RIIO-2 open letter

Our response

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By email only to RIIO2@ofgem.gov.uk

Dear Jonathan

Open letter on the RIIO-2 Framework

Thank you for the opportunity to comment on the above open letter. Our response should be treated as a consolidated response on behalf of UK Power Networks' three distribution licence holding companies: Eastern Power Networks plc, London Power Networks plc, and South Eastern Power Networks plc.

We consider that the open letter is comprehensive in setting out the key challenges and areas of focus for RIIO-2. We are extremely pleased to see this level of scope being considered so early in the timetable and appreciate the consideration that has gone into the issues. We believe we are well placed to provide some unique insights into the future regulatory framework as we have first-hand experience of some of the changes occurring in the energy system. We are already in a world where nearly 30% of all generation is now connected to the distribution networks[1], fuelled by nearly 28GW of distributed generation (DG) that has been connected by DNOs (of which 8.5GW is on our networks).[2] We have adapted our business practices to facilitate this rapid rise in DG and introduced new innovative approaches to manage generation on our networks. We will continue to meet the new challenges that will arise and are proactively preparing for a new role as a DSO to ensure we can continue to meet our customers' wants and needs. All of this is being delivered while maintaining our sector leading position as the lowest cost DNO group, with the best safety performance, reliability levels of 99.99% and high levels of customer service. We therefore welcome this opportunity to consider how the RIIO framework needs to adapt and evolve to reward companies who successfully respond to a changing environment and penalise those companies who act as barriers to change.

In compiling our response we thought it would be helpful to outline how the various components of the RIIO framework could be consolidated into an overall RIIO-ED2 package that delivers further improvements for customers. Therefore, our response is structured as follows:

- **An Executive Summary** which explains the benefits that the current regulatory framework has delivered for customers, by recreating where possible the dynamics of a competitive market for regulated networks; outlines our view of the principles that should underpin RIIO-2; and details an initial set of views on how these principles could form an outline package specifically for RIIO-ED2;
- **Appendix 1** which comprises our full response to each of the questions posed in the open letter; and

[1] https://www.gov.uk/government/statistics/digest-of-uk-energy-statistics-dukes-2017-main-report
[2] http://www.energynetworks.org/events/networking-workshops-and-fora/overview/distributed-generation-fora-2016/distributed-generation-fora-2016.html

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- **Appendix 2** which comprises a short bibliography of the key resources we have used and referenced in our response.

We hope that you will find our comments helpful. If you have any questions, please do not hesitate to contact us. We look forward to working with you over the coming months to develop some of the suggestions in this response and set up a clear process for RIIO-2 and eventually RIIO-ED2.

Yours sincerely,

Suleman Alli
Director of Safety, Strategy and Support Services
UK Power Networks

Copy Basil Scarsella, CEO, UK Power Networks
James Hope, Head of Regulation and Regulatory Finance, UK Power Networks

Executive summary

The existing RIIO-ED1 framework provides strong foundations for RIIO-ED2. Along with previous price controls, RIIO-ED1 has facilitated the delivery of significant improvements in the quality of service customers receive at lower cost. For example, since 2010 DNOs have collectively:

- Delivered a 25% reduction in the number of supply interruptions that customers experience;[3]
- Delivered a 40% reduction in the duration of supply interruptions;[4]
- Increased customer satisfaction scores to an average of 8.6 out of 10;[5]
- Reduced the average domestic customer bill by 5.5% (since 2013);[6] and
- Reduced the number of safety incidents to an all-time low across the industry.[7]

We believe this is evidence that the regulatory framework enables good management teams to deliver improvements for customers. We have first-hand experience of implementing a new management approach to deliver such improvements for our customers. Our track record over the past 7 years is testament to the success of our approach. This success has been based on listening to our customers. They tell us that they want outputs delivered at lowest cost through deploying innovative approaches and sharing the subsequent savings with them, while improving service and reliability and keeping our employees and the public safe. The RIIO framework has supported this through: benchmarking performance across companies; focussing on outputs; providing powerful incentives to be efficient and deliver service improvements for our customers; and focussed mechanisms for continual stakeholder engagement to ensure that our business maintains its focus on our customers' wants and needs.

Consequently, we believe that the approach for RIIO-ED2 should continue to build on the successful framework which Ofgem has invested significant intellectual thought and energy into developing over a number of years across successive price controls. RIIO-ED2 should continue the evolution of the regulatory regime through applying the learning gained from implementing and monitoring the current price controls and applying the RIIO principles to the new challenges being faced in the energy sector. There may well be elements from other sectors which enhance Ofgem's framework, but these should be scrutinised carefully given the high regard Ofgem's regulatory approach is held in, both within the UK and internationally.

When we look ahead to RIIO-ED2, we can see that our challenges will be focussed around maintaining affordability for our customers in the light of new demands being placed on our networks in the form of connecting low carbon technologies. Forecasts based on National Grid's Future Energy Scenarios (FES) illustrate that there could be up to 2 million active devices on our networks by 2030, comprised of electric vehicles, distributed generation (DG) and heat pumps.[8] These devices are likely to have unpredictable consumption and export patterns and could be providing services to a range of industry players. Managing such scenarios will be highly complex. We believe that innovation will be key to meeting this challenge. Where it is efficient, we will need to facilitate new markets to deliver services for our networks and maximise the use of the new data available from smart meters to deliver savings. We will not only need to engage with our customers to understand their wants and needs but to provide them with the information they need to help reduce their electricity bills through providing flexibility services. As an example, we have already started running tenders for flexibility services from our DG customers to support our network.[9] This is a fundamental shift to how we run and operate our networks and our recently published Distribution System Operator (DSO)

[3] The data for these statistics comes from Electricity Distribution Company Performance 2010-2015 : https://www.ofgem.gov.uk/sites/default/files/docs/electricity_distribution_company_performance_2010-2015.pdf and the 2015-16 annual report: https://www.ofgem.gov.uk/system/files/docs/2017/02/riio-ed1_annual_report_2015-16.pdf

[4] As above

[5] Since the introduction of the Broad Measure of Customer Satisfaction in 2012-13

[6] Based on Ofgem's consumer count weighted averages included in: https://www.ofgem.gov.uk/system/files/docs/2017/02/riio-ed1_annual_report_2015-16.pdf

[7] http://www.energynetworks.org/assets/files/events/SHE/2014/Presentations/Thursday%2009.00-09.15%20-%20David%20Smith,%20Energy%20Networks%20Association.pdf since records of incidents were recorded in 1989/90

[8] https://www.ukpowernetworks.co.uk/internet/en/about-us/documents/UK%20Power%20Networks%20_A_Smart_Flexible_Energy_system_A_call_for_evidence_response_%20final.pdf p55

[9] http://www.ukpowernetworks.co.uk/internet/en/news-and-press/press-releases/UK-Power-Networks-gives-major-boost-to-flexible-renewable-energy.html

strategy provides a ground-breaking way of setting out how we will do this.[10] We believe this strategy will be key to playing our role in facilitating the £17-40bn of wider system benefits which Ofgem and BEIS cite as attainable through smarter, more flexible use of the energy system.[11] As we embark on the challenge of delivering these benefits, it is imperative that there is a stable financial basis to fund the investments and programmes needed to deliver whole system savings to customers. We will need an appropriate cost of capital which reflects the long term nature of our investments and the period over which our customers fund those investments.

To help meet these challenges and empower companies to continue to deliver in this more complex, future world, we believe we need a regulatory framework which seeks to mirror the behaviours seen in competitive markets. This means a framework which embodies the following core principles:

Promoting simplicity and transparency to enable customer engagement: Companies must be free to develop well justified plans which are endorsed through deep stakeholder engagement. Many of the aspects of RIIO are complex in order to place the right incentives on companies. This can make it difficult to engage with end customers and get their input to help shape the business plan. Companies should continue to be encouraged to find appropriate ways of conveying the key elements of their plans. This should be done in a simple and transparent manner. Companies should tailor their messages and the mediums used to present these messages to their different stakeholders. This transparency would be assisted by Ofgem using its existing reporting mechanisms to more clearly articulate what good performance of a regulated business looks like, in language that customers can relate to. This could be used by customers as a barometer to fully scrutinise ongoing company performance.

Rewarding high performing companies with higher than average returns: Where companies deliver well above expectations at the time the price control was set and for which they were funded, they should be able to earn higher returns than the average performing company. We note that the FTSE 100 companies have on average delivered returns of around 13% over the last 10 years.[12] However the better performing companies have produced returns in the range 15-20%, demonstrating that the returns for good performance are significantly higher than the average.[13] We believe that the regulatory framework needs to generate this type of environment for network companies, in order to replicate the competitive market in which customer satisfaction is paramount. This is achieved through powerful incentives which are aligned to what consumers want and need: efficiency (such as the IQI sharing factor); service (such as the Broad Measure of Customer Satisfaction); and reliability (such as the Interruptions Incentive Scheme). We believe that the ability to earn high returns is a key strength of the RIIO framework. It provides the incentive for management teams to drive significant improvements in service levels and find cost efficiencies which customers then benefit from for years to come. We consider this is a feature of the RIIO framework which needs to be enhanced to ensure that companies are effectively rewarded where they deliver high levels of service for customers.

