEAV might also provide a good indication of forward looking prices where capacity is scarce.



Option 2: Unfocused approach

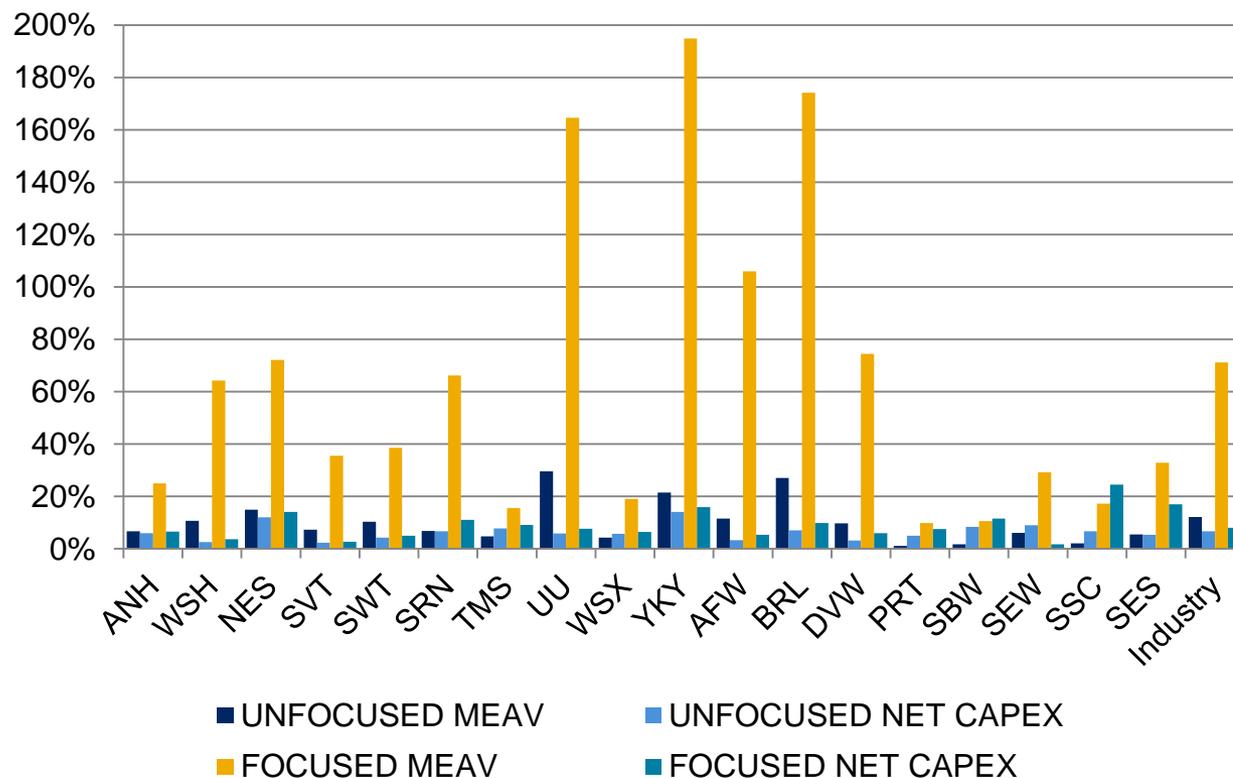
This option may provide a better spread of the RCV across different areas but could provide incumbents with a cost advantage relative to a new (or potential) entrant.

Potential impact of RCV allocation for water resources



Focused allocation leads to more than 100% of the water RCV allocated to water resources for UU, YKY and BRL and so does not seem feasible.

The high MEAVs for these companies appear to stem from the number and cost of water reservoirs allocated to water resources.



