Ofwat PR19 draft methodology webinar: Wholesale controls, direct procurement for customers and retail

19 July 2017

Aim

To explain draft methodology to assist your response

To take clarification questions – not for views on methodology (this is for your response)

We will provide stops in the presentation to allow questions

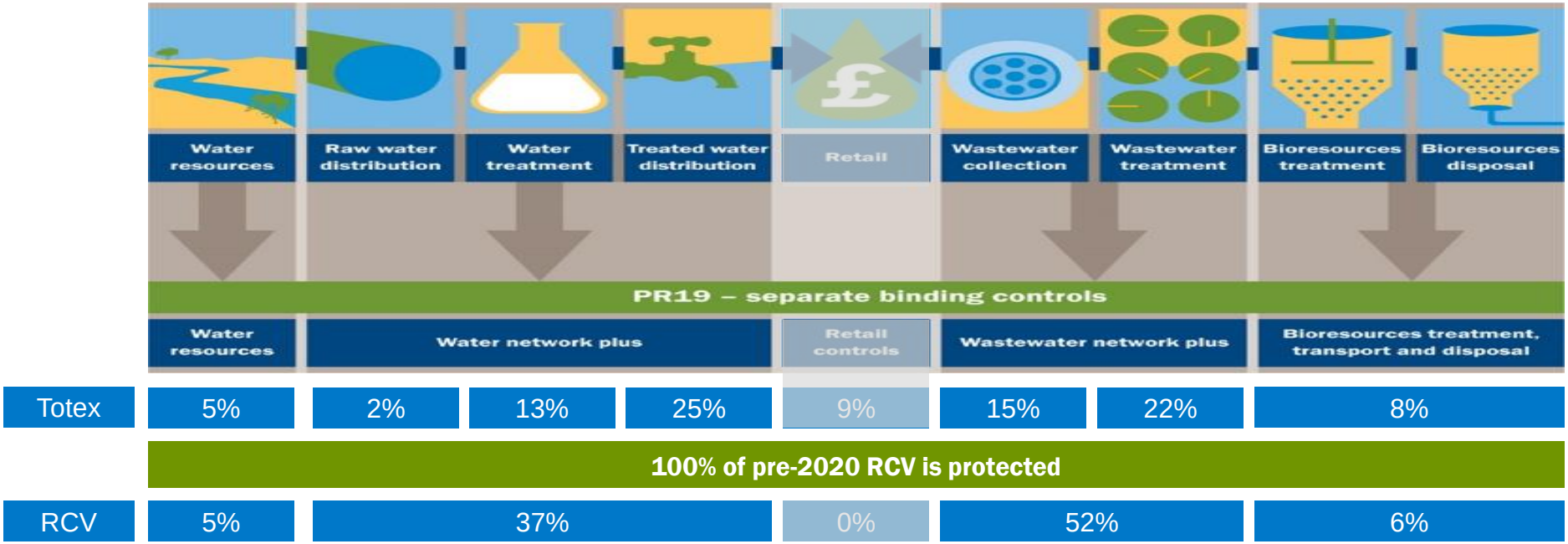
Structure

1. Wholesale controls
2. Direct procurement for customers
3. Retail controls

Wholesale controls

- Wholesale activities account for approximately **90% of totex** and represent all of the **RCV**
- At PR19 we will have **4 separate controls across wholesale activities** (water resources, water network plus, wastewater network plus and bioresources) – up from 2 at PR14
- **Key decisions** on the wholesale controls were made in our May 2016 decision document, following our December 2015 consultation
- Our overall aim is to develop a **targeted, transparent, and predictable** set of controls that we can adapt to changes in services – and changes in our approach to regulation - over time

Figure: Overview of the water and wastewater value chain



Water resources control - context

Figure: Rationale for a separate water resources control

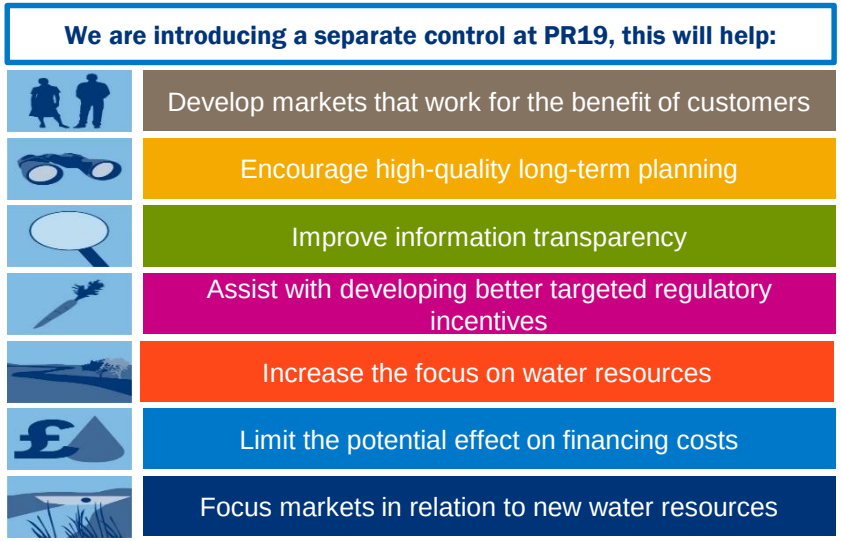
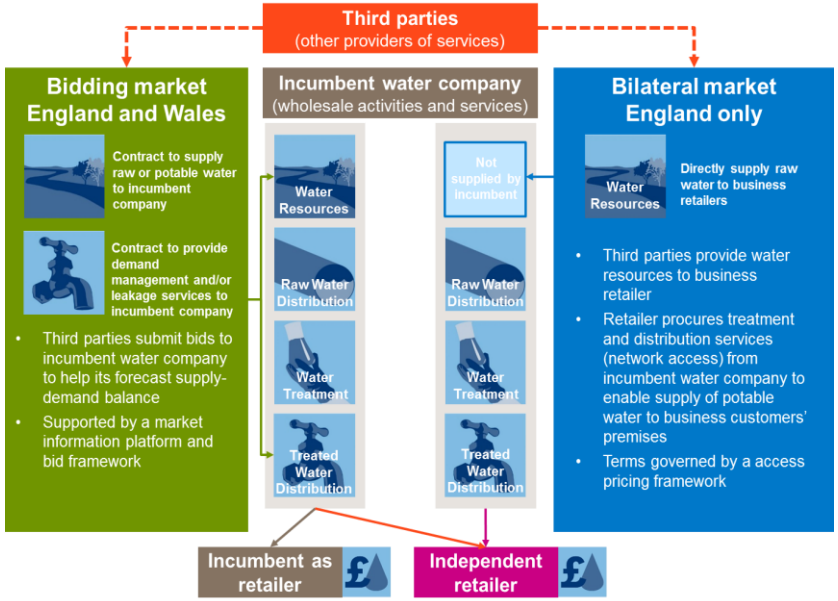