Penalising poor performing companies: If companies are rewarded for high performance, they equally need to be penalised for poor performance. In a competitive market, poor performing companies ultimately go out of business. We do not believe this option is in customers' interests, as monopoly networks provide an essential service for customers and help to power the economy. To replicate the pressures of the competitive market Ofgem should calibrate the overall package of allowances and incentives in a way that ensures a poor performing company is only able to earn a return which enables it to service debt. Ofgem will be able to use the revealed information being reported on costs and levels of service delivered to date, to set some challenging output targets for the RIIO-2 controls. If companies do not meet these targets, they should expect to be penalised so that they only earn low returns. We believe that, wherever possible, penalties (and rewards) should be objective measures. Mechanistic incentives should be less onerous to assess and provide regulatory certainty and clarity as to how performance will be addressed. The certainty this creates should in turn be reflected in a lower cost of capital, from which customers further benefit.

[10] http://futuresmart.ukpowernetworks.co.uk/wp-content/themes/ukpnfuturesmart/assets/pdf/FutureSmart-Consultation-Report.pdf
[11] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633442/upgrading-our-energy-system-july-2017.pdf
[12] http://www.cityam.com/258383/after-ftse-100s-37-return-should-still-invest See table entitled 'How Sector valuations have fluctuated on the FTSE'.
[13] Ibid

Reinforce company ownership of business plans: We believe that just as in competitive markets, companies need to be accountable for delivering what their customers expect. Companies need to have ownership of business plans and responsibility for ensuring they reflect what their customers want. The key concepts of the regulatory framework, particularly outputs, need to be simple enough to allow companies to explain them to end customers and seek their feedback to help shape the development of business plans. Companies also need the flexibility to evolve and adapt to unforeseen circumstances, particularly given the uncertainty surrounding the energy sector and the pace of change which we are already beginning to see emerge. Companies will need the freedom to deviate from the business plan as new information becomes available, new developments occur or customers' wants change. Where these deviations are in customers' interests, the regulatory framework should reward such behaviour. Our flexibility and ability to find new ways of delivering for less will be stymied if calls for input based regulatory approaches are adopted, however attractive they initially may appear. The focus should continue to be on the delivery of the outputs and outcomes embodied in plans and final allowances.

Ensure strong and robust safeguards for those that are vulnerable: We believe that one of the strengths of the current RIIO framework has been the emphasis placed on protecting vulnerable customers. The Stakeholder Engagement and Customer Vulnerability (SECV) scheme has driven companies to develop a range of measures to protect vulnerable customers. As the role of the networks and our customers' expectations evolve, mechanisms such as this will be crucial to ensuring that all customers can benefit from the possibilities offered by the new energy landscape. In order to open these benefits to all and maintain the necessary safeguards for vulnerable customers, we believe it is essential that the SECV mechanism should be continued in RIIO-ED2.

Include appropriate mechanisms to manage uncertainty: As in competitive markets, companies need to be empowered to manage those uncertainties which are within their control. However, there are some uncertainties which companies in the regulated environment should not be expected to manage on their own. The RIIO framework needs to continue to share these risks between companies and customers appropriately. We believe that specific and targeted uncertainty mechanisms are vital in reducing companies' exposure to risks beyond their control and therefore reducing borrowing costs which can be reflected to customers through lower bills. RIIO-ED2 will need to continue to balance the interests of customers and investors through a range of uncertainty mechanisms and, dependent on the length of the price control period, potentially expand them into new areas to reduce the impact of forecasting errors.

Incentivising lowest cost solutions: In a changing energy system, DNOs will have new roles to play to help deliver the Government's objectives for decarbonisation at lowest cost. As we transition into a DSO, we can play a role as a neutral facilitator of new markets which can provide benefits and cost savings to customers. Equally, we can help deliver solutions which can avoid or defer the need for transmission investment. The current regulatory framework does not fully fund or incentivise us to undertake these actions where the benefits fall outside of our totex allowances. We believe the current outputs and incentives should be expanded to cover whole system solutions.

RIIO-ED2 package: Initial views

Based on the principles above, Table 1 below sets out some initial views on what the RIIO-ED2 package could consist of.

Table 1: Initial views on evolutionary changes required for RIIO-ED2:

Key Component	RIIO-ED1	RIIO-ED2	Relevant Questions
Price Control Period	• 8 year price control period	• Customers need protection from forecasting errors which can result in them paying more than they should do. We propose that a 5 year price control period will provide a better basis to forecast, given the higher uncertainty within the RIIO-ED2 period. • Customers need to have confidence that they are funding the lowest cost, whole system solution. We propose that RIIO-T2 is aligned with RIIO-ED2 to enable better joint planning and for Ofgem to assess least cost solutions across transmission and distribution.	Questions 16, 17 and 25.
Incentives	• Linked to what customers want • Have delivered improvements in service for customers	• We propose that Ofgem build on the success the existing incentives have delivered for customers. • Targets and benchmarks should reflect the high levels of service achieved in RIIO-ED1– customers should not pay more for poor performing companies to catch up. • Customers can benefit from new incentives which reward companies which deliver whole system benefits, cited at between £17-40bn by 2050.[14] • Customers need to have confidence that incentives appropriately reward and penalise companies. We propose that incentives should, where warranted, be symmetrical and have appropriate caps and collars to ensure this.	Questions 4, 5, 9 and 26.
Cost of Capital	• 10 year cost of debt index (trombone)	• Customers rely on financially stable networks to provide them with an essential service. To provide this stable environment, the cost of capital needs to reflect the long term environment in which assets are funded, not short term market fluctuations. • Customers benefit from stable charges and the cost of debt index needs to avoid producing any volatility in charges which are difficult to explain to customers. Consequently we support a medium to long term cost of debt index and Ofgem may need to consider moving to a 20 year iBoxx.	Questions 11, 12, 13 and 14.
Customer and Stakeholder Engagement	• Companies encouraged to engage with stakeholders to develop business plans with continued	• We consider Ofgem needs to continue to empower companies to take ownership of the business plan to allow them to reflect customers' wants and needs. Consumers need to be able to understand and shape the product they receive from companies. • The regulatory framework needs to assess how well companies engage with stakeholders	Questions 2 and 3.

[14] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633442/upgrading-our-energy-system-july-2017.pdf

Key Component	RIIO-ED1	RIIO-ED2	Relevant Questions
	ongoing assessment	on an ongoing basis, rewarding those who do this successfully and penalising those which do not. • We consider there could be a role for a standing consumer panel, funded through Ofgem's licence fees, which formally assesses the approach companies have taken to stakeholder engagement in compiling and delivering the outputs associated with their plans.	
Fast Track	• Upfront reward for fast-track company based on a 70/30 sharing factor and 2.5% totex	• We support a fast-track approach which appropriately rewards companies to reveal efficient cost information which customers can then benefit from in the form of lower allowances. • Evidence shows that customers have paid a considerable price for this information in RIIO-ED1 and we consider it important that the fast-track decision is based on an objective assessment of performance. • The rewards of fast-track need to be aligned with the benefits customers receive. Ofgem may need to reconsider the rewards for fast-track in light of performance within RIIO-ED1 and RIIO-T1.	Question 34.
IQI / Sharing factor	• Companies receive a higher sharing factor the closer they are to Ofgem's view of efficient costs	• We strongly support the retention of the sharing factor which has delivered benefits to customers through driving companies to innovate to reduce costs. • However, we propose a tiered sharing factor so that customers benefit more the greater the totex savings a company delivers. We propose that outperformance above 15% should be shared with customers at a higher sharing factor e.g. with 70% of savings returned to customers.	Questions 26 and 27.
Output categories	• Based around reliability, customer service, safety, connections, social and environment	• The feedback we receive from engaging with our customers and stakeholders continues to support the current output categories and confirms they align with what our customers value. • We propose that there should be work to develop potential new outputs around facilitating wider system benefits through improved system operation. These could comprise of specific transmission outputs which a DSO supports delivery of and incentives to reflect how well we utilise our network assets to facilitate generation. • We propose that there should be an improved measure of safety performance which is more comparable across companies.	Questions 6, 7 and 8.
Cost Assessment	• Mixture of totex and disaggregated benchmarking	• Customers have benefitted from Ofgem's cost assessment which benchmarks all companies to the upper quartile of performance. We propose that Ofgem maintain the broad	Questions 22, 23 and 24.

Key Component	RIIO-ED1	RIIO-ED2	Relevant Questions
	• 25% interpolation	parameters of the approach to cost assessment which have largely worked well. • The framework should retain scope to capture additional savings which are forecast by companies which go beyond those already revealed by historical data.	
RPI/CPIH	• Revenues and assets linked to RPI	• Linking our charges to the consumer price index (CPIH) would be more legitimate for our customers who will also benefit from a less volatile index, ensuring customer bills are more stable. • In the interests of simplicity and transparency (both for network companies and consumers) we believe that the move to CPIH needs to be present value neutral. • We propose that Ofgem considers the various options and sets out a clear and transparent approach to moving to CPIH, taking account of feedback from rating agencies and other relevant stakeholders.	Question 15.
Innovation	• Funding available through LCNF and NIC/NIA has delivered £1bn of savings[15]	• We are concerned about the efficiencies of a process whereby Ofgem provides access to innovation funding through regulatory mechanisms, asks companies to report the benefits delivered through this funding and then removes the benefits from future totex allowances. Echoing our view on replicating a competitive market we believe that, with the right incentive framework in place to reward good performance, there may be a case to remove any separate innovation funding for DNOs in RIIO-ED2. This incentive framework would need to cater for wider system and/or societal benefits which may have longer payback horizons. While these incentives are developed and initially implemented, there could still be a role for more limited innovation funding, focussing on projects which produce longer term, wider system benefits.	Questions 28 and 29.