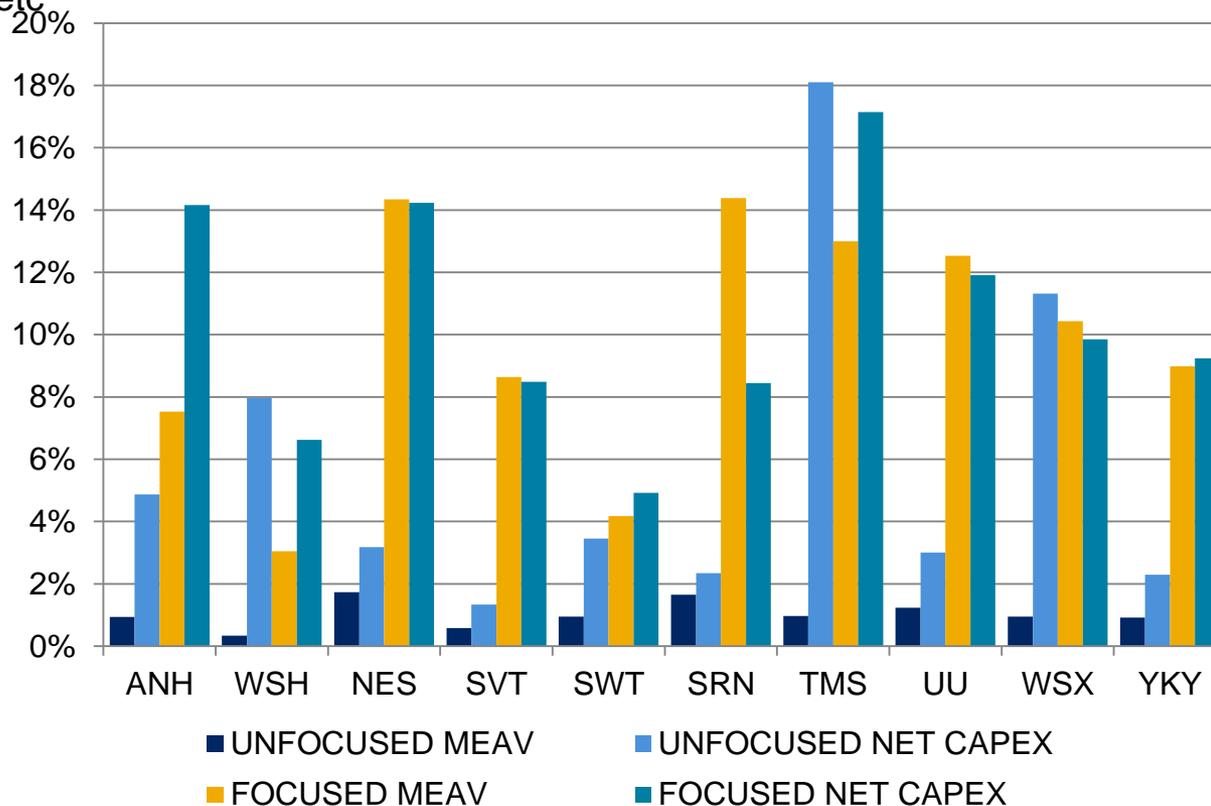
Note: Numbers provisional and subject to change

Potential impact of RCV allocation for sludge



Unfocused MEAV leads to allocations that are lower than focussed MEAV so incumbents could potentially undercut new entrants.

Extent of potential risk of different RCV allocations would be moderated by RCV protection, extent of competition (which could be limited to overlaps) etc



Note: Numbers provisional and subject to change



Initial thoughts on access pricing for upstream competition



Purpose: To set out the key issues with designing access prices

Structure of the presentation

- What we said in July 2015
- Why access prices are important
- Key considerations designing access prices
- Options for designing access prices
- Companies' views on setting access prices
- Potential relationships with RCV allocation
- Questions



Our July document stated that:

