

**Setting price controls for 2015-20 – final methodology and expectations for companies' business plans**

**Appendix 4: Network management questions**



## A4.1. Introduction

We explained in chapter 11 of our methodology statement that we want to develop network management reporting to:

- encourage the better management of networks;
- help managements make better informed decisions about network use and development;
- support the non-discriminatory treatment of new entrants; and
- inform our decisions on whether it is appropriate to introduce incentives for efficient network management when we next set prices in 2019.

We also explained that we plan to use an iterative process to gather information on network management – with our information requirements evolving over time from high-level questions to specific and targeted requests for consistent data (including cost drivers).

Our first round of questions is aimed at discovering general information about the processes and systems companies use to manage their networks. We expect that the answers to these initial questions will help us to design more detailed questions and specific data requests later in the price control period.

In developing our initial round of questions, we have assumed that network management involves the following activities.

- Physical balancing of supply and demand, and short-term cost minimisation given the existing network, environmental, regulatory, market and contractual arrangements.
- Supporting the efficient functioning of market and commercial arrangements designed to support efficient sector operation – by publishing information and demonstrating non-discrimination, and perhaps taking an active role in ensuring markets develop in an efficient and coordinated manner.
- Ensuring effective coordination of network outage and maintenance, charging arrangements and connections, to support efficiency and continuous delivery of service commitments.
- In the medium and longer term, seeking out a full range of opportunities (including different water sources, capital projects and demand management initiatives) to ensure network resilience and efficiency.

In line with the scope of network management set out in our methodology statement, we have developed separate initial questions for water and sludge networks.

## A4.2. Initial network management questions – water

Activity	Initial questions
<b>Physical balancing and cost minimisation</b>	<p>We want to understand to what extent these processes are objectively determined, the scope for discriminatory treatment of different sources, and how each company balances cost and other factors in making network management decisions.</p> <ol style="list-style-type: none"><li>1. Please describe your processes for mitigating short run mismatches of supply and demand (by short run we mean the period over which the network configuration is fixed and there is limited scope to balance supply and demand by changing the mix of water sources).</li><li>2. Please outline the main factors that influence your choice between different options for balancing short run supply and demand, including the following:<ol style="list-style-type: none"><li>a. the different parameters or cost drivers that are optimised, including whether you explicitly take into account the cost of energy (including different energy tariffs and pump curves), cost of water treatment and maintenance costs;</li><li>b. any other factors that are taken into account, including resilience/security of supply, abstraction licence conditions, resource availability, storage capacity, minimum reservoir levels and water quality;</li><li>c. timeframe over which these factors are taken into account and how frequently they are reset/recalculated; and</li><li>d. an explanation of any differences in approach across different parts of your network.</li></ol></li><li>3. Please describe your processes for optimising your network over the medium run. By medium run we mean the period over which the network configuration is fixed, but there is scope to use different combinations of water sources and demand side measures to balance supply and demand.</li><li>4. Please outline the main factors that influence your choice between different options for balancing medium run supply and demand, including the following:<ol style="list-style-type: none"><li>a. the different parameters or cost drivers that are optimised, including whether you explicitly take into account the cost of energy (including different energy tariffs and pump curves), cost of water treatment and maintenance costs;</li><li>b. any other factors that are taken into account, including resilience/security of supply, abstraction licence conditions, resource availability, storage capacity, minimum reservoir levels and water quality;</li></ol></li></ol>

	<ul style="list-style-type: none"> <li>c. the timeframe over which these factors are taken into account and how frequently they are reset/recalculated;</li> <li>d. an explanation of the extent that different water sources and demand side measures are used to balance supply/demand over time;</li> <li>e. an explanation of whether alternative optimisation scenarios are modelled, and if so how frequently; and</li> <li>f. an explanation of any differences in approach across different parts of your network.</li> </ul> <p>5. Please outline the resources your company employs in undertaking its water network management functions. For example, this could include staff levels, control rooms, telemetry and automatically operated equipment.</p> <p>6. Using specific examples, please describe how any recent and future planned network management related investments in your water business were considered and justified (including cost minimisation and other objectives such as resilience/security of supply).</p>
<b>Supporting the development of market/commercial arrangements</b>	<p>7. When optimising your network, what factors do you consider when deciding whether to use your own water resources, or to contract with other companies for bulk supply in order to ensure efficiency?</p> <p>8. Please describe how you would or do adjust your optimisation processes to take into account the input of water by a third party. This should include what activities you do or would do to ensure water quality and customer service standards are maintained.</p>
<b>Efficient coordination of activities</b>	<p>9. Please explain how planned maintenance outages are coordinated on your water network, including how you take account of the interests of third party suppliers and customers.</p>
<b>Longer-term decision making</b>	<p>10. Please describe how your long-term planning/investment planning takes into account network management processes and issues. For example, do the costs of short-term balancing factor into your investment decisions?</p>

## A4.3. Initial network management questions – sludge

Activity	Initial questions
<b>Physical management and short-term cost minimisation</b>	<ol style="list-style-type: none"><li>1. Please describe the factors (including cost minimisation and other factors) you take into account when considering different options for sludge transport, treatment, storage and disposal.</li><li>2. Further, explain how these factors are taken into account or optimised to manage your sludge network, including the following:<ol style="list-style-type: none"><li>a. how you choose which treatment works to take sludge to;</li><li>b. how you choose between different disposal options;</li><li>c. the degree of flexibility in your choice of treatment and disposal options; and</li><li>d. the frequency with which you review your different treatment and disposal options.</li></ol></li><li>3. Please describe the resources your company employs in undertaking its sludge network management functions. For example, these could include staff, control rooms, telemetry and automatically operated equipment (among other things).</li><li>4. Using specific examples, please describe how any recent and future planned network management related investments in your sludge business were considered and justified (including cost minimisation and other objectives).</li></ol>
<b>Supporting the development of market/commercial arrangements</b>	<ol style="list-style-type: none"><li>5. When optimising your network, what factors do you consider when deciding whether to use your own sludge treatment facilities or to contract with other companies for treatment in order to ensure efficiency?</li><li>6. Please describe how you would or do adjust your network management processes to take into account the input of sludge by a third party. This should address input into both treatment and disposal processes.</li></ol>
<b>Efficient coordination of activities</b>	<ol style="list-style-type: none"><li>7. Please explain how you coordinate your planned maintenance outages on your sludge network, and how you take account of the interests of the third party suppliers and customers.</li></ol>
<b>Longer-term decision making</b>	<ol style="list-style-type: none"><li>8. Please describe how your long-term planning/investment planning takes into account your network management processes and issues. For example, do the costs of short-term sludge management factor into your investment decisions?</li></ol>

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Printed on 75% minimum de-inked post-consumer waste paper  
July 2013

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