In conclusion, we believe that the regulatory framework has a good track record of evolving in order to facilitate the delivery of improving service levels at ever lower cost for customers. RIIO-ED2 should continue this trend and broaden the remit of current mechanisms to empower DNOs to meet the new challenges associated with facilitating a low carbon economy at lowest cost to their customers. A critical step in this evolution is for incentives and outputs to focus on the wider role DNOs can play as DSOs in operating their networks to accommodate ever increasing volumes of DG and delivering whole system solutions at lowest cost. We believe that in developing RIIO-ED2 Ofgem should:

- **Evolve the existing price controls**: There is clear evidence that the regulatory framework has empowered good management of network companies to deliver improvements to customers. RIIO-2 should build on this framework and use learning from implementing the RIIO-1 price controls to deliver further benefits for customers;

[15] http://www.energynetworks.org/news/press-releases/2016/november/energy-network-innovation-shown-to-be-cutting-costs-and-reducing-carbon-emissions.html

- **Replicate traits of competitive markets**: Allowing companies to be rewarded and penalised depending on their performance in similar ways as would occur in competitive markets, provides the incentives to deliver high quality of service to customers. RIIO-ED2 needs to create an environment where good performance is appropriately rewarded and poor performance penalised;
- **Empower company ownership of business plans**: Companies are best placed to engage with their customers and stakeholders, reflect their wants and needs in a business plan and be held to account against the outputs included in that plan. RIIO-ED2 needs to continue to allow companies the freedom to engage with their stakeholders and develop their own business plan;
- **Outputs not inputs:** Companies need the flexibility to respond to changing circumstances and decide how to best meet pre-defined outcomes for their customers, as well as being free to deploy innovative approaches to reduce costs to customers. RIIO-ED2 needs to maintain the focus on outputs for customers and not the way which in which companies deliver them; and
- **Recognise changing roles in the energy sector:** DNOs will need to play a new role as a neutral market facilitator which can enable wider system benefits for customers. There is clear evidence that appropriately calibrated incentives have driven significant improvements in performance to date across a range of areas. RIIO-ED2 should apply incentive regulation to these new activities and roles in order to deliver the best outcome for customers.

Appendix 1

Please find our detailed responses to the questions outlined in the Open letter below.

1. Do you agree with our overarching objective for RIIO-2 and how we propose to achieve it?

We agree with the overarching objective for RIIO-2. We consider that the scope of the open letter is comprehensive and provides an excellent starting point to review the RIIO framework and refine it to achieve the overarching objective for RIIO-2.

We believe that the RIIO-ED1 framework provides a solid basis for delivering Ofgem's overarching objective for RIIO-2. It already contains the following elements which we believe deliver benefits for customers:

- An allowance benchmarked to the upper quartile of performance on which we are incentivised to find efficiencies which are shared with customers;
- A robust set of challenging output targets which we must to achieve, with financial penalties should we fail to meet these outputs and financial rewards should we deliver improved service;
- A business plan informed through extensive stakeholder engagement and consultation; and
- Mechanisms to engage with customers throughout the price control period to understand how their needs and wants change to allow us to reflect these changes into our business planning decisions.

Consequently, we consider that Ofgem can achieve its overarching objective by building on the solid foundations already in place for RIIO-ED1 and ensuring the current framework evolves to meet new challenges. We believe that for RIIO-ED2, Ofgem can set objective, quantifiable measures which can be used to determine whether companies have truly engaged with and listened to their stakeholders. For example Ofgem could monitor the level of engagement it receives on its consultations and how that directly influences its decisions.

2. How can we strengthen the consumer voice (primarily end-consumers), in the development of business plans and price control decisions?

We believe that there is already a considerable role for the consumer voice within the development of business plans and price control decisions. Under RIIO, companies have a responsibility to demonstrate that they have engaged with stakeholders. This has encouraged them to take real ownership of their business plans, developing stakeholder friendly documents and consulting widely and deeply with a broad range of stakeholders to test that the plan delivers want they want and meets their needs. For example, we ran a series of customer panels to test key areas of our RIIO-ED1 business plan, particularly on willingness to pay.[16] This helped us to identify clear support from our customers for an additional £116m of network investment to support low carbon technology growth across our networks.

We note that for Distribution Price Control Review (DPCR) 5 and RIIO-ED1, Ofgem used a consumer challenge group of appointed representatives to provide an additional customer perspective to setting the regulatory framework and assessing business plans.[17] We believe that this added value and Ofgem should consider the merits of a similar independent evaluation and assurance of company plans. We would stress that the benefits any group could provide would need to be balanced against any additional regulatory burden it may create. In addition, Ofgem would need to ensure that the assessment was objective and based on customer experience and outputs delivered.

Separately, Ofgem may want to consider if there should be a formal role for paid consumer representatives to engage with key decisions in the price control which impact the price and quality of service customers pay. We can see benefits in providing an independent, quality assessment which is applied equally and commonly across all companies. This idea will clearly need to be explored further with Ofgem, with consideration given to how it can best supplement the business plan assessment process.

[16] http://library.ukpowernetworks.co.uk/library/en/RIIO/Stakeholder_Engagement_Supporting_Documents/

[17] https://www.ofgem.gov.uk/network-regulation-riio-model/network-performance-under-riio

3. How should we support network companies in maintaining engagement with consumers throughout the price control period?

We believe that continued customer engagement is paramount to ensuring that we continue to deliver what customers want and need. We already run a number of forums and workshops through which we engage with a wide and diverse range of our customers and stakeholders, including:[18]

- DG customer forums;
- DG surgeries (run on a regional basis);
- Critical friend panels;
- Investor and shareholder forums;
- Street works focus groups;
- Targeted sessions with the City of London;
- Vulnerable and fuel poor workshops;
- Fuel poverty drop in sessions;
- Competition in connections workshops; and
- Highway service forums.

We are constantly challenging ourselves to ensure that we pursue a wide variety of avenues to engage with our customers and stakeholders. We ensure that we look to other sectors, including water, gas and aviation to learn from best practice elsewhere in Great Britain. We also seek to look further afield to understand best international practice, particularly leveraging our contacts across Asia and Australia, as part of the same Cheung Kong Group (CKG).

We believe that the annual comparison through the stakeholder and customer vulnerability incentive (SECV) and incentive on connections engagement (ICE) fosters a competitive approach among network companies and helps to deliver continual improvement. We believe that empowering companies to decide the means and frequency of engagement and focusing on the outputs of that engagement is more successful than being overly prescriptive about the form and format of that engagement. We consider that Ofgem can support companies to maintain stakeholder engagement through maintaining the ICE and SECV for RIIO-ED2. In addition, we would be happy to contribute to Ofgem run workshops to share specific examples of best practice across the sector and potentially more widely.

4. Does this structured approach to defining outputs provide the right level of clarity around delivery?

We strongly believe that the RIIO-ED1 framework of outputs and incentives provides a good level of clarity around what is expected to be delivered, while leaving room for network companies to innovate and find different ways of delivering the outputs. We believe that the structured approach to defining outputs is key to providing transparency on the performance of companies and legitimising the rewards they can gain through good performance. We would also highlight that the RIIO-ED1 framework is arguably more advanced than the RIIO-T1 and RIIO-GD1 frameworks, owing to the lessons learned from implementing those price controls as well as the strong outputs and incentives foundation put in place from DPCR5. Those other sectors are now looking to learn from some of the mechanisms in place in RIIO-ED1. We believe this shows that the RIIO framework is already evolving and suggests that it can continue to do so to provide further benefits to customers.

The current outputs/incentives can be broadened for RIIO-ED2 to cover the wider system benefits which DSOs can help facilitate (as highlighted in our response to question 5). However, these changes should build on the strong foundation already in place.

[18] http://www.ukpowernetworks.co.uk/internet/asset/c17eb6a8-8144-4a57-9a38-c7217ba651bC/Stakeholder_Engagement_Pt1.pdf see page 6

5. How can the outputs framework be improved, including the introduction of additional output categories for example around efficient system operation for distribution network companies?

In response to this question we have first considered improvements which can be made to current output categories, secondly where outputs and incentives may need to be modified to reflect new DSO activities, and lastly considered any new output categories required for RIIO-ED2, including those around efficient system operation.

Current output categories

We believe that the outputs framework has been a key component of the RIIO-ED1 price control as it has allowed companies to set out their commitments to stakeholders in a simple and transparent way, and report against these on an ongoing basis. It also allows an element of comparison across network companies, helping to create some competitive pressures. The financial incentives available for beating outputs have driven year on year improvements (as outlined in our response to question 8 below). These improvements will be incorporated into the baseline for future price controls, ensuring that customers continue to benefit. We believe that wherever appropriate, incentives should be symmetrical, with equal penalties and rewards.

One output area which could be improved is the current safety output. The current output is to comply with the health and safety executive (HSE) requirements. We believe there are currently inconsistencies in how DNOs report compliance with these requirements. The philosophy behind outputs is that they need to be measurable and comparable across companies. We don't consider that the current safety output is measurable or comparable in a meaningful way. The Energy Networks Association (ENA) currently collects data on safety compliance and it should be possible to agree a reporting framework around this data. More detailed, consistent reporting would strengthen the reputational incentive to meet safety outputs.