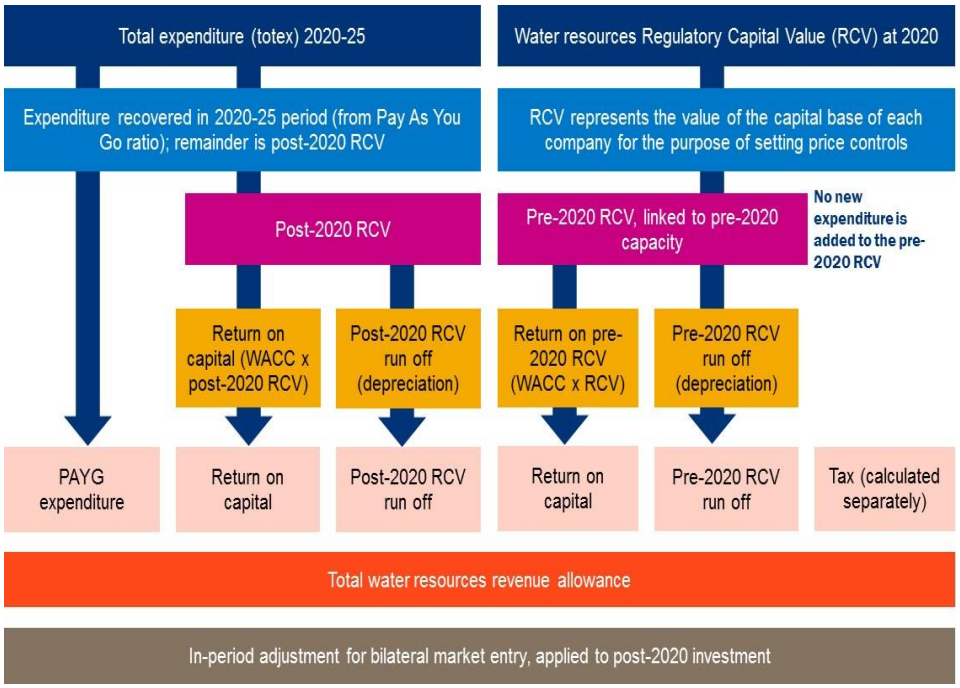
Figure: Two key markets for new water resources



- PR19 is the **first time** we will set a **separate control** for water resources
- The control has links to our approach to **access pricing** for the **bilateral market** for English incumbents
- This decision was based on detailed **impact assessment** of our policy package which identified net benefits of **£802 million** over 30 years (2015/16 prices)
- **Key decisions** on the control were made in our May 2016 decision document, following our December 2015 consultation
- These decisions were subsequently confirmed by a **licence change**
- The licence **does not specify the detailed form of the control,** but allows us to develop and refine it through the methodology, and to confirm it in our final determinations
- We have developed our approach to the control through **engagement** with the water resources working group

- Our proposed form of control is a **total revenue control** with an **in-period adjustment mechanism** that depends on the scale of bilateral market entry
- It will be set using a **building block** approach which provides a high degree of certainty for revenues
- The in-period adjustment will accommodate the **bilateral market** in England if introduced in 2020-25
- Overall our approach will ensure that:
  - incumbents can fully recover **efficiently incurred investments** in existing water resources up to **31 March 2020**; and
  - **incumbents and not customers** will face **utilisation risk from bilateral market entry** that displaces the need to invest in new post-2020 water resources

Figure: The building blocks of the water resources control



Data requirements for the control

The data requirements to implement our form of control are set out in the business plan tables, they include:

- *Wr6 Water resources capacity forecasts*
- *Wr7 New water resources capacity ~ forecast cost of options beginning in 2020-25*
- *Wr8 Water resources forecast charging and equalisation payments*

For full details please see '[Guidance on business plan data tables]'

Water resources control - more detail on our decisions

Decisions	
Topic	**Confirmed approach**
Future markets	To encourage markets for the provision of new water resources, covering the bidding and English bilateral market and direct procurement for customers. For the English bilateral market this will involve a new access-pricing framework for English incumbents to help third parties enter this market in the future, if they can provide new water resources as efficiently as incumbents.
Separation of activities	To introduce a separate control for water resources activities.
Length of control	Five years.
Boundary of control	The focus of the water resources control will be abstraction licences and raw water abstraction activities.
Inflation indexation	Annual adjustment to reflect any percentage change in the relevant inflation index.
Pre-2020 RCV allocation between water resources and water network plus	We will use an unfocused approach that allocates pre-2020 RCV value proportionally between network plus water and water resources.
Our approach to pre-2020 RCV	Our price control framework at PR19 will provide the same type and degree of regulatory protection as at present for the RCV allocated to water resources at 31 March 2020.
Post-2020 RCV and investment	From April 2020, new investments will retain a high degree of regulatory protection within the water resources control. Water companies and not customers will face utilisation risk from bilateral market entry, to the extent that third party entry defers or displaces the need for to invest to deliver future capacity. This will be introduced through an in-period adjustment mechanism. We consulted on whether incumbents should be exposed to some utilisation risk from market wide demand and our proposal for this is set out on the next slide.