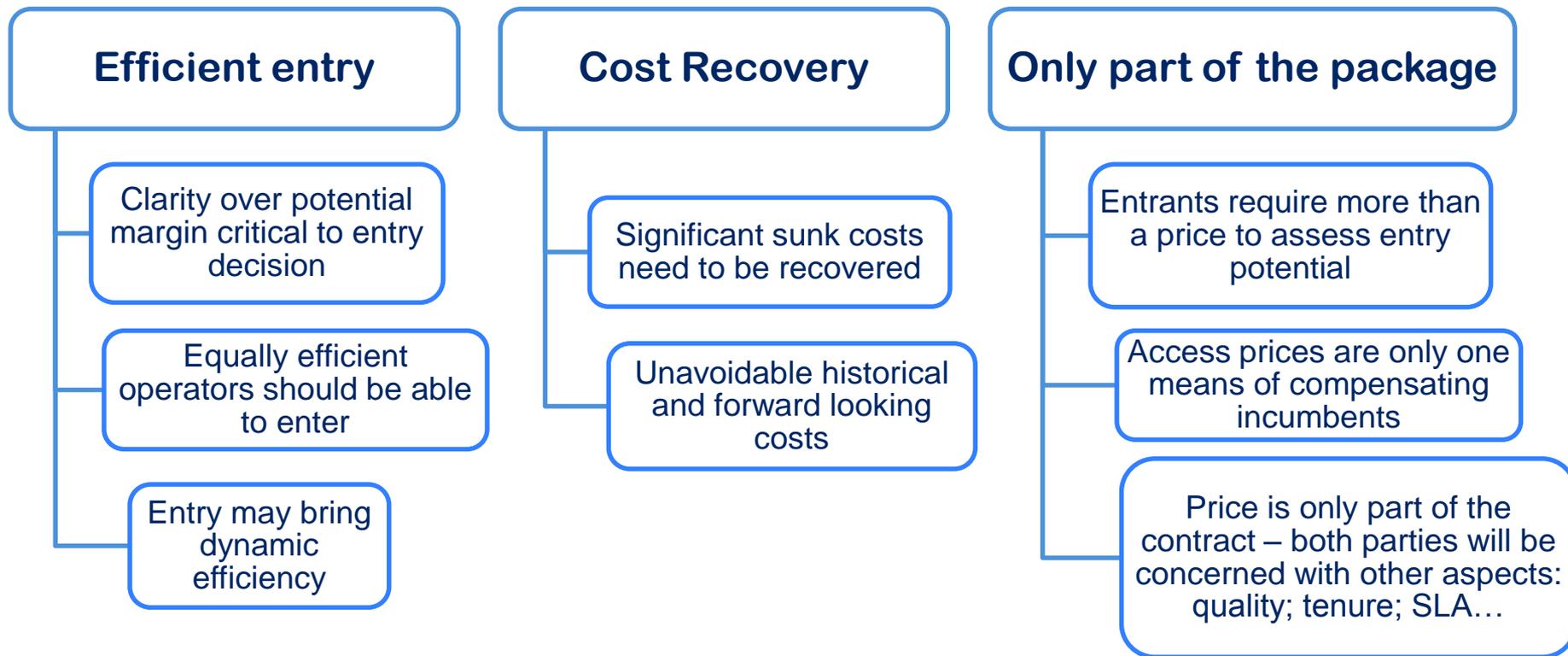
“The setting of charges plays an important role in well-functioning markets, providing price signals to buyers and sellers.... Access prices have two key roles to play:

- providing price signals to enable efficient entry; and
- enabling the incumbent to recover efficiently incurred costs.

“Both of these roles are vital to the overall success of well-functioning markets. Providing efficient price signals helps ensure that new entry into the sector benefits customers by minimising the total cost of providing services and maximising benefits of additional resilience. Allowing the recovery of efficiently incurred costs ensures that the incumbent is properly compensated for providing services and ensures longer term financial sustainability.

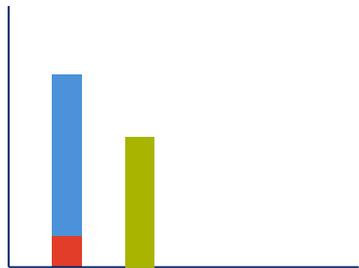
“In order for prices to set efficient price signals, it is the structure of prices that is important so that prices reflect the incremental costs of providing service. While the recovery of efficiently incurred costs requires the incumbent revenues to fully reflect the total cost of providing service ie average revenue needs to equal average cost. This means that it is possible to set access price signals and ensure that price controls allow for recovery of efficient average costs.”