Changes to current incentives to recognise new activities

BEIS's and Ofgem's recent publication on a smart, flexible energy system highlights how DNOs will need to connect new technologies to the network and facilitate new business models which can help deliver the UK's carbon transition plan at lowest cost.[19] We are embracing this challenge as part of our DSO strategy and think that some of the existing incentive schemes will need to be adapted and broadened to recognise and incentivise these activities. We have included two examples below:

Recognition of new customers and services within customer engagement incentives: As we transition from a DNO into a DSO, we will need to actively manage our networks in close to real time. This will require new activities such as contracting for flexibility services, engaging with prosumers and EV owners to facilitate smart EV charging and enabling optimum output of microgeneration. We may also need to facilitate the procurement of Distributed Energy Resources (DER) for the System Operator (SO) and manage dispatch signals for different services. This will require us to provide close to real time data in order to inform our customers about constraints and enable them to understand the potential services they can provide and when. These new types of activities and services need to be captured and reflected in futures incentives in order to drive the same level of performance improvement which has been delivered through the broad measure of customer satisfaction and the SECV.

A generation index to monitor utilisation of assets: A key role of a DSO will be to maximise the use of existing network assets in order to defer and/or avoid investment to save money for our customers. A good measure of how well we achieve this is the utilisation of our assets. We already have a load index in place, but there is currently no metric to capture how we utilise our assets for generation. We think there is merit in developing a reporting framework around the utilisation of the network by generators at both primary and secondary level. This will help identify where DNOs are using smart solutions, such as flexibility, to maximise the use of network assets and facilitating the connection of generation, and where companies are simply investing in new assets. Taking this concept further, the level of utilisation of assets could be used as a trigger or evidence to support DUoS funded reinforcement where this could reduce the constraints which DER are subject to. This idea will need further development, particularly how it would interact with the current load indices. This is one of the areas we are keen to discuss and develop further with Ofgem.

[19] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/631656/smart-energy-systems-summaries-responses.pdf

Additional output categories

The vast majority of the £17-40bn of benefits from optimal system operation, quoted by BEIS and Ofgem are obtained through optimising the use of resources at distribution level.[20] These benefits can be delivered by the DSO but do not accrue to DSOs. Our DSO strategy has set out our vision on how we will complete the transition into a DSO over the remaining years of RIIO-ED1 and into RIIO-ED2.[21] We believe that this will provide the starting point to help deliver many of the system benefits cited by BEIS and Ofgem.

The current output categories and totex incentive mechanism ensures that where the benefits of our DSO strategy reduces costs on our networks, or improves the outputs our customers receive, that we are rewarded appropriately. However, a DSO role is not just about using new tools to deliver traditional outputs; it is about managing resources and assets on our networks to provide wider benefits to the system. The actions we can take as a DSO can provide wider benefits which broadly fall into three categories:

- Saving investment on the transmission networks;
- Supporting efficient whole system operation; and
- Avoiding the need for more large scale generation plant to be built.

The current RIIO output categories do not fully recognise these three areas of benefits. The RIIO-ED2 framework should fully recognise the risks and costs associated with the development and deployment of new technologies. Clear incentives are needed to facilitate a timely evolution towards a smart DSO future. Developing these mechanisms will be a crucial part of the policy development for RIIO-ED2 (as highlighted in our response to Ofgem and BEIS's call for evidence).[22]

The challenge in developing new output categories in these areas is to pin-point a specific measurable deliverable which is within the control of the DNO. We have some emerging ideas of how incentives could be designed to deliver these wider system outputs:

Saving investment on the transmission system

We comment in our response to question 16 that we think there are benefits for customers in aligning the electricity distribution and electricity transmission price controls. This would provide the scope for more joint planning between distribution and transmission operators and the submission of joined up plans to Ofgem which can reflect lower cost, whole system solutions. On the South Coast, we are already seeing examples of where DG on our networks can provide a lower cost solution for managing reactive power on the transmission network. We are exploring these solutions further through the Power Potential project.[23] We consider that RIIO-ED2 needs to allow these types of benefits to be fully considered in order to provide savings to customers.

A first step to help realise these benefits would be aligning the RIIO-T2 and RIIO-ED2 price controls. This would allow transmission operators to fully explore these options with DNOs (potentially through the regional development plans already in place). Where appropriate, the DNO could include the costs of these solutions in its business plan. Importantly, this would allow the DNO to calculate the full impact of these actions on other areas of its plan. In addition, this aligned approach would enable DNOs to propose a separate pot of funding specifically for 'transmission benefits'. This separate pot of funding could be explicitly linked to the delivery of transmission outputs, providing transparency on what we have delivered for customers. This would minimising the likelihood of customers inadvertently funding activities on both transmission and distribution networks which are seeking to resolve the same problem.

[20] As above

[21] http://futuresmart.ukpowernetworks.co.uk/wp-content/themes/ukpnfuturesmart/assets/pdf/FutureSmart-Consultation-Report.pdf

[22] http://www.ukpowernetworks.co.uk/internet/en/about-us/documents/UK%20Power%20Networks%20_A_Smart_Flexible_Energy_system_A_call_for_evidence_response_%20final.pdf

[23] http://nationalgridconnecting.com/power-potential-ready-make-name/

Supporting efficient whole system operation
Our forecasts (transposed from National Grid's FES), indicate that under a high take-up scenario, we could have over two million active devices (such as EVs, DG and storage) connected to our networks by the mid-2020s.[24] These devices will not have regular consumption or export patterns and may be providing flexibility services elsewhere to the SO, suppliers or aggregators. To provide some context, the current number of active devices is in the low thousands and the flexibility markets to access these devices are only just developing. The challenge is how to co-ordinate access to these resources in a way which minimises conflict and maximises the benefits to customers. Given that these resources are connected to our networks and their actions impact how we best manage our networks, we consider that we will have a key role in managing the dispatch of services. We are actively exploring this in the Power Potential project. RIIO-ED2 allowances and outputs will need to reflect the new role which DSOs can play in co-ordinating access to these resources and helping to avoid conflicts. We may need to have a specific allowance for managing the conflicts, working with the SO, and be incentivised to use this allowance as efficiently as possible. We would like to work with Ofgem to explore this concept more fully and understand how it could align with TO and SO incentives going forward.

Avoiding the need for more large scale generation to be built
A number of academic reports have outlined the benefits which enhanced distribution system operation can provide through enabling more distributed generation to connect, avoiding the need to build more expensive, larger scale plant.[25] The challenge is around how to link this value directly to the actions DSOs can take which enable it, particularly in a way which can be accurately quantified and compared across companies. We consider that, at a minimum, the cost benefit analysis (CBA) undertaken to assess new DNO investments should take account of the wider benefits they can enable. This is likely to be particularly crucial for enabling technologies required to deliver DSO capabilities such as monitoring equipment and advanced management systems. We want to work with Ofgem to understand how the current CBA approach can be used to capture these wider benefits and agree an approach prior to the development of RIIO-ED1 business plans.

6. Did the outputs target the right behaviours?

Although just over 2 years into the RIIO-ED1 price control, it is our view that the right behaviours are being encouraged through the outputs which were set. It is worth reflecting that these outputs are a product of:

- Building on practical experience over the course of a number of price controls (particularly for IIS);
- A series of Ofgem chaired working groups with DNOs and stakeholders to develop outputs[26] and wide consultation on these outputs;[27]
- Wide stakeholder consultation as part of our business plan development[28]; and
- Ofgem consultation on the business plans.[29]

The output framework drives us to listen to our stakeholders to help plan and maintain reliable, safe networks, connect new customers in a timely manner and provide a high quality of customer service.
One of the key benefits of the RIIO regime is that companies are incentivised to beat the targets set by Ofgem, where it is efficient to do so. This drives innovation and efficiencies. For example, in the last few years we have:

- Delivered a reduction of 40% in the number of supply interruptions customers experience from 2010/11 to 2016/17;
- Delivered a reduction of 49% in the duration of supply interruptions from 2010/11 to 2016/17;
- Delivered a 13% improvement in our Broad Measure of Customer Satisfaction score since 2012/13; and

[24] https://www.ukpowernetworks.co.uk/internet/en/about-us/documents/UK%20Power%20Networks%20_A_Smart_Flexible_Energy_system_A_call_for_evidence_response_%20final.pdf p55
[25] See the Imperial College London and Carbon Trust report: Imperial College & The Carbon Trust 'An analysis of electricity system flexibility in GB': https://www.carbontrust.com/news/2016/12/capturing-the-benefit-of-a-smart-flexible-energy-system/
[26] https://www.ofgem.gov.uk/network-regulation-riio-model/riio-forums-seminars-and-working-groups/riio-ed1-working-groups
[27] https://www.ofgem.gov.uk/publications-and-updates/strategy-consultation-riio-ed1-overview
[28] https://library.ukpowernetworks.co.uk/library/en/RIIO/Main_Business_Plan_Documents_and_Annexes/UKPN_Stakeholder_Engagement.pdf
[29] https://www.ofgem.gov.uk/publications-and-updates/riio-ed1-draft-determinations-consultation-slow-track-electricity-distribution-companies

- Returned £168m to customers in the first two years of ED1.[30]

Customers benefit from this, not just through the higher quality service in the short term but in the long term through the tightening of output targets (in future price controls). The value of the outputs framework put in place is that it allows these improvements to be demonstrated in a quantifiable manner and allows continuous scrutiny from stakeholders to hold companies to account for delivery of the outputs. Consequently, we think that the current output framework provides a strong basis for RIIO-ED2, particularly with the refinements and additions which we have outlined in our response to question 5.