- These decisions were confirmed in our May 2016 decision document and subsequent licence change process
- More detail on them can be found in Chapter 2 of Appendix 5, ‘Water resources control’

Water resources control - more detail on our proposals

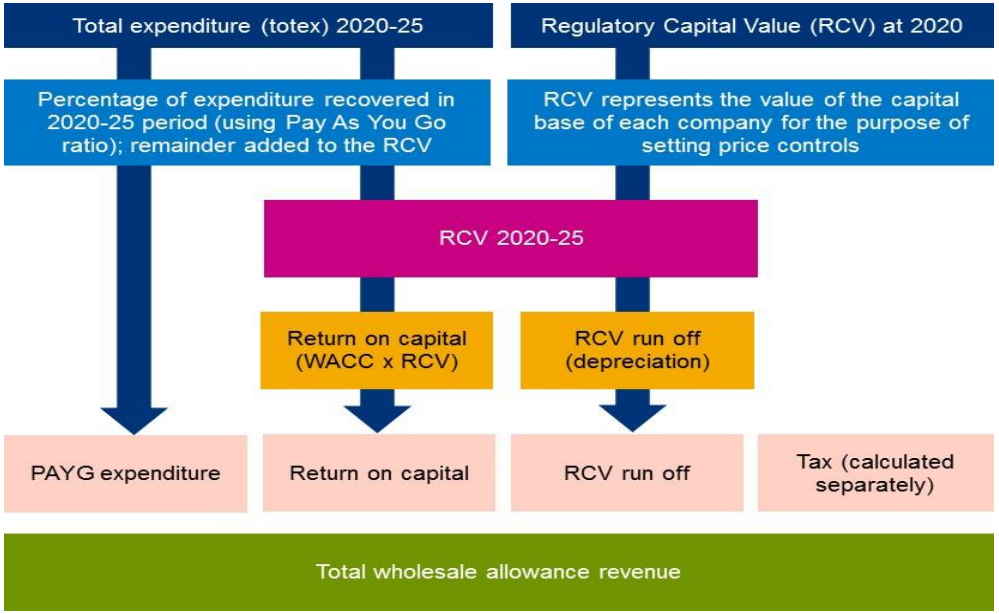
Proposals	
Topic	**Proposed approach**
Calculation of water resources charges	Incumbents will develop and publish a charging structure for its water resources activities which is to be charged to retailers. Water resources would be seen as a supplier of raw water to retailers, and network plus water would provide treatment and distribution, to retailers (including the incumbents' own retail businesses).
The links to access pricing for English incumbents	English incumbents will propose in their business plans the equalisation payments that would apply under the access pricing arrangements and demonstrate how these are consistent with their proposals for the water resources control and their forecast costs for post-2020 incremental water resource capacity. Once the control has been set, during 2020-25 if and when the market opens, incumbents would be responsible for updating and applying the equalisation payments.
The capacity measure for the control	To use water resources yield which captures the average volume of water available from the environment, dependent on the service level and planning period, and constrained by assets in the water resources control.
Our regulatory approach to post-2020 investment	Maintain a building block approach, rather than using a unit cost based revenue allowance for post-2020 investment with expenditure added to a post-2020 RCV. We welcome, in the context of future market development, stakeholder's views on the scope for setting future controls using a unit cost based revenue allowance.
The implementation of the in-period adjustment mechanism for English incumbents	The adjustment uses water resources yield which is our measure of capacity. It accounts for the level of bilateral market entry that wasn't forecast by the incumbent and whose post-2020 capacity is no longer required. The adjustment is based on the total forecast post-2020 capacity requirement (incumbent plus bilateral) as a ratio of the actual capacity supplied (forecast incumbent plus actual bilateral). It only accounts for bilateral entry risk and not market wide utilisation risk. The financial value of the adjustment reflects the costs of the post-2020 capacity funded through the control.
Our approach to utilisation risks relating to market wide demand	There is no exposure to market-wide utilisation risk in the form of control; instead individual incumbents should take ownership of this issue We expect incumbents proposing significant investment in new water resources to also propose long-term risk sharing arrangements as part of their business plans for us to review.

- These proposals are out for consultation. More detail on each proposal, along with options appraisal, is provided in Chapter 4 of Appendix 5, 'Water resources control'

Network plus water and wastewater - overview

- Network plus water and wastewater activities represent the **majority of the wholesale value chain**
- They will continue to be regulated as **monopolies** during 2020-25
- The form of control will be a **total revenue control**, in line with approach taken at PR14 for the wholesale controls and set it in licence
- It will be set using the traditional **building block** approach
- We will protect past, efficiently-incurred investments included in the RCV, up to 31 March 2020
- We are **consulting** on our approach to:
  - developer services;
  - the revenue forecasting incentive; and
  - water trading incentives

Figure: Building block approach to setting wholesale revenue controls



Activities in network plus water and wastewater

This includes the parts of the wholesale water and wastewater businesses that remain once the activities associated with water resources and bioresources – for which we are setting separate controls – are excluded. Reflecting this the activities covered by the

- network plus water control to include raw water transport, raw water storage, water treatment; and treated water distribution; and
- network plus wastewater control to include collection of foul sewage, collection of customers properties' surface water, collection of highway's surface water, sewage treatment and disposal; and sludge liquor treatment

Network plus - more detail on our decisions

Decisions	
Topic	**Confirmed approach**
Form of control	Total revenue control, set using a building block approach.
Length of control	Five years.
Boundary of control	Network plus water: regulated wholesale water activities that are not defined as water resources activities. Network plus wastewater: regulated wholesale wastewater activities that are not defined as bioresources activities, as set out in paragraph 2 of companies' licence condition B.
Inflation indexation of revenues	Annual adjustment to reflect any percentage change in the Relevant Index, plus or minus an adjustment factor "K".
RCV allocation	Network plus water: allocate water RCV to the water resources control using an unfocused approach, with the remaining value allocated to the network plus water control. Each company will propose its own allocation of the water RCV between the controls for us to review Network plus wastewater: allocate wastewater RCV to the bioresources control using a focused approach, with the remaining value allocated to the network plus wastewater control. Each company will propose its own allocation of the wastewater RCV between the controls for us to review.
RCV indexation	Index 50% of the RCV at 1 April 2020 to RPI. Index the remainder of the 1 April 2020 RCV and all future RCV additions to the Relevant Index.

