

Using and facilitating wholesale markets: PR19 next steps

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This is a formal document that alerts our stakeholders to a change in the way that we regulate the water sector in England and Wales.

About this document

Promoting wholesale markets encourages greater innovation, resilience and efficiency across the sector as companies make better use of water resources and bioresources and improve connectivity between companies. [Our final methodology document](#) states out how we would set our controls and that we would consider companies' approaches as part of our Initial Assessment of Business Plans (IAP).

The IAP demonstrated that water companies have made progress towards using and facilitating wholesale markets. However, companies' business plans also showed that their approaches and progress are mixed. We want to see a step-change in progress across the sector, including by companies adopting best practice where this emerges.

As part of this wider strategy, this information note:

- **sets our expectation of companies of using and facilitating wholesale markets** for the 2020 to 2025 period and beyond; and
- **highlights good practice** in companies' business plans.

We have separately published an information note regarding companies' [Bid Assessment Frameworks](#), so do not discuss companies' Bid Assessment Frameworks in detail here.

Background

Markets can realise benefits for water companies, their customers and the environment. Markets help to reveal information, value and open up the scope for innovation and efficiencies for companies, and lower bills for customers.

Our approach in PR19 aims to facilitate a greater role for wholesale markets, where appropriate, to encourage greater efficiency, innovation and resilience.

For **water resources**, our long-established view is that the water resources market can benefit from more trading. This conclusion was reiterated in the 2018 report of the National Infrastructure Commission (NIC) "[Preparing for a drier future](#)". Trading requires greater collaboration between water companies, other water resource providers and users - potentially in the form of strategic collaborations and alliances.

We will continue to use a range of regulatory tools to encourage and support companies to take a regional approach to water resource planning and a market-based approach. We will collaborate with other public bodies to deliver these objectives. For example, in a [joint letter](#) with other regulators to English water companies, we called for a greater use of markets and competition and regional water resource planning, among other tools; within this letter we also explained how the EA would lead the development of a National Framework for water resources. More recently, we announced that we will:

- make available up to £360m through the Price Review 2019 (PR19) period to facilitate the development of strategic water resources options for the south and south-east of England; and
- create a regulatory alliance with the Environment Agency (EA) and the Drinking Water Inspectorate (DWI). This alliance will facilitate the development of regional solutions. It will ensure that the full potential of joint schemes will be better evaluated and that companies, regulators, customers and Government better understand the costs and benefits of the options available. This is so that the most efficient and effective projects are taken forward.

For **bioresources**, we want to see the establishment of trading between water and wastewater companies (WASCs) and other parties, harnessing the benefits of opportunities in other waste markets, and greater collaboration in developing the capability to treat sewage sludge. This will maximise the potential value, for customers and the environment.

For activities related to **water and wastewater network-plus**, we want to see companies use markets and partnership working, as part of catchment management, to benefit customers and the environment.

For the **developer services market**, we expect to see water companies treating alternative providers, self-lay providers and new appointees in a manner that enables them to compete effectively. Alternative providers are able to innovate and serve developers in different ways which can have benefits to developers as well as the wider environment.

Our expectations of companies

In this section, we set out our expectations of water companies in relation to wholesale markets. **We expect companies to maintain their focus on taking a market-based approach now and in the future.**

For example, by:

- **using markets;** this includes exploring market opportunities, inviting and assessing third-party options, and collaborating and trading with third-parties and other water companies; and
- **facilitating existing and future markets;** this includes supporting the existing developer services and bioresources markets, as well as preparing for and enabling the bilateral market for water resources in England.

The examples we provide below come mainly from business plans. We do not cover all the regulatory requirements on companies. For example, although not discussed below, we expect continuous improvement of **water resources market information** publication on companies' websites, which enables and encourages potential third-parties to identify and put forward opportunities to supply water resources, provide demand management and leakage services.

Good practice examples

In this section, we set out a number of examples relating to using and facilitating market that companies.