7. How can we address areas of expenditure for which a clear output is difficult to define?

We consider that the outputs associated with areas of expenditure in RIIO-ED1 are generally clear and well defined. There is clear evidence that Ofgem improved on the outputs used in RIIO-T1 and RIIO-GD1 (set two years earlier) to provide more certainty for companies and customers in the definition of outputs in RIIO-ED1. There are still some areas of expenditure which it is difficult to define a clear output. For example, some of the closely associated indirect costs (CAI), business support and non-operational capex costs. We consider that this is where disaggregated benchmarking can play a role alongside totex benchmarking. Ofgem's approach already takes this into account and allows Ofgem to set challenging targets.

The approach to cost assessment will be extremely important in the RIIO-ED2 process and we would like to see the relevant working groups set up in sufficient time to inform the cost assessment models, particularly if Ofgem are contemplating attempting to derive their own view of allowances before the submission of business plans (as indicated in question 24). We note that for RIIO-ED1 there were 9 cost assessment working groups over a period of 14 months, with a number of publications over the 2 years of the price review.[31] We would like to see a similarly robust process put in place for RIIO-ED2 to help address the areas of expenditure for which there is no clear output.

8. Were the output targets and associated financial incentives set for RIIO-1 appropriate, reflecting what consumers value and are willing to pay for?

We have separated our response to this question into two parts: first addressing the point around whether output targets and associated financial incentives are appropriate; and secondly whether the outputs reflect what customer's value and are willing to pay for, which we note is currently being debated in the water sector as part of the Price Review 19 consultation.[32]

Are output targets and associated financial incentives appropriate?
We consider that the output targets for RIIO-ED1 are appropriate. The targets are the product of a rigorous process which included:

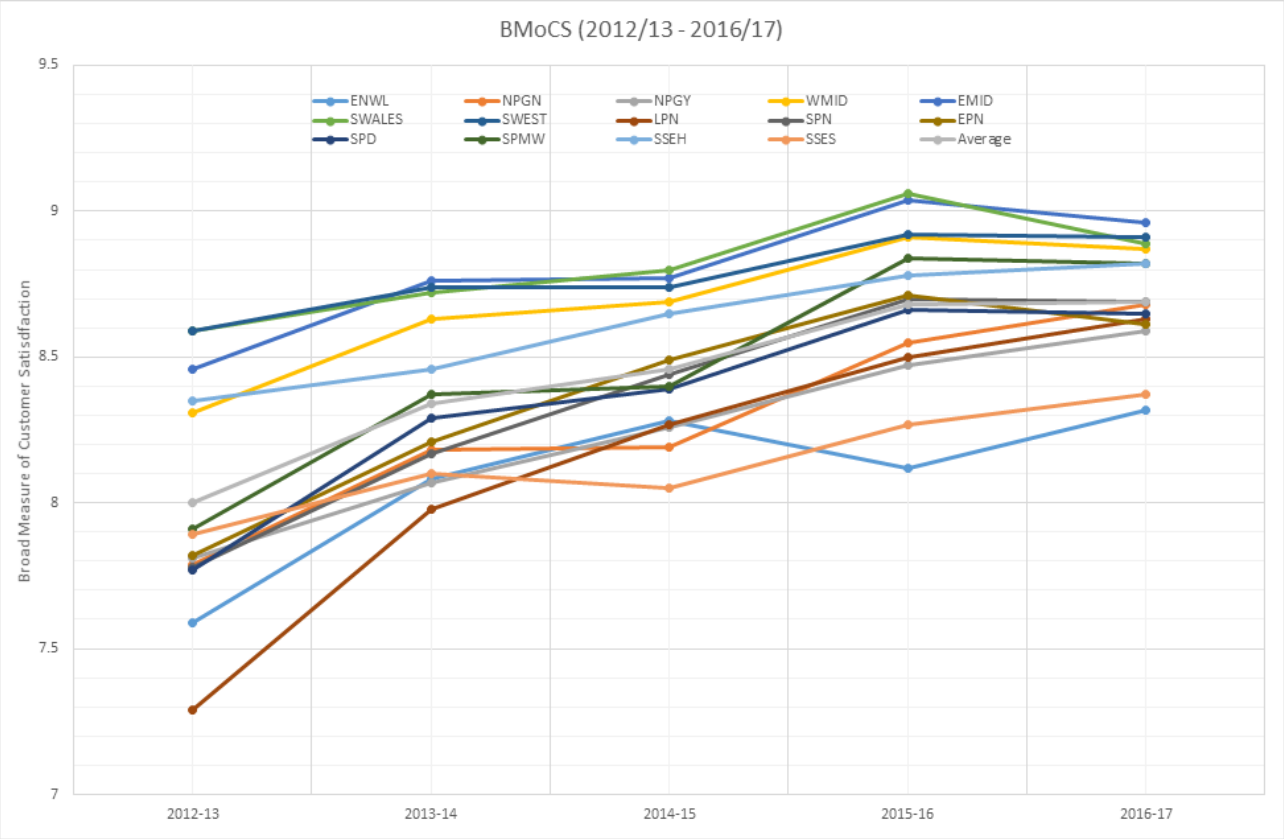
- **Analysis of historical performance**. DNOs' targets for RIIO-ED1 reflect historical performance. Customers benefit from DNOs innovating to beat the targets within the price control period, through better service and also from having that better service reflected in the baseline outputs for the next price control. We believe that this principle has placed the right incentives on companies to drive efficiencies and led to significant improvement in the service which customers receive;
- **Competitive benchmarking between companies.** DNOs' targets for RIIO-ED1 are the product of Ofgem's benchmarking process. This benchmarking process raises all DNO targets to the upper quartile level of performance. This ensures that all DNOs are challenged to perform at the top level; and
- **Scrutiny through the Competition and Mergers Authority (CMA) process.** DNOs' targets for the Broad Measure of Customer Satisfaction (BMCS) and IIS were scrutinised as part of the appeal made to the CMA on the RIIO-ED1 final determinations. The CMA specifically assessed the targets and associated financial incentives. The CMA concluded that "*our view is that GEMA's [Ofgem's] design*

[30] In 2012/13 prices
[31] https://www.ofgem.gov.uk/network-regulation-riio-model/riio-forums-seminars-and-working-groups/riio-ed1-working-groups?page=1#block-views-publications-and-updates-block
[32] http://0980a19b0bb02fe4a86d-0df48efcb31bcf2ed0366d316cab9ab8.r32.cf3.rackcdn.com/wp-content/uploads/2017/07/Delivering-Water-2020-Consulting-on-our-PR19-draft-methodology-2.pdf, see page 65

of the schemes is not flawed such that the schemes are likely to lead to significant rewards for DNOs, without these being justified by any substantive improvements in performance".[33]

We are aware that one of the criticisms of the current output targets is that all companies seem to be outperforming. This comes down to expectations about the dispersal of rewards under the incentives. In the past Ofgem implemented relative incentives where companies are only rewarded in comparison to the performance of other DNOs. The telephony survey used in DPCR 3 and DPCR 4 was an example of this. [34] We would not support a return to this type of relative incentive. This is because it makes it more difficult to build a business case for the investment needed to improve service levels without certainty on the incentive rewards we can achieve through that investment. One of the strengths of the DPCR5 and current RIIO frameworks are that companies can assess the costs of additional investments (not funded in allowances) to beat the targets and calculate whether the rewards in incentive payments are worth these investments. It is important to remember that the incentive income companies earn when they beat the targets is funding the investment which delivered that higher level of service. As highlighted in Figure 1 below, customers benefit directly from this improved service and the improved performance informs the baseline in future price controls, ensuring these improved services are "baked" into core performance.

Figure 1: DNO scores against the Broad Measure of Customer Satisfaction 2012-13 to 2016-17



Whether outputs reflect what customers' value and are willing to pay for

There has been extensive work undertaken on devising the current output categories, as set out in our response to question 6. As part of our RIIO-ED1 business plan development we actively engaged with a series of consumer panels to inform our RIIO-ED1 business plan. This included carrying out our own willingness to pay research particularly on customer appetite for greater investment to facilitate the take-up of low carbon technologies. Our customers have told us they want outputs delivered at lowest cost through deploying

[33] https://assets.publishing.service.gov.uk/media/5609588440f0b6036a00001f/BGT_final_determination.pdf
[34] https://www.ofgem.gov.uk/ofgem-publications/47704/2007.08-quality-service-report-v2.pdf, see page 16

innovative approaches and sharing the subsequent savings with them, while improving service and reliability and keeping our employees and the wider public safe. We believe this aligns well with Ofgem's output categories but as highlighted in our response to question 5, we require some broader outputs and incentives to cover the role we can play in delivering wider system benefits.

In terms of customers' willingness to pay, we would stress that the value of the IIS is grounded in detailed customer research on the value they place on lost load.[35] While the financial rewards linked with other incentives have been fully consulted upon with stakeholders, the value of these other incentives does not have the grounding in customer willingness to pay. We consider that Ofgem should assess where it is appropriate for the value of other incentives and discretionary rewards to be grounded in similar research. We note that ensuring that incentive rates reflect what customers value may become particularly important as companies start to reach the point where improvements in outputs require significant funding. For instance, DNOs have shown consistent improvements in reducing customer interruptions and customer minutes lost under the IIS. There may become a point where improving this level of performance further will require substantial investment. The financial incentives need to appropriately reflect customers' willingness to pay for higher levels of service to ensure that the incentives fund improvements in service which customers' value. As the reliance on electricity and distribution networks continues to grow (as customers adopt EVs and potentially heat pumps), the value of incentives and customers' willingness to pay needs to be kept under review.