- These decisions were confirmed in our May 2016 decision document and subsequent licence change process
- More detail on them can be found in section 2 of Appendix 7, 'Wholesale revenue incentives'

Network plus - more detail on our proposals

Proposals	
Topic	**Proposed approach**
Treatment of developer services	For 2020-25 we will introduce a symmetric volume correction mechanism – to encourage companies to respond to changing demand for developer services, and ensure that costs are recovered appropriately from customers and developers. We will apply no adjustment for changes in the average cost of delivering those activities, to preserve the incentives for cost efficiency. The correction will be applied at the end of the control period and to encourage companies to forecast the overall volume of new connections and other developer services we will apply interest rates to large volume differences.
Revenue forecasting incentive (Water resources and network plus controls)	We propose to continue using an in-period adjustment mechanism. We propose to offer a licence modification to enable companies to enable in-period adjustments on under- or over- recovered revenues in PR19 and future price review periods. We propose to introduce a yearly financial incentive to encourage companies to accurately forecast revenue. This should help reduce bill volatility.
Water trading incentives	We propose to maintain the water trading incentives, both export and import, for new water trades agreed in 2020-25. To protect customers and the environment we propose to maintain the caps set at PR14. In order to qualify for the incentive the company must also show that its trade complies with an Ofwat-approved trading and procurement code. This is assessed as part of the price review process and payments are made in subsequent control periods. Any incentive payments from new water trades in 2015-20, due to be paid in 2020-25, will need to be allocated between the water resources and network plus water control. Companies will also need to provide indicative splits for future trades.

- Some of these proposals cut across multiple controls e.g. water trading incentives relate to water resources and network plus water
- These proposals are out for consultation. More detail on each proposal, along with options appraisal, is provided in section 4 of Appendix 7, ‘Wholesale revenue incentives’

Bioresources control - context

Figure: Rationale for a separate bioresources control

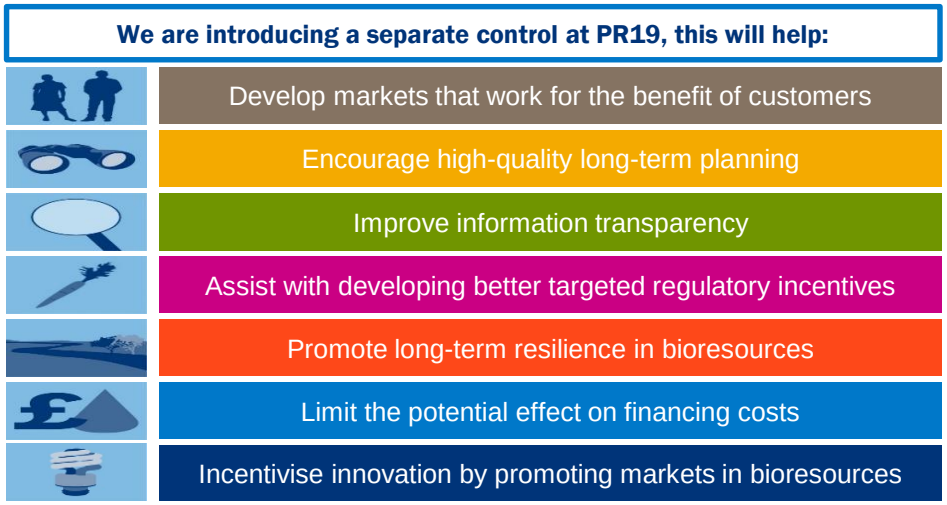
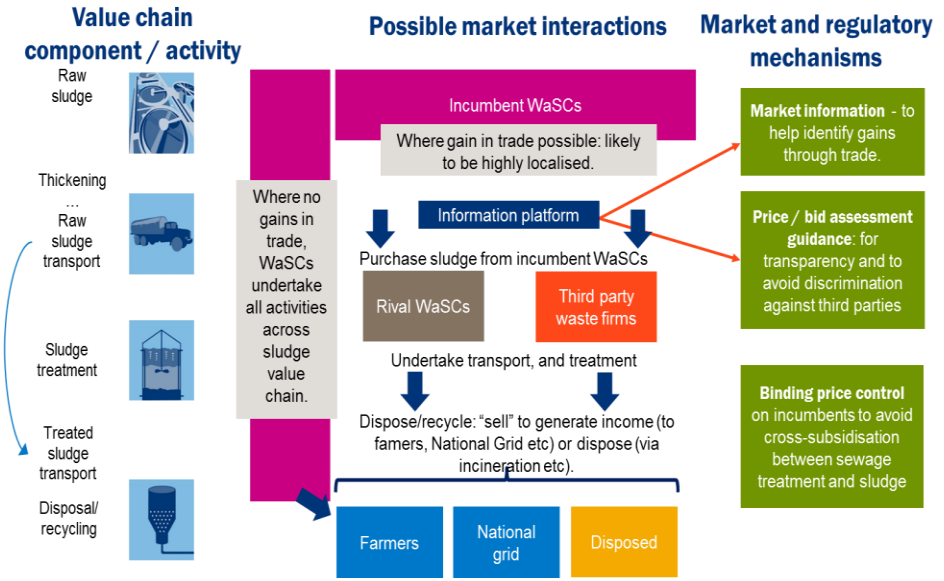


