

Key questions for RIIO-T2 and GD2

THE POTENTIAL IMPACT OF BREXIT



This is part of a series of discussion notes that are relevant for the next RIIO price controls.

The uncertainty that comes with Brexit – be it in financial markets, the UK economy or the energy sector – could make it harder for network companies and Ofgem to “get it right” at the next price control review. The regulator faces difficult decisions about how to allocate the related risks, and how to protect consumers’ interests in both the short- and long-term without making the RIIO framework unduly complex.

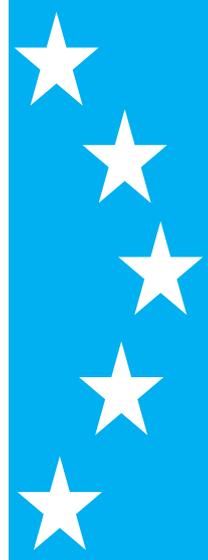
BREXIT AND THE REGULATORY FRAMEWORK

In broad terms, the impact of Brexit on RIIO-T2 and GD2 is a two-level question:

- Firstly, will a resolution on the UK’s exit from the European Union (EU), and subsequent arrangements, be reached by the time Ofgem makes its decisions on the next set of RIIO price controls? The deadline for the UK’s negotiations is the end of March 2019 – right around the time we expect Ofgem to be setting out its strategy decision for RIIO-T2 and GD2.
- Secondly, will the impact of Brexit on financial markets, the UK economy and the energy sector be transient, or will it represent a structural change? We discuss this further in the rest of this note.

THE POTENTIAL IMPACT ON FINANCIAL INDICATORS

Financial markets tend to react fastest to news. After an initial downward shock in reaction to the referendum, both the FTSE All-Share index and the yield on benchmark 10-year Gilts have returned to their pre-referendum trends.





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In addition to directly impacting the cost of debt allowance through movements in the iBoxx indices that Ofgem uses, trends in financial markets can impact on the allowed rate of return in three ways:

- movements in the yield on gilts over the next couple of years are likely to have an impact on Ofgem's decision regarding the risk-free rate;
- this, in turn, is likely to impact the equity risk

A NEW ECONOMIC REALITY?

The UK economy has been slower than financial markets in responding to the Brexit vote. But early indicators point to deteriorating economic prospects. There are a number of ways in which macro-economic changes can affect the regulatory framework:

- **Inflation:** the impact of Brexit on economy-wide inflation remains uncertain – slower economic growth usually reduces price pressures, but a weakening Sterling increases the price of imports to the UK. Inflation is a key component of the RIIO framework, as both allowed revenues and the value of the regulatory asset base are set in real terms and indexed annually. Should the impact of Brexit on inflation prove to be more than transient, it would be significant for network companies regardless of whether Ofgem retains the use of the Retail Prices Index (RPI) or moves to some variant of the Consumer Prices Index (CPI). One advantage of the latter is that it is typically less volatile than RPI.
- **Wage growth:** network companies' centrally-negotiated labour deals, a large portion of their costs, typically set wage growth at a margin above changes in RPI. Ofgem's approach to dealing with this margin while incentivising efficient expenditure by the companies is to set an *ex ante* allowance for 'real price effects' (RPEs) based on forecasts of wage growth.

premium – depending on whether Ofgem decides to take a short-term or long-term view of total market returns on equity; and

- observed beta levels tend to fall when equity markets perceive a crisis – underlining the fact that investors view UK utilities as very safe investments.

Heightened uncertainty as a result of Brexit will make it harder to accurately forecast wage growth.

- **Exchange rate movements and the price of input materials:** the need to accurately forecast RPEs, and the difficulty in doing so, is likely to be even greater for non-labour inputs. The price of input materials used by network companies – such as copper for electricity, steel for gas transmission, and plastics for gas distribution – is impacted by complex relationships between the Sterling exchange rate and economic trends both at a global and domestic level. Global trends, such as demand for materials in China, play a large role in determining these input prices but are particularly challenging to predict, especially over a period as long as eight years.