Overall, we consider that the output targets and associated financial incentives have been subject to a high level of independent scrutiny and the evidence shows that they are providing clear improvements to customers.

9. What changes in the RIIO framework would facilitate returns that are demonstrably good value for consumers?

We believe that the RIIO framework has gone a long way to ensuring that financial returns earned by network companies are demonstrably good value for consumers. The focus on outputs within RIIO makes it easier for our customers to understand how our returns are linked to the levels of service they receive. Our performance against incentives and subsequent returns is highly transparent to a range of stakeholders through the publication of our annual business plan commitments report[36] and through Ofgem's scrutiny of performance in its annual report.[37] We think these provide a good basis for our customers to understand how we have performed and how our returns are linked to the service they receive from us. We are aware that stakeholders have highlighted that network companies' actual costs have been lower than those forecast and set in allowances. We would highlight that the current forecast underspend against allowances in RIIO-ED1 stands at just 3% across all DNOs. In addition, the underspend which we are forecasting includes areas where that money may be returned to customers at the end of the price control e.g. high value projects and load related reinforcement.

Looking ahead to RIIO-ED2, we would recommend that the regulatory framework ensures that returns are evenly balanced between a base allowance return and assumed level of incentive outperformance. A good company should be able to earn above average returns (as they do in competitive sectors). As we highlight in our executive summary, the prospect of earning above average returns is a key strength of the current regulatory framework as it incentivises improved performance which delivers improved levels of service for customers. Equally, a poor performing company should only earn a level of return which is enables it to service its debt.

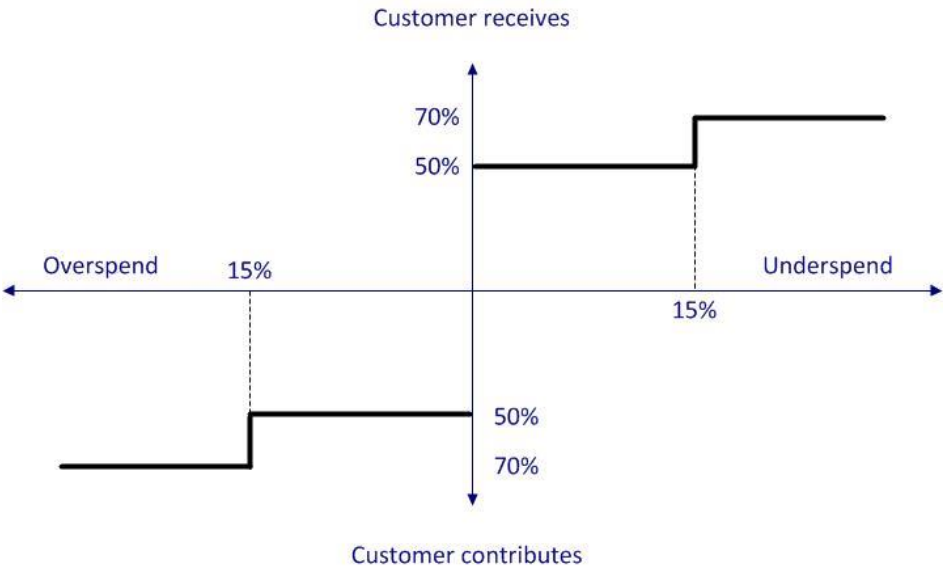
One way of reinforcing the legitimacy of the returns would be to introduce a tiered sharing factor, to allow customers to benefit from a higher proportion of savings where companies outperform beyond a specified level, for example 15% of totex allowances. Equally, it would provide companies with additional protection where they overspend totex allowances. Figure 2 below, provides an illustration of how this tiered approach could work.

[35] https://www.ofgem.gov.uk/ofgem-publications/53835/t1decisionoutput.pdf

[36] http://www.ukpowernetworks.co.uk/internet/en/about-us/documents/UK%20Power%20Networks%20RIIO-ED1%20Business%20Plan%20Commitment%20Report%202015-16.pdf?pdf=2016-business-plan

[37] https://www.ofgem.gov.uk/publications-and-updates/riio-electricity-distribution-annual-report-2015-16

Figure 2: Illustration of our proposed tiered sharing factor



We acknowledge that this proposal would need further discussion and debate with Ofgem and wider stakeholders. Particularly how it would interact with the IQI and any areas that make use of the set sharing factors, such as the IIS incentive rates.

10. How can we minimise the scope for forecasting errors?

In setting a price control it is necessary to make judgements on a range of areas where the future cost requirements are uncertain. Where this uncertainty exists, the RIIIO framework needs to ensure that the party which is best placed to manage that uncertainty bears the appropriate risk. We think that risk can be appropriately allocated and managed through calibrated uncertainty mechanisms. The RIIO-ED1 framework contains a number of elements which seek to minimise forecasting errors. We have listed a few below to highlight how they work to protect customers' interests in particular situations:

- **Load related reopener**: This protects customers and shareholders from forecasting errors around load growth (largely linked to economic growth);
- **Smart metering volume driver**: This protects customers and shareholders from forecasting errors around the number of properties we will need to visit to resolve issues associated with smart metering installation;
- **Street works reopener:** This protects customers and shareholders from forecasting errors around the costs and number of permitting schemes we require;
- **High value projects reopener:** This protects customers and shareholders from forecasting errors around the number of large capital schemes costing £25m or more which we have to undertake in the price control; and
- **Cost of debt indexation**: This protects customers and shareholders from changes in the underlying macro-economic conditions which can impact the cost of raising debt. The strength of this approach is that the costs adjust automatically for changes in the drivers. However, we recognise that in determining the design, an appropriate index can be complex and if improperly constructed it can cause significant year on year cost fluctuations.

These mechanisms are specifically targeted at areas where it is inappropriate for companies or customers to manage forecasting uncertainties themselves. We believe that they work well and contribute to minimising our and customers exposure to risk, allowing a lower level of borrowing which reduces costs for customers. There are a few areas where we consider these mechanisms could be further strengthened or added to. We provide a number of ideas below, which we would like to explore further with Ofgem and wider stakeholders.

i) Include a reopener band on material items

There are some material items such as cost of debt indexation which could be subject to a reopener if companies are either outperforming or over-spending due to forecasting errors. The benefit of this approach is that it maintains the incentives on companies to deliver efficiently. It also provides protection for both customers and companies to ask for the price control to be reopened if the external factors have resulted in the actual costs deviating significantly from the original forecasts. The trigger points can also be set in a way that reflects the scale of the uncertainty. We consider that this is a better approach than indexing the cost of debt over a shorter period time as this could cause significant year on year fluctuations, leading to volatility in our charges which we cannot control.

ii) Reduce the period of the price control

We would support a shorter price control period for RIIO-ED2 as it would reduce the risk associated with forecasting errors. Our allowances in RIIO-ED1 are based on a 10 year forecast (the last 2 years of DPCR5 and 8 years of RIIO-ED1). As highlighted in Ofgem's open letter, the energy sector is currently undergoing a period of substantial change. There is a range of uncertainty over future roles and responsibilities and load and generation forecasts which provide scope for errors (notwithstanding the protection provided by the load related reopener). A shorter, 5 year price control period would provide a better basis for companies to forecast and reduce the scope for errors.

iii) Amend the price control process to allow greater use of actual data

The current RIIO process requires companies to submit business plans to Ofgem around 2 years before the completion of the ongoing price control. While we understand the benefits of this in terms of enabling a fast-track assessment and full consultation on business plans, it means that business plans are assessed against a backdrop of 2 years of forecast costs for the current price control. This provides scope for errors in these forecasts to materially influence the allowances companies receive in the next price control. We consider it is worth Ofgem assessing what changes could be made in the price control process to allow a later submission of business plans which increases the years for which actual data is available to be used in the assessment process. One option would be for a single submission of business plans and single assessment of business plans for fast-track and slow-track.

iv) Introduce a claw-back for material fast-track rewards earned through forecasting errors

Another option to reduce forecasting errors would be to introduce a claw back mechanism where a fast-track company has earned significant rewards as result of substantially incorrect forecasts. If rewards earned through these errors pass a materiality threshold, then any fast-track company would have their allowances adjusted on the basis of the actual information available. The materiality threshold would need to be set at an appropriate level so as not to undermine the incentives associated with fast-tracking. We also acknowledge that there could be some complexity to manage in terms of the impact on other companies' allowances (given any fast-track company will be used to set the benchmarking for others). This concept will require further development with Ofgem and stakeholders.

v) Remove the assessment of Real Price Effects (RPEs) and inclusion of ongoing efficiencies from the price control package

Under the current RIIO approach, Ofgem undertakes an assessment of ongoing efficiencies and factors RPEs into these. This is an area which requires a number of macro-economic and regional forecasts to be made. Experience has shown that errors in these forecasts can lead to windfall gains or losses for companies. A more radical option would be not to make any adjustments for RPEs or ongoing efficiencies in the price control package and let companies take the risk on changes in costs. This would allow actual ongoing efficiencies to be revealed through the sharing factor. This change in risk profile could be picked up in setting the cost of capital. As highlighted in our response to question 31, this option would also contribute to making the RIIO framework simpler.