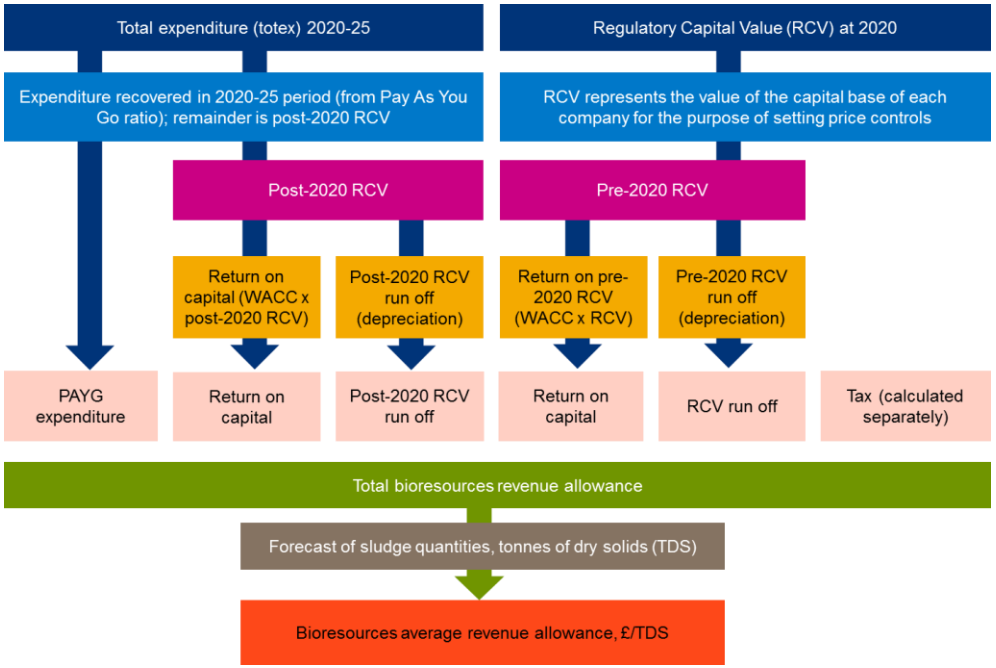
Figure: Bioresource market (sludge transport, treatment, recycling and disposal)



- PR19 is the **first time** we will set a **separate control** for bioresources
- This decision was based on **evidence of potential trading opportunities** and our impact assessment showed there to be significant **net benefits** from bioresources markets
- **Key decisions** on the control were made in our May 2016 decision document, following our December 2015 consultation
- These decisions were subsequently confirmed by a **licence change**
- The licence **does not specify the detailed form of the control,** but allows us to develop and refine it through the methodology, and to confirm it in our final determinations
- We have developed our approach to the control through **engagement** with the sludge working group

- Our proposed form of control is an **average revenue control based on £/TDS on an NPV approach** set on a building block approach
- Revenue will be **net of income (transfer price)** from any trading activity and **net of costs of undertaking** non-appointed business
- Companies **will bear volume risk** arising from **changes in measured volume** of bioresources – as they are best placed to manage this risk
- To **protect customers**, there will be a **forecasting accuracy incentive** based on the variation between actual and business plan forecast volumes over 2020-25
- There will also be an **in-period revenue correction mechanism** to correct for under- or over-recovery in average revenues

Figure: The building blocks of the bioresources average revenue control



Definition of sludge production

For the PR19 average revenue control, sludge production (in TDS):

- is a measure of untreated sludge (primary, secondary and tertiary) produced by in-area wastewater treatment processes in a year;
- does not include the grit and screenings removed through preliminary wastewater treatment processes; and
- is ideally measured at the boundary between network plus and bioresources as defined in RAG 4.06, or if not, at the point of treatment. There should be continuous measurement via instrumentation, rather than by composite or spot sampling.

Bioresources control - more detail on our decisions

Decisions	
Topic	**Confirmed approach**
Type of control	Separate, average revenue control to be set at company level; this will reflect the volume of sludge produced by water and sewerage companies (WaSCs)
Length of control	Five years
Boundary of control	See Regulatory accounting guideline (RAG) 4.06 and paragraph 2 of companies' licence condition B for definitions of the activities that could be covered by the bioresources price control.
Inflation Indexation	Annual adjustment to reflect any percentage change in the relevant inflation index
Trading incentives	We will not introduce explicit sludge trading incentives at PR19
RCV allocation	Allocate the RCV to the separate bioresources control using a focused approach Determine the bioresources RCV using the concept of forward-looking economic value of the assets. We set out the approach companies should take when proposing their bioresources RCV allocations in April 2017 Determine allocation of RCV to the bioresources and network plus wastewater control (the remainder) as part of PR19 determinations
Protecting the pre-2020 RCV	We propose to extend our protection of past, efficiently-incurred investments included in the wholesale wastewater RCV, up to 31 March 2020. However, we have concluded there is no need to create a specific regulatory mechanism at PR19

- These decisions were confirmed in our May 2016 decision document and subsequent licence change process
- More detail on them can be found in Section 2 of Appendix 6, 'Bioresources control'

Bioresources control - more detail on our proposals

Proposals

Topic	Detail
Post-2020 investment	Building-block approach. The return and depreciation on efficiently incurred investment will be recoverable in the 2020-2025 period. Post-2020 investment incorporates all investment. We are not making a distinction between maintaining existing bioresources treatment capacity and building new capacity
Allowed average revenue	For each company, calculate the average revenue in £/TDS, using an NPV approach. Divide the NPV of five year total revenue by the total five year forecast of sludge volumes in TDS Revenue for bioresources will be net of both income (transfer price) from any trading activity and costs of undertaking any non-appointed business Index the average revenue figure by the relevant inflation index through the form of control
Forecasting accuracy incentive mechanism	Apply a penalty for significant inaccuracies in sludge volume forecasts in companies' business plans for variations greater than ±3% from the forecast used in setting the revenue control. Returning revenue to customers where five year total sludge volumes are greater than 7% of those used in setting the revenue control. These adjustments will be applied as part of the 2020-25 reconciliation at PR24.
In-period true-up for revenue variance	A company should collect the revenue associated with the volume of sludge it produces through treating wastewater. This revenue equals the company-level average revenue, in £/TDS, multiplied by the measured tonnes of dry solids produced. We propose to limit the total revenue companies can collect. Where required, alter the average revenue, £/TDS, in subsequent years to correct for any under- or over-recovery in an earlier year
Accounting for income from bioresources trading	In-period sharing of profits from using appointed assets for treating other waste or sludge trades.