Why access prices are important



RCV issues need not affect access prices

The RCV discount and the allowed return on the RCV are functions of the water industry which have benefited customers.



- RCV discount of c.90% might suggest entrants have to be super efficient to be able to enter unless favourable access prices are set.

- Access prices which compensate incumbents even when market share is lost might lack legitimacy.



There are alternative means of dealing with RCV issues that mean the access prices can be considered in isolation

Objectives

- Enable efficient entry
- Cost representative
- Customer benefits
- Flexibility
- Certainty
- Clarity

Practicability

- Availability of cost information
- Robustness of information
- Timescale of implementation

Other issues

- Addresses information asymmetry
- RCV consistency

Cost plus

The access price is based on the costs the incumbent incurs in providing services to the entrant

Avoided cost – “Wholesale minus”

Access price based on the cost the incumbent no longer incurs after entry by an alternative provider.

Market mechanisms

Develop auctions to reveal the price at which entry should occur.

Options for designing access prices – in practice

Water resources

Sludge

Cost plus
Cost of core services

Cost of local distribution and any treatment

Cost of local collection network and waste water treatment

Avoided cost
“Wholesale minus”

Retailers – wholesale tariff less discount
New entrants – volumetric price based on the cost saved by the incumbent not building greater capacity

New entrants – ‘net value’ of sludge – incumbent energy and fertiliser value less transport and disposal costs

Market mechanisms
Auctions

Incumbents run auctions for short and long-term supply of additional water. Must input their own new schemes

Incumbents run auctions for short and long-run removal of sludge from individual waste water treatment sites

What is industries' view?



"[A] revised access pricing regime should seek to **incentivise efficient entry** whilst ensuring that **efficient past costs** and common costs can be **recovered**"

"a **long lead time** and significant effort .. to develop good... models of **long run costs**"

"[We] suggest that Ofwat assess what **proxy cost measures** could provide a reasonable basis for access pricing ... **adjustments to FAC; AAC; ... or forms of "minus"**. ... leave open the potential for LRIC-based approaches to evolve over time. "

- "adopt a **pragmatic approach** to the cost base for pricing"
- "develop broad ex-ante pricing guidance to allow some **flexibility**"
- "rely on the Competition Act to deal **ex post** with any especially **problematic complaints** about access pricing"

"it is vital that access prices enable efficient entrants to compete on level terms ... **networks are a natural monopoly** .. But competitors could provide alternative resources – raw or treated – and should be able to use the incumbent's pipes to supply their customers."

"Any form of **bottom-up** approach to access pricing will be **difficult to implement** because new entrants need to be able to recover the cost of assets [and] the RCV discount ..means that [wholesale] prices do not reflect the cost of constructing new assets"

"A **modified cost principle** could allow efficient entry to occur .. It is important that access prices are **defined at a local level** ... but geographic averaging of prices for end-users must be maintained"

Access pricing for network needs to be set at **total average cost, less LRIC** for resources. This will lead to access prices being low where LRICs are high

An approach to pricing which **involves pricing resources at LRIC, but pricing the rest of the wholesale value chain at average cost**, can lead to **over or under-recovery** in total

Any change involving **allocating large amounts of the RCV to contestable activities** would involve renegotiation of financing in a number of companies. In addition, allocation of RCV to contestable activities, where it is uncertain whether a return can be earned, **would affect confidence in the stability** of the regulatory regime. Investors have made their investments on the basis of a relatively certain return.

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Discussion

RCV

How could we protect the 2015 RCV while allocating the RCV across different market segments?

What approach to RCV allocation is preferable for water resources and sludge?

What steps should we take to ensure that RCV allocations are robust?

Access Prices

How should the tension between efficient entry signals and asset stranding costs be reflected in any approach to access pricing?

From an entrant's perspective, what are the key requirements of an access pricing framework?

Next Steps



We will consider the views expressed in this workshop and will look to further develop our thinking on these issues.

We will present our views on viable options for developing access prices in December.