We expect that a key part of the RIIO-ED2 process will be to assess how to minimise the scope for forecasting errors. It will be important to ensure the correct balance is achieved between protecting both customers and companies from forecasting errors and making the price control overly complex.

11. What constitutes a fair return for a regulated monopoly network company, and how can we ensure that returns remain legitimate in the eyes of stakeholders?

We believe that we should be able to earn a fair return for meeting its regulatory performance targets and delivering the outcomes that our stakeholders want for the allowances we have been given. If a company outperforms its output targets and delivers them for less than its allowances, it should earn a higher return. Similarly if a company fails to meet its output targets and/or overspends its allowances, it should earn a lower return. In effect, the regulatory framework should seek to mimic the competitive market where high performing companies earn high returns and poorly performing companies earn low returns.

Given that energy networks provide an essential service to customers and help power the economy, we do not believe it is in customers' interests for network companies to fail and go out of business as this would result in serious detriment to customers. However, neither should these poor performing companies earn returns above the base return on equity. To help support this principle, we would propose a cap and collar arrangement which ensured that poor performing companies can only service their cost of debt and high performing companies can achieve double the cost of equity.

In terms of legitimacy, stakeholders must be able to correlate the level of return with the performance of the company and the prices they are charged. We agree that it would be inappropriate for a company to earn high returns purely on the basis of luck. The current focus on particular assumptions at the price control out-turning in companies' favour as simply good luck is, in our view, an oversimplification. At each price control there are a number of uncertainties (like RPEs) which Ofgem must make a judgement on who is best placed to manage them, companies or customers. In general, Ofgem has decided, correctly in our view, that the companies are best placed to manage these uncertainties. If the situation had been reversed and economic growth had resulted in real price effects increasing above the allowances we would not expect Ofgem to give companies increased allowances because they had experienced "bad" luck. We note that a number of debates have focussed on issues such as RPEs. We would stress that it is worth remembering the materiality of these issues within the price control. We note that for slow-track DNOs, RPEs amounted to £63.3m out of the £17.5bn ED1 settlement (0.36%).[38]

In addition, we believe that the legitimacy of returns could be further enhanced through our proposal for a tiered sharing factor as outlined in our response to question 9. Under this proposal, any totex out or under-performance above a certain level (such as 15%) could be subject to a tiered sharing factor which allows customers to receive a larger share of these savings.

12. What factors do you think are relevant for assessing and setting the cost of capital so it properly reflects the risks faced by companies?

We believe that the overarching principle for setting the cost of capital should be that it remunerates both efficiently incurred past investment and be of a level to attract investment into the sector based on the risks that the sector faces. If the cost of capital does not enable remuneration of previous incurred efficient investment, is it tantamount to asset stranding. One of the four guiding principles of the RIIO framework was that there would be no stranding of efficient investment. The system of RAV based regulation has evolved over time to give investors' confidence that regulators will provide for the recovery of efficiently incurred investment over multiple price controls. This confidence has translated into a low cost of capital and low prices for customers. If Ofgem were to act in a way that undermines the confidence generated to date, then the perception of risk would increase and the cost of capital would rise.

Setting a cost of capital below a fair level risks setting an investor perception that incremental capex destroys value. This would lead to an incentive not to invest. The analysis we ran for our RIIO-ED1 business plan using the Transform model[39] suggested a range of potential reinforcement costs in RIIO-ED2 of between £1.5bn (based on the core scenario we used in RIIO-ED1) and £3.2bn (based on a 'high' take-up of heat pumps and EVs). While this is highly indicative, this shows the level of investment which we may need to raise during the RIIO-ED2 period and it is vital that there is investor appetite for this, in order to enable customer take-up of these technologies.

The choice of the cost of capital parameters necessarily requires regulators to make judgements on the appropriate dataset to use to set them. We welcome the UK Regulators Network (UKRN) study into the cost

[38] https://www.ofgem.gov.uk/sites/default/files/docs/2014/11/riio-ed1_final_determination_expenditure_assessment_0.pdf

[39] https://www.eatechnology.com/projects/the-transform-model/

of capital methodology and look forward to contributing to it. We acknowledge that there has been considerable debate on whether the cost of capital parameters should be based on historical data, current market data or a combination of them. We expect this will be a key aspect of UKRN study and it is vital that any movement from the approach used in previous price controls is based on robust analysis.

Ofgem should consider that the question it is seeking to answer is what the cost of capital will be over the price control period in question, not what is the cost of capital today. Regulators and the CMA have generally used long run data to set the parameters for the cost of equity, on the basis that this best equates to the returns that investors require for investing in long term businesses. If Ofgem moves away from this approach it must be able to robustly demonstrate that there has been a structural change in the underlying parameters that would justify such a move.

We note that the open letter implies that recent transaction premia suggest that investors' required returns are below the allowed return set at the RIIO-1 controls. We would highlight that we do not support the use of limited data on transaction premia to inform the cost of capital at the RIIO-2 controls. Transaction premia represent many different factors, including the particular risk appetite of the specific purchaser (which may not be the same as the wider market), the premium for control, as well as the investors' assumptions on out or underperformance on costs, incentives, as well as finance costs.

At all recent price controls, Ofgem, in line with other UK economic regulators, has primarily drawn on the Capital Asset Pricing Model (CAPM) to estimate network companies' cost of capital. To determine the different elements of the CAPM, regulators have generally drawn on historical realised returns to inform the Total Market Return (TMR) elements of the CAPM, and empirical beta estimates for listed networks. We consider that the CAPM framework remains relevant for the RIIO-2 controls. In addition to the CAPM, in the past regulators have used the Dividend Growth Model (DGM) as a cross-check on the results of the CAPM based cost of equity. The advantage of the DGM is that it reflects investors' forward-looking expectations and current market conditions, and will help Ofgem and other stakeholders understand the impact of the current economic environment on required returns.

We support the continuing use of CAPM, possibly supplemented by the DGM, as the basis for estimating the cost of capital going forwards and strongly caution against any shift by Ofgem towards use of other unreliable methods such as transaction premia based approaches.

13. Can we improve our methods for the indexation of the costs of debt and equity?

We consider that the "trombone" cost of debt index introduced in RIIO-ED1 was a positive development. The approach could be improved if the start point of the index was extended to incorporate all of the available iBoxx data. This would ensure that the index captured the maximum amount of the industry embedded debt hence ensuring that all efficiently incurred debt costs are remunerated. Ofgem's approach to the cost of debt could also be improved through including a specific allowance for transaction costs. This is common practice across regulated industries. In RIIO-ED1 Ofgem excluded such costs on the basis they were captured in the perceived cost of equity headroom. We consider that continuing with this approach would be neither credible, nor sustainable as it relies upon opaque financial engineering for justification. We believe that this type of approach increases the complexity of the price control making it more difficult for our customers and stakeholders to engage in key decisions which impact the bills they pay.

We do not believe it is necessary, or practical, to index the cost of equity due to the following reasons:

- It is unlikely that the cost of equity will vary significantly over a price control period, particularly if the current period is shortened from 8 years;
- It is not obvious how Ofgem would develop an index for all of the elements of the cost of equity calculation, including the equity risk premium. It would be inappropriate for Ofgem to index the cost of equity for solely the risk free rate as this would ignore the fact that the risk free rate and the equity risk premium are linked and that a fall in the risk free rate is accompanied by an increase in the equity risk premium; and
- The equity betas that are visible in the market are predominantly water industry related. Given the changes that are occurring in electricity distribution the use of water sector betas, as a proxy for the sector risk, will become less relevant in the future.

14. Are there specific amendments to any core aspects of financeability that we should be considering in light of performance during RIIO-1 and the change in the financial environment?

We would expect Ofgem to continue to adhere to its duty to provide sufficient allowances to enable efficient companies to finance their functions. We consider that this means:

- Setting out a clear transparent approach to assessing financeability;
- Providing details of the credit metrics it will use, including the associated thresholds; and
- Stress testing the credit metrics with a range of plausible downsides. Our view is that a company is only deemed financeable if it can achieve the relevant metrics under the stress tests. We expect Ofgem's chosen metrics to align with those used by the rating agencies. It is not appropriate for Ofgem to address financeability issues by developing its own view of the relevant credit metrics. We note that Ofgem is currently pushing for enhanced reporting and information on RIIO accounts to satisfy "demands" from stakeholders such as ratings agencies. We believe that Ofgem should also recognise the metrics used by these same stakeholders and consider how it can reflect them in its approach to financeability.

15. Should we consider moving to CPIH (or another inflation index) and how should we put into effect any change to ensure it is present value neutral for investors?

Given that CPIH is now the chosen measure of inflation, we believe that our customers would benefit from linking the charges they receive to CPIH. It would improve the transparency and legitimacy of those charges for our customers. To achieve this, we believe that the following features should be addressed to ensure that any change is present value neutral for investors:

Determining a CPIH stripped cost of capital: The current approach to calculating the real cost of debt is to deflate the relevant iBoxx index with RPI breakeven inflation. Calculating a CPIH stripped version requires a determination of the wedge between RPI and CPIH. The choice of methodology for determining this wedge will be subject to regulatory judgement and therefore introduces an additional element of uncertainty into determining the appropriate cost of capital. For investors to have confidence that the change in inflation is present value neutral Ofgem should set out in advance and in detail how it would translate from an RPI based cost of capital to a CPIH based cost of capital.