- These proposals are out for consultation. More detail on each proposal, along with options appraisal, is provided in Chapters 3 and 4 of Appendix 6, 'Bioresources control'

Consultation questions on wholesale controls

Q1. Do you agree with our proposals for the form of control for network plus water and network plus wastewater set out in the 'wholesale controls' chapter and appendix 7, 'Wholesale revenue incentives'?

Q2. Do you agree with our proposals for the form of control for water resources as set out in the 'wholesale controls' chapter and appendix 5, 'Water resources control'?

Q3. Do you agree with our proposals for access pricing for English water companies set out in the 'wholesale controls' chapter and appendix 5, 'Water resources control'?

Q4. Do you agree with the proposals for company bid assessment frameworks set out in appendix 9, 'Company bid assessment frameworks: the principles'?

Q5. Do you agree with our proposals for the form of control for bioresources as set out in the 'wholesale controls' chapter and appendix 6, 'Bioresources control'?

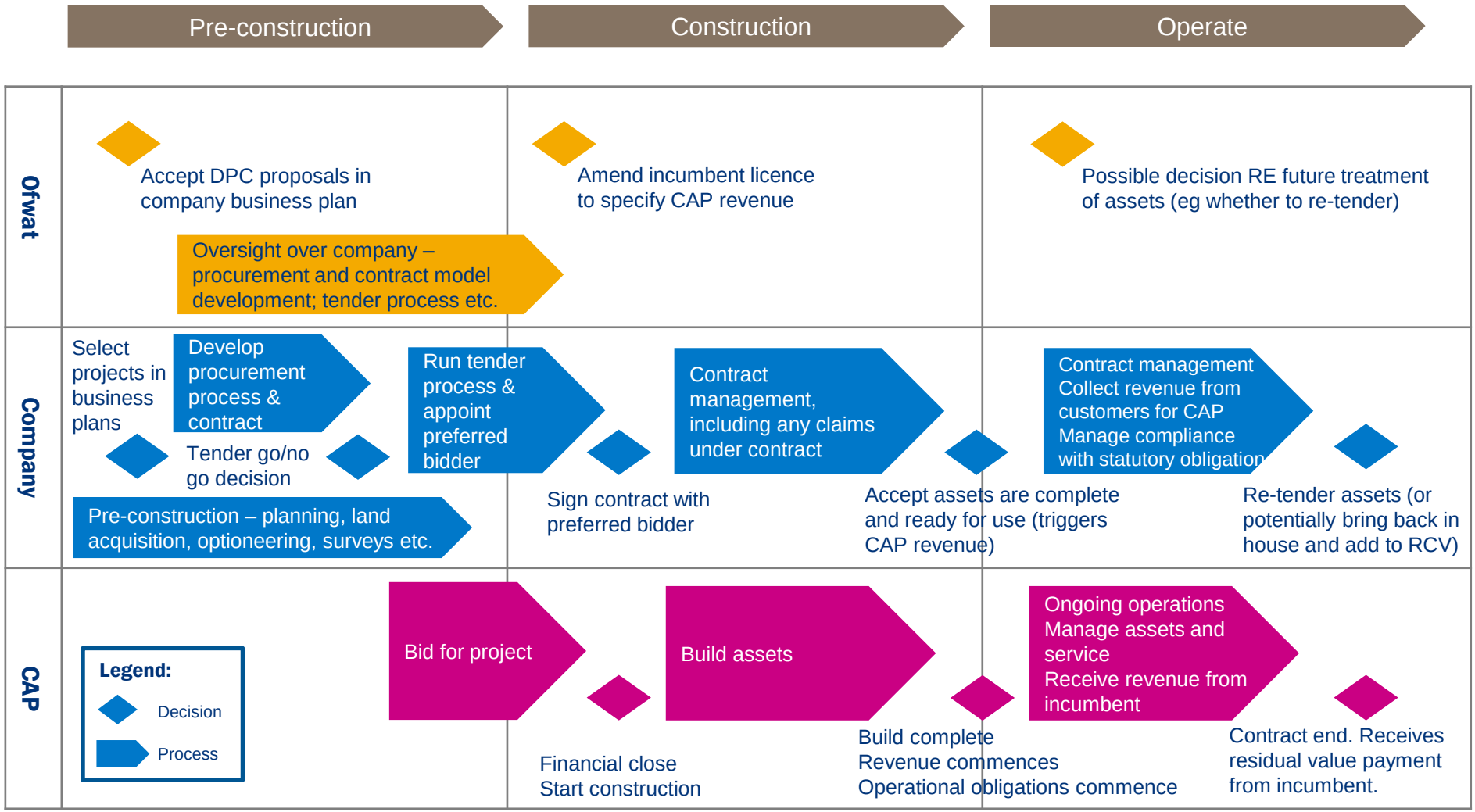
Direct procurement for customers

DPC involves arrangement where an English or Welsh water company tenders for services and infrastructure on behalf of customers. Our initial view is these projects will be discrete, large-scale enhancement projects with whole-life totex of over £100m. We envisage customer benefits through competitive pressure to reduce costs for the largest/most expensive new assets across capex, opex and financing, as well as innovation and the frontier for our and companies' view of efficient costs.

