Impact Assessment Form

Title: Output accountability Project: MPR parallel work Division: Network Team: RIIO Teams	**Impact Assessment (IA)**
	Date: 03/3/2017
	Stage: Final
	Source of intervention: Domestic
	Type of measure: Price control
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Impact of proposals on Ofgem's Strategic Outcomes

Strategic Outcomes	Overview of Impact
Lower bills than would otherwise have been the case.	The preferred option is likely to result in lower bills for customers in the long term.
Reduced environmental damage both now and in the future.	The preferred option is likely to result in reduced environmental damage due to delivering outputs efficiently.
Improved reliability and safety.	The preferred option is likely to result in improved reliability and safety due to delivering outputs efficiently.
Better quality of service, appropriate for an essential service.	The preferred option is likely to result in better quality of service due to delivering outputs efficiently.
Better Social Outcomes	N/A

Quality Assurance Status	Reviewed

Summary: Intervention and Options

Rationale for intervention, objectives and options

What is the problem under consideration? Why is Ofgem intervention necessary?

The RIIO-T1 and RIIO-GD1 price controls set base revenues and outputs for transmission and gas distribution companies over an eight year period.

Since the start of each sector's price control, circumstances have changed. In some cases this makes it unclear when we will consider the outputs delivered. Will we consider the output delivered only if exactly what we specified is delivered? Or will we consider the output delivered as long as the overall purpose of the output is achieved regardless of what method was used?

We have identified two outputs where it is unclear when we will consider the outputs delivered. We would like to provide clarity for these two cases and note that our approach could be applied to other ambigious outputs. However, we would need to consider the nature of the output and why it was set.

What are the policy objectives and intended effects?

Our principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution and transmission systems.

We do this through our RIIO model, which sets outputs that network companies are required to deliver in return for earning the revenue set under the price control. Outputs hold network companies to account for delivery of what consumers value in a way that provides value for money over the long term.

We would like to provide clarity to ensure that our outputs framework continues to support the delivery of our principal objective.

What are the policy options that have been considered, including any alternatives to regulation? Please justify the preferred option (further details in Evidence Base)

To address ambiguity we could:

1. Consider the outputs delivered if they are delivered in a manner that provides the greatest value to consumers (both in the short and long term). We prefer this option as it will encourage companies to find

alternative ways of delivering and managing changing circumstances – it also avoids the risk of companies building things that are not needed.
2. Hold companies to account for what was specified rather than the outputs purpose.

Monetised Impacts (£m)

Business Impact Target Qualifying Provision	**N/A**
Business Impact Target (EANDCB)	**N/A**
Net Benefit	**N/A**

Hard to Monetised Impacts

Describe any hard to monetised impacts, including mid-term strategic and long-term sustainability factors.

Driving value for money –We think that focusing on what consumers value, rather than the detailed output specification, will provide the greatest value for consumers in the long term. The extent to which this happens will be hard to monetise as we do not know what different investment decisions will be taken in the future and cannot see the impacts of the options not selected.

Will the policy be reviewed? Yes, as part of the development of the next price control.	**If applicable, set review date: N/A**

Summary: Analysis & Evidence Policy Option 1

FULL ECONOMIC ASSESSMENT-Focus on the Purpose of the Output

Price base year: 2009/10	**Base Year:**	**Time Period:**	**Net Benefit (£m)**		
			Low:	**High:**	**Best Estimate:**

COSTS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Cost** (Present Value)
Best Estimate			

Description and scale of key monetised costs by 'main affected groups'

Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Benefit** (Present Value)
Best Estimate			

Description and scale of key monetised benefits by 'main affected groups'

Other key non-monetised benefits by 'main affected groups'

This approach will encourage companies to find alternative ways of delivering what consumers value and take ownership for managing changing circumstances.

Key Assumptions/sensitivities/risks	**Discount rate (%)**

BUSINESS ASSESSMENT (Option1)

Direct impact on businesses (EANCB)	**Score £m: N/A**

Summary: Analysis & Evidence Policy Option 2

FULL ECONOMIC ASSESSMENT- Hold Companies to specification in licence

Price base year: 2009/10	**Base Year:**	**Time Period:**	**Net Benefit (£m)**		
			Low:	**High:**	**Best Estimate:**

COSTS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Cost** (Present Value)
Best Estimate			

Description and scale of key monetised costs by 'main affected groups'

Other key non-monetised costs by 'main affected groups'

We are concerned that this approach will create incentives for companies to avoid considering alternative more efficient options. It may also encourage companies to seek larger allowances if costs increase. We want to avoid creating these incentives.

There is also a risk that companies will build assets that are not needed to meet the ouput.

BENEFITS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Benefit** (Present Value)
Best Estimate			

Description and scale of key monetised benefits by 'main affected groups'

Other key non-monetised benefits by 'main affected groups'

This could allow clawback of allowances if cheaper more efficient solution is delivered, which could lower costs in the short-term for consumers.

Key Assumptions/sensitivities/risks	**Discount rate (%)**

BUSINESS ASSESSMENT (Option1)

Direct impact on businesses (EANCB)	**Score £m: N/A**

Evidence Base (for summary sheets)

1. Scope of this IA

This Impact Assessment evaluates the each option applied to two outputs where we consider it is currently ambiguous how we will hold network companies to account.