Using markets

Example 1: Exploring potential market opportunities (bioresources)

Welsh Water provided a good example of how to do an **initial assessment of market opportunities**. It carried out geospatial analysis using publically-available bioresources market information. It showed that it has 21 raw sludge producing sites which are closer, by road distance, to the treatment centres operated by other water companies than they are to its own treatment centres. This analysis provided an initial indicator of the scale of possibilities and where it should look to undertake further work.

Example 2: Inviting and assessing third-party options (water resources, bidding market)

United Utilities demonstrated **use of bidding markets** in a continuous process of looking for both short- and long-term solutions for water resources. The company demonstrated transparent and objective engagement in a range of ways including:

- publishing in the Official Journal of the European Union,
- holding a market engagement event with third-parties; and
- using its own communication channels like direct-contact lists and its website for announcing a call for proposals.

United Utilities also provided specific numbers in its water resources management plan (WRMP) **option appraisal process**, where over 60 of the final feasible list of options were provided by third-parties across supply and demand solutions. In addition, the company identified 12 feasible export options which have been offered to other water companies.

Example 3: Inviting and assessing third-party options (water resources, auctions)

Wessex Water demonstrates a plan for the effective use of markets to deliver services related to water and wastewater network-plus. The company has embedded a scheme for creating an online **reverse auction** for pesticide reduction from farming (EnTrade). This is innovative for the industry and Wessex Water demonstrate cost savings and environmental benefits from using these natural solutions, compared with engineered solutions.

Wessex Water ran its first auction with farmers in 2015 and saved 30% on nitrogen removal costs. It then ran further auctions in 2017 and 2018 with increased savings. This approach is being extended to future years. Wessex Water also plans to expand this approach to a trial for phosphate reduction in wastewater.

Example 4: Inviting and assessing third-party options (bioresources, market testing)

Yorkshire Water's approach to **market testing** of bioresources services enabled it to identify potential savings of around £100 million over the period the next AMP.

Yorkshire Water engaged with over ninety companies on nine potential packages of bioresources work that constituted over 80% of its bioresources capital programme. The activities Yorkshire Water have included in market testing include: outsourcing of thickening and dewatering across all their transfer sites, biogas management at a number of priority sites and pursuing market delivery of sludge treatment capacity.

After reviewing the initial findings, Yorkshire Water redeveloped the packages, which included combining some and removing others. The updated packages were developed into a pricing specification and shared with market participants with a request for budget estimate proposals. Those companies that responded to the pricing specification provided a range of potential solutions, some of which were markedly more efficient than Yorkshire Water's originally costed solution.

In addition to higher elements of the value chain, Yorkshire plans to tender for a full transportation service. Currently, sludge cake transport and some aspects of reactive liquid tankering are outsourced activities. It will start a full procurement process to include all liquid tankering as well.

Example 5: Collaborating with third-parties (water resources)

We expect to see collaboration not just on supply-side options, but on demand-side options too. Anglian Water and South West Water provide good practice examples of **working with third-parties to deliver demand-side solutions**.

Anglian Water deployed an Innovation Shop Window in Newmarket to actively engage with third parties to demonstrate the solutions they can offer. The company is now working with more than 100 organisations across 95 projects. On specific demand schemes, Anglian Water is working with equipment manufacturers for enhancing leakage detection products with increased coverage and reduced maintenance requirements. The aim is to enhance both operational and customer benefits.

South West Water also developed demand-side schemes provided by third-parties. For water efficiency, the company collaborates with organisations such as Greenredeem and Advizzo to develop schemes that reduce consumption of water. For leakage reduction, the company is partnering with Western Power Distribution to conduct helicopter leakage detection. It also shows evidence of long-term planning on finding innovative solutions to leakage detection via their Laser Imaging, Detection And Ranging Leak detection programme where they are collaborating with the University of Exeter, Plymouth Marine Laboratory and Plymouth University to optimise detection of leaks from subsurface merged aqueducts and water mains.

Example 6: Trading (bioresources)

For bioresources when companies make the best use of the sludge generated by treating domestic and business wastewater, there are considerable benefits to be had for customers, companies, the environment and other stakeholders. Most water and wastewater companies have identified opportunities where water and wastewater companies could **trade with third-parties**.