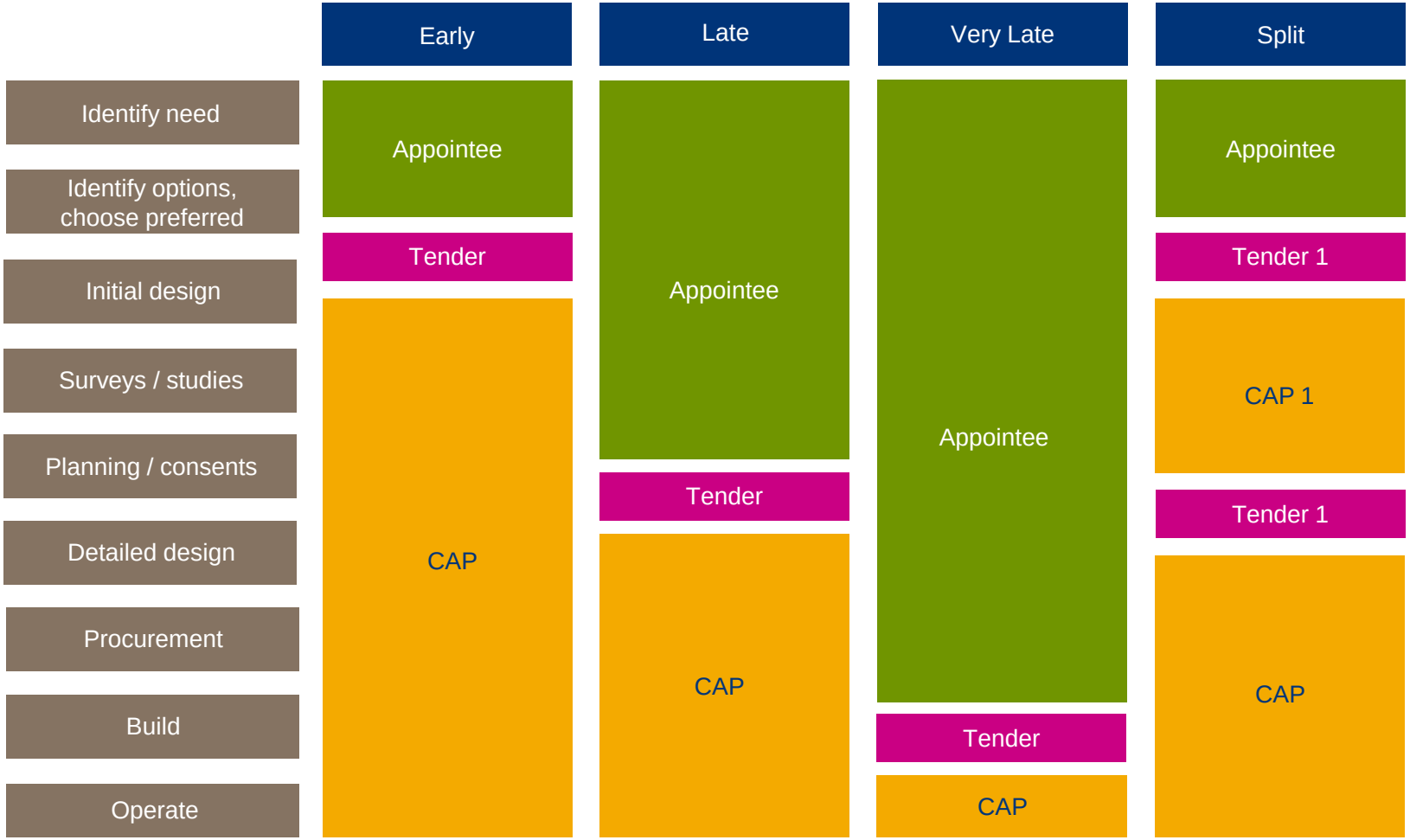
Our methodology details our thinking on:

- projects in scope
- initial assessment of business plans
- type of DPC tender model
- procurement process
- commercial model
- regulatory arrangements and treatment of costs

Overview of the DPC process (Figure A10.1)



Simplified representation of different tender models (Fig A10.2)



Competition focussed on delivering outcomes. Typically takes place before early design work.

Competition focussed on delivering outputs. Typically takes place once planning consents are in place, but before procurement/ construction.

Competition focussed on financing and operations. Typically occurs once construction or procurement for capex is complete.

We expect to test companies' approaches to DPC as part of our IAP:

Has the appointee clearly demonstrated that it has considered all relevant projects for direct procurement for customers, and has it provided a well-reasoned value for money analysis supporting its decisions about whether or not to take forward any of these projects using direct procurement for customers?

This will take into account a number of factors, including:

- evidence that the appointee has considered DPC;
- evidence that the appointee has a high-quality framework for assessing its potential to deliver projects by DPC – which should:
  - present clear evidence on the potential costs, benefits and opportunities;
  - clearly explain and quantify risks, and consider mitigations

Q1. Do you agree with our draft guidance that appointees should focus on projects likely to deliver the greatest customer value for DPC at PR19? (We ask that appointees provide a list and description of which projects, based on our guidance, they consider would be in scope at PR19.)

Q2. What are your views on the type of tender model (ie an early or late tender model) appointees should use? Do you have any views on whether or not we need to specify a tender model companies should use?

Q3. What are your views on the overall commercial and regulatory model, including our draft procurement and contract principles set out in Appendix 10?