NEW CHALLENGES FOR THE ENERGY SECTOR

The relationship between energy demand and economic growth has historically been relatively linear.¹ This is changing with improvements in the energy efficiency of buildings and appliances, as well as growing use of distributed generation, electricity storage, and demand-side response. Brexit has the potential to further complicate the relationship through its impact on cross-border gas and electricity trading across interconnectors. This is on top of any impact on economic growth.

¹ As noted in [CEPA's advice to Ofgem on RPEs for DPCR5](#).



Depending on the deal that is struck between the UK and the EU (or individual countries), we could see significant changes in the patterns of generation and/or demand across the networks (particularly in transmission). The uncertainty around any such deal, as well as its timing, makes it difficult for network companies to effectively plan their networks. It also makes it harder for Ofgem to determine what level of investment (and to a lesser extent operating costs) is efficient and should be

WHAT DOES IT MEAN FOR RIIO-T2 AND GD2?

Regulators have three options when faced with heightened levels of uncertainty: build in a margin into the allowances they set (effectively asking consumers to underwrite the risk), focus on long-term trends instead of short-term volatility, or use uncertainty mechanisms. The appropriate solution will depend on the source of the uncertainty, who is best placed to manage the risk, and the practicalities of implementing different solutions.

The RIIO framework already manages uncertainty around the cost of debt through an index introduced in the RIIO-T1 and GD1 controls (and amended in RIIO-ED1). One option to deal with financial market uncertainty would be to extend indexation to the cost of equity, or some of its components. A less radical approach would be to rely on long-term trends to set the cost of equity, but this would represent a change from Ofgem’s focus on recent data in setting a lower cost of equity allowance for RIIO-ED1.

Indexation is also a theoretical option for RPEs. CEPA assessed different options for setting an indexed allowance for RPEs as part of our advice to Ofgem for DPCR5.² At the time the added complexity of indexation outweighed the likely benefits, but that may not be the case for an eight-year price control.

underwritten by consumers.

A further complication relates to interconnectors: consumers underwrite interconnector costs up to the floor under Ofgem’s ‘cap and floor’ regime for new interconnectors. Should the interconnectors that are being developed under this regime fail to sell their capacity in the market, consumers will have to make up the difference through higher transmission network use of system charges.

When it comes to the totex allowances for RIIO-T2 and GD2 Ofgem will be able to draw on an array of existing uncertainty mechanisms – for example, triggers for investment in ‘strategic wider works’ – to make sure that consumers are not asked to fund investment that later turns out not to have been needed.

EFFECT ON DIFFERENT INDUSTRY PLAYERS

Network companies
<ul style="list-style-type: none"> • Impact on network planning and investment • Impact on the allowed totex and cost of capital
Suppliers
<ul style="list-style-type: none"> • Greater use of uncertainty mechanisms could result in higher volatility of network charges from year to year
Ofgem
<ul style="list-style-type: none"> • Will need to set allowances that reflect efficient levels of expenditure and the cost of capital, and will need to balance that against the complexity of the regulatory framework
Consumers
<ul style="list-style-type: none"> • Ofgem’s approach to dealing with uncertainty could impact the level and/or volatility of network charges

² [CEPA’s advice to Ofgem on RPEs for DPCR5.](#)



KEY QUESTIONS

1. Is the impact of Brexit transient or permanent, and will it be clear by the time Ofgem makes its decisions for RIIO-T2 and GD2?
2. What is the interaction between any impact of Brexit on the energy sector and Ofgem's broader policies such as interconnector regulation and flexibility?
3. What are the appropriate regulatory mechanisms for dealing with the (potential) heightened uncertainty caused by Brexit?

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CEPA is an economics, finance, regulation and competition advisory firm with offices in London, UK and Sydney, Australia. Our staff and associates have extensive experience in developing and implementing regulatory frameworks in network and other regulated markets across the UK and other international jurisdictions. We combine intellectual rigour in applied regulatory economics with practical experience of advising a variety of stakeholders – regulators, regulated companies, suppliers and major consumers.

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