2. Problem and rationale for intervention

We want to clarify how we will hold companies to account for output delivery in cases where the definition is ambiguous, such as National Grid Gas Transmission's (NGGT) compressor output and SP Transmission's (SPT) voltage control output.

Since the start of each price control, circumstances have changed. In some cases this makes it unclear when we will consider the outputs delivered. For instance, will we consider the output delivered only if exactly what we specified is delivered? Or will we consider the output delivered as long as the overall purpose of the output is achieved regardless of what method was used?

Example 1, National Grid Gas Transmission's compressors output -

In RIIO-T1 we provided NGGT an allowance to install new compressors at specific stations to ensure compliance with the Industrial Emissions Directive (IED). The IED applies a new emission limit for carbon monoxide (CO) and a more stringent emissions limit for oxides of Nitrogen (NOx). It also removed the exemption that previously applied to NGGT's compressors due to their age.

We provided funding for new compressors at Aylesbury, Huntingdon and Peterborough and added the following output:

> *"Compressor replacement – changes for compliance with requirements of the IED."*

We provided further details of the output in the initial proposal:

> *"More specifically the outputs are set as follows:*
>
> - *Appropriately sized electric Variable Speed Drives (VSD) in Peterborough and Huntingdon compressor stations, and*
> - *Rendering Aylesbury compressor station compliant with the IED requirements, via the installation of an appropriately sized VSD and a compliant gas turbine."*

NGGT is delivering alternative solutions to what was originally envisaged. In particular, at Aylesbury an oxidation catalyst (catalytic convertor) was added to reduce emissions and comply with the IED rather than new compressors. NGGT's latest forecast estimates that it will underspend by approximately £25 million against its allowance of £143 million.

Example 2, SP Transmission's voltage control output –

SPT's RIIO-T1 business plan identified that network assets will be required to help manage voltage following the closure of Hunterston B power station in 2020/21. To fund this requirement, we provided an output and associated funding (£15.4m). The output is specified in SP Transmission's licence as:

> *"Voltage support to comply with Grid Code and NETS SQSS on possible closure of Hunterston Power station and transmission system reconfiguration in the west coast."*

The closure of the Hunterston B power station has been delayed beyond RIIO-T1. EDF Energy, the operator of the Hunterston B, estimates decommissioning to occur in 2023. No expenditure will therefore be required to address the closure of Hunterston B in RIIO T1.

Elsewhere on the network, there has been a reduction in the availability of generators that can support voltage. In particular, the large 2,400 MW Longannet power station closed in March 2016. These changes were not foreseen by SP Transmission in its RIIO-T1 business plan.

SP Transmission proposes to deploy equipment (shunt reactors) across their network to help manage voltage. SP Transmission forecasts this to cost £10.8m.

3. Policy objective

The policy objectives of outputs in the RIIO model is to hold network companies to account for delivery of what consumers value in a way that provides value for money over the long term.

4. Which parties may be affected?

The main affected groups are:

- **Consumers** – Outputs will deliver better value for money.
- **Network Companies** – Will be obliged to deliver the high level output in cases of ambiguity.

5. Options and calculation of monetised impacts

1. (Preferred) Focus on the purpose of the output.

Under this approach we would consider the outputs delivered if an output is delivered in a manner that provides the greatest value to consumers (both in the short and long term), ie it is economic and efficient. This approach will encourage companies to find alternative ways of delivering and manage changing circumstances – it also avoids the risk of companies building things that are not needed.

Example 1, National Grid Gas Transmission's compressors output –

We will hold NGGT to account for complying with the Industrial Emissions Directive in a manner that delivers the greatest value for consumers. NGGT will share with consumers the benefit of any cost savings or increased costs relative to what was originally envisaged through the total expenditure sharing mechanism.

Example 2, SP Transmission's voltage control output –

We will hold SP Transmission to account for manging voltage control in a manner that delivers the greatest consumer value.

2. We could hold companies to account for what was specified rather than the output's purpose.

We are concerned that this approach will create incentives for companies to avoid considering alternative options. It will also encourage companies to seek changes to outputs if costs increase. We want to avoid creating these incentives.

Example 1, National Grid Gas Transmission's compressors output –

Under this alternative we would adjust allowances to reflect the change in circumstances. This option could claw back savings from lower costs.

However, we would also have to consider whether we would apply this approach symmetrically. This could mean providing higher allowances when costs increase and transfer the risk of higher costs from companies to consumers. It would also remove the incentive for NGGT to identify alternative more efficient solutions. We are concerned that this would undermine incentives for network companies to identify and realise efficiencies.

Example 2, SP Transmission's voltage control output –

In this case we would reduce funding. As with NGGT's compressors if we applied this approach symmetrically, we would also need to consider providing additional funding where the cost of meeting an output has increased. This approach will reduce incentives for companies to identify lower costs options and likely increase costs for consumers in the long run.

Driving value for money

Companies have more freedom on how they choose to deliver outputs that drive value for consumers. This will avoid companies building unneeded assets that are specified in the licence and will encourage companies to focus on building assets needed to deliver for customer needs. We think that this will also provide companies to identify other solutions that could improve the safety, reliability of quality of service that they provide.

6. Wider impacts and Risks and uncertainties

Future RIIO ambiguous outputs

While we consider that this approach could be applied to other ambigious outputs in RIIO T1 and GD1, we will need to consider the nature of the output and why it was set. Given the complexity of a price control, in some cases, applying this approach may provide outcomes that are not in consumers' interests. We will not apply this approach in these circumstances.