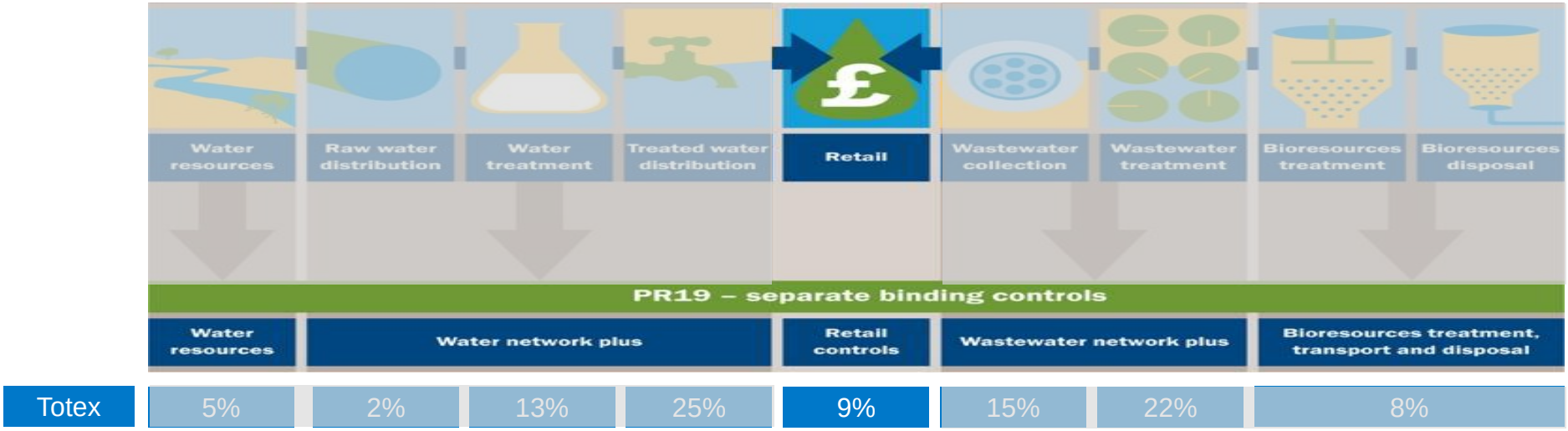
Extra: Guidance on potential DPC projects for PR19 (Table 7.2)

Area	Guidance
Definition of a 'project'	A project should be an efficient package of works, or multiple packages of works to be delivered together, which meet a common need. A project should not include a range of different asset types, addressing different needs, bundled together without the justification of synergies that can be achieved.
Types of project suitable for DPC	DPC projects could come from any part of the water and wastewater value chain, and services appointees provide, except bioresources. (We have separate proposals to develop markets in bioresources). We do not expect one type of project to be more suitable than another, subject to the other parameters we set out here (such as costs).
Identifying 'discrete' projects	We think some highly integrated projects in appointees' networks may not be suitable for DPC. When considering potential DPC projects, appointees should look to minimise the number of complex interfaces with existing assets. Appointees should also consider the complexity of operational and other dependencies between the project and the appointee's assets.
Identifying projects with high value for customers	Appointees should aim to achieve the greatest possible customer benefits at PR19 from proposed DPC projects. Greater customer benefits are likely to be associated with larger projects. These are likely to provide greater benefits relative to the administrative costs of implementing DPCs. A high proportion of capex, relative to opex, also increases the scope for financing benefits. We expect that competitive pressure on design, build and financing could help realise significant customer benefits.
Analysing DPC proposals' value for money	We expect appointees to analyse whether they expect projects to deliver customer value under the DPC route. Appointees should, for example: • analyse and quantify any project-specific risk factors which could erode customer benefits; • analyse the extent to which the project can drive innovation and therefore realise customer benefits; and • analyse potential indirect customer benefits through tendering the project. Any assumptions appointees use to perform this analysis must be clearly outlined and justified.
Project delivery	We consider that, in general, tendering need not delay delivery, as the early stages of the project could be progressed alongside a tender for a provider. However, for projects where pre-construction works are nearing completion, we expect appointees to consider any impact the tender process may have on delivery timings.

Retail controls

- In PR14 we introduced separate price controls for residential and business retail activities for the first time
- Price controls are an important tool to enable Ofwat to protect customers by setting a strong efficiency challenge and stretching service level obligations for companies
- PR19 we will set retail price controls for residential customers of water companies in England and Wales and retail price controls for business customers of Welsh water companies, where there is limited or no competition
- PR19 will consider what type of price protection should apply for business retail activities for English water companies, where an appointed company has not exited the market
- In PR14, we set business retail price controls for a two-year period. We set new price controls through the PR16 process that would apply for three years, starting on 1 April 2017. We set residential retail controls for a five-year period. PR19 will consider the appropriate duration for business and residential controls

Figure: Overview of the water and wastewater value chain



PR19 proposed approach and duration of retail form of control

Residential retail –approach

- Residential retail customers do not have access to competition in England or Wales. We propose to keep setting price controls for the residential retail activities of English and Welsh water companies to protect the interests of customers.
- In PR19 we will examine differences in retail costs by customer type. If there are differences in retail costs by customer type, we propose to continue to use a weighted average revenue control so that these differences can continue to be reflected in revenue allowances, as in PR14.
- If there are no differences in retail costs across customers type, we propose to set an average revenue control.

Business retail - approach

- There will be no business retail price control for exited water companies in England.
- We are considering what type of price protection should apply for business retail activities for English water companies, where an appointed company has not exited the market. If we did set price controls for these companies, we would use the same approach as used in the 2016 price review (PR16).
- We will set an average revenue price control for business retail activities for Welsh companies. This control will be for all sewerage services and for water supplies less than 50 megalitres a year.
- We are continuing to consider whether to set price controls for business retail activities for Welsh water companies in relation to water supplies of at least 50 megalitres of water a year. If required we will set an average revenue price control based on a gross margin cap.

Residential retail and Business retail - duration

- We consider that a three-year price control may be appropriate for retail activities as this would give us an earlier opportunity to take account of information and lessons from the English competitive business market.

Consultation questions on retail controls

Q1: Do you agree with using a weighted average revenue control, where appropriate taking account of different costs by customer type for the residential retail price controls for English and Welsh water companies?

Q2: Do you agree with using an average revenue control for business retail price controls for Welsh companies not subject to competition?

Q3: Do you support price controls for business retail activities for English water companies that have not exited the business retail market?

Q4: Do you support price controls for water service customers of Welsh companies using more than 50 megalitres a year?

Q5: Do you support a three year price control for residential retail activities and business retail activities?