Thames Water provides a good example of a plan to engage in trading. It stated that it is working with neighbouring WaSCs, specialist technology suppliers and Other Organic Waste treatment operators to identify potential opportunities to work more collaboratively together. The company has provided a list of tables, where it detailed engagement, along with the volumes involved. It plans to import 10,000 tonnes of dry solids per year in total. For example, it demonstrated that it has had engagement with Anglian Water on opportunities to trade sludge between Tilbury and Riverside where potential headroom capacity is available. By maximising the use of its spare capacity through trading, customers will ultimately benefit.

Another positive example is Southern Water. It has begun detailed discussions with Wessex Water and Thames Water about options to use market mechanisms in Hampshire. It will begin market-led sludge trading during the next control period and sees this as a way to maintain bill affordability and increase resilience for customers.

Example 7: Trading (water resources)

We have seen some good examples of **regional coordination** between incumbent water companies regarding water resources. Water companies report in their business plans a number of future water trades proposed to begin after 2025. Many take the form of bilateral agreements between incumbents. Most importantly, there are a few of strategic regional trades being considered.

A promising example of regional coordination is Portsmouth Water's trades to Southern Water. The current strategy includes a series of water trades by Portsmouth Water that by 2029 will trade around 60 MI/d of its total 227 MI/d available supply with Southern Water. For Southern Water, it represents an increase in trade of 5.6%. This includes the water trade supported by the construction of the Havant Thicket reservoir that will release 21 MI/d of water to Southern Water.

Another good example of a potential trading solution that has come forward since business plans were submitted is the United Utilities Water, Severn Trent Water and Thames Water trade. The three companies have recently partnered to take forward a potential raw water transfer from the River Severn to the River Thames. The current plans consider building a transfer route, pipeline or canal, capable of carrying up to 300 MI/d from the River Severn to the River Thames. This partnership has been developed within the Severn Trent Working Group, will be supported by the strategic regional solution allowance announced in the IAP and will be supported by the regulatory alliance between Ofwat, EA and DWI.

We consider there is more scope for trades between incumbent water companies and third-party providers, like the Canal & River Trust. A good third-party trading example is included in Thames Water's business plan for the delivery of a raw water trade utilising the Oxford Canal to provide 15 MI/d.

Facilitating future markets

Example 8: Preparing for and facilitating markets (bioresources trading)

Yorkshire Water has partnered with the Open Data Institute (ODI Leeds), with the aim of making Sludge Treatment Facility (STF) capacity data more readily available. This would provide the market with the opportunity to help Yorkshire Water identify areas for improvement and efficiency and enable a more agile cross-country sludge trading market.

Example 9: Preparing for and facilitating markets (water resources, bilateral market)

English water companies need to be prepared to fully operate in a bilateral water resources market. A potential date the market could open is 2022. Once open, retailers in the business market would be able to procure water directly from third parties and use incumbents' network to transport it to customers. For the market to operate, incumbents will need to establish cost-reflective access prices for their network-plus services, where an equalisation payment may be applied to ensure a level playing-field for new water resources¹.

South West Water is implementing an internal water resources market from 2020. This places a system operator in charge of long-term water resources planning and advises on short-term system optimisation. The company will engage with third-parties for water supply through its Water Resources Market Information website, supplemented by a clear bid assessment framework.

Potential benefits include helping to reveal the price of water and preparing for a bilateral market. As part of this preparation, the company has already provided estimated access prices and notional charges for water resources.

Our on-going approach to markets

We continue to see the development of markets as an enabler of greater value and resilience for customers and the environment. We expect companies to maintain a focus on markets and procurement now and in the future.

As discussed above, companies' approaches to markets, controls and procurement formed a key part of our assessment of their business plans in the IAP. Going forward, companies' approaches to these topics will be relevant to how we set companies' price controls. For example, where relevant, we will take account of the use of markets in assessing efficiency.

¹ This equalisation payment will be set to reflect the difference between the average price of water resources and the cost of developing new water resources in each water resource zone. [Appendix 5 Water resources control, page 24, Box 1.](#)