Mismatch between debt and RAV accretion: Another impact from the change in inflation index is the mismatch that it could lead to between a RAV that indexes in full or in part with CPIH and a regulated companies' long-term RPI-denominated index-linked debt. Differences in the rate of growth in a company's asset and liabilities could have adverse consequences over both short and long horizons. For example, in the longer term, one of the rationales for borrowing on an index-linked basis has, until now, been that the principal owed to lenders would grow at the same rate as the regulated asset base. If debt grows more quickly than RAV, companies' index-linked borrowing may look less sustainable, in particular when the expected differential compounds over the 30 or 40 year tenor that is left on some companies' RPI-linked bonds. CPIH indexation may also negatively affect companies' financeability. Specifically, we note that Moody's have commented that it may no longer be appropriate for the accretion element of this debt to be fully excluded from the interest coverage calculation.

Impact of the loss of access to index linked debt: A shift to CPIH indexation may cut regulated companies off from new RPI-linked debt when there is no significant market for CPIH linked debt. If companies cannot realistically issue new index-linked debt, and if RPI-linked debt (or a mix of index-linked and nominal issuance) is cheaper than issuing only nominal debt, a change in indexation method would increase industry financing costs. This would be to the disadvantage of customers as it would increase the cost of debt and ultimately costs to customers. A solution may be to swap the RPI debt into CPIH linked debt. However, this will also increase financing costs and hence costs to customers. There are a range of approaches that Ofgem could apply to facilitate a change in indexation. These include:

- The CAA methodology where the regulatory charge restriction is defined as CPIH + X% cap on average prices but allowed revenues are still set in such a way as to provide in year for an RPI-stripped cost of capital while NATS' RAV still indexes in line with RPI;
- An approach which preserves RPI indexation for the existing RAV but moves to CPIH indexation, and by implication a CPIH stripped cost of capital, for new RAV additions;

- An approach which provides for some of the existing RAV to switch from RPI indexation to CPIH indexation. This is the current OFWAT proposal; and
- An approach where there is an immediate switch to CPIH for both revenues and the RAV.

Each approach has advantages and disadvantages and we would expect that Ofgem would set out the rationale which supports its eventual chosen methodology in a clear and transparent way. This is vital if investors are to be convinced that the impact of the change is present value neutral. We consider that this is a key area where we are keen to work with Ofgem and industry stakeholders to agree an approach.

16. Do you think there are sufficient benefits in aligning the electricity price controls to off-set the disadvantages we have outlined?

In principle, we believe that extending the RIIO-T1 price control period to align with the start of RIIO-ED2 can deliver benefits for customers through supporting the development, assessment and funding of lower cost, whole system solutions. We are seeing evidence of the benefits which joint planning can provide through our regional development plan which we have implemented with National Grid in the South East.[40] This has helped deliver new network models and increased granularity of data sharing with National Grid. This has enabled a significant increase in available capacity on the South East network, along better technical and cost information to provide to prospective connecting customers. The opportunity for such benefits will be enhanced if the transmission price control were more aligned with RIIO-ED2. It would allow for a fuller consideration of planning options and for DNOs and transmission operators to include the costs of specific options within our respective business plans.

In addition, aligning RIIO-T2 and RIIO-ED2 could enable a more common set of network outputs and alignment of relevant incentives potentially providing greater scope for efficiencies and frontier performance to be identified across the electricity sector. Along with the greater identification of whole system solutions, we believe that this would benefit customers. We recognise that there are some disadvantages associated with aligning the price controls, not least the burden it places on stakeholders to engage across both. However, on balance, we think the potential benefits outweigh these disadvantages.

In terms of implementing an aligned RIIO-T2 and RIIO ED2 price control, we believe it would be bad regulatory practice to shorten the RIIO-ED1 control, given the regulatory expectations set. We can see clear benefits in introducing a 2 year roll-over of RIIO-T1, where necessary outputs and associated allowances could be set for the 2 additional years. It would also allow Ofgem to focus on particular areas which are less impacted by whole system considerations.

17. Are there any other realignment options we should consider?

We believe that the scale and scope of decarbonisation of heat and the potential implications across the gas distribution and electricity distribution price controls warrant attention. However, we do not believe that there is the same need to align the timings of the RIIO-GD2 and RIIO-ED2 reviews as there is across electricity transmission and electricity distribution. We also recognise that the disadvantages outlined by Ofgem would only be amplified in attempting to align all the price controls. For example, it may not be practical to obtain the quality input needed from stakeholders across all price controls at the same time. Therefore, we do not consider that alternative realignment options are necessary or practicable.

We understand that some stakeholders are suggesting that transmission and distribution price controls should be aligned in the longer term, whereby the price control periods for RIIO-2 are set so that they converge for RIIO-3. We do not support this. We are already seeing evidence from our regional development programmes of the benefits that more aligned network planning can bring to customers. We do not want our customers to have to wait until RIIO-ED3 to realise these benefits and consider that they should be able to realise them in RIIO-ED2.

[40] http://futuresmart.ukpowernetworks.co.uk/wp-content/themes/ukpnfuturesmart/assets/pdf/FutureSmart-Consultation-Report.pdf p29

18. What amendments to the RIIO framework, if any, should we consider in supporting companies to make full use of smart alternatives to traditional network investment?

We consider that RIIO has been successful in supporting companies to make full use of smart alternatives. Our record of delivering £120m of smart benefits in the first 2 years of RIIO-ED1 is testament to this. The sharing factor under the totex incentive mechanism has provided a powerful incentive to allow good management to encourage smart alternatives where they can deliver savings to benefit both customers and shareholders. However, we believe that there are some changes which can be made to the RIIO framework which would reduce the risk of deploying smart alternatives at greater scale.

Broader outputs and incentives to cover wider customer benefits: The current framework incentivises DNOs to use smart alternatives where they impact totex allowances. The relevant totex allowances cover predominantly load-related investments. To date, the biggest need for smart alternatives is driven by DER connections where the majority of the cost of upgrade is borne by the customer. A smart alternative in this case delivers financial benefit to the customer but little financial reward to the DNO, apart from making a marginal difference to customer satisfaction scores and meeting our ICE commitments. We consider that the financial value of these incentives needs strengthening (particularly as ICE is penalty only). This can be done by a combination of new outputs (as highlighted in our response to question 5).

Recognise longer term and wider system benefits of smart enabling investments: There are some enabling technologies which are required to help scale up the use of smart alternatives such as active network operations and DER customer engagement. These include monitoring equipment and advanced distribution management systems. The RIIO framework will need to be able to evaluate these types of investments on the basis of the longer term and potentially wider system benefits they can provide.

Acceptance of higher risk associated with smart alternatives: Using smart alternatives such as flexibility is inherently more risky than investing in assets. We bear the risk that customers cannot deliver their flexible solutions and that, as a consequence, we don't meet our outputs. We are not able to pass all this risk onto those providing flexible solutions as it may limit the attractiveness of providing such services. Equally, we are adopting a policy of investing in assets as a last resort in order to ensure that we only commit customers' money when absolutely necessary, to continue to deliver the service they want. This means that we will deploy smart alternatives based on the option value. In some cases, this may result in shorter term costs being higher than if traditional approaches were used. The business case to deploy smart alternatives, which can provide benefits to customers, would be clearer if Ofgem were to acknowledge this heightened risk profile in setting the parameters of the price control and also factored this into the cost benchmarking it undertakes.

Remove any perverse incentives to using smart alternatives: In developing the specific outputs and incentives for RIIO-ED2, we need to ensure that the combined effect of different mechanisms do not lead to perverse incentives. For example one of the innovative solutions we could deploy is protective blankets on linkboxes to improve their condition and postpone replacement. However, currently that type of solution does not generate HI points so replacement may be chosen to ensure HI targets are met. In addition, there is currently no output relating to secondary network capacity (i.e. a secondary network load index). This means that there is not a clear outcome for customers that network companies can deliver against. This limits the motivation to deploy smart solutions. These types of innovative activities could be more fully recognised across the suite of outputs and secondary deliverables.

Requirement to demonstrate alternative approaches have been explored: We note that in New York State, the regulator specifically requires that distribution companies demonstrate that they have explored all non-wires (flexibility services) options before approving investment in network assets. We believe that there could be merits in introducing a similar approach, provided this is done in a targeted and proportionate manner. As highlighted in our response to question 28, we are already running flexibility tenders to understand where customers can provide us with viable services which we can use instead of building new assets.

In addition, we would highlight that we are also taking actions to help reduce the risk associated with using smart alternatives. Along with other DNOs and National Grid, we are actively working through the ENA on the Open Networks project. Part of this project is seeking to develop the commercial frameworks for flexibility. We

look forward to outputs of this work which we hope will provide more certainty on the mechanisms which can be used to deliver smart solutions.[41]

19. Given the uncertainty around demand for network services, how much of an issue might asset stranding be and how should this risk be dealt with?

We consider that there are three different elements to this question – risk of stranded assets, risk of stranded technology investments and risk of under-recovery of costs. We take each in turn below:

Risk of stranded assets

In recent years, the deployment of energy efficiency measures allied with increasing behind the meter generation has led to a fall of around 7% in the total units distributed on our networks. However, the Government's low carbon transition plan is predicated on the electrification of transport and electrification of heat in rural areas. As highlighted in our response to question 13, the analysis we ran for our RIIO-ED1 business plan using the Transform model[42] suggested a range of potential reinforcement costs in RIIO-ED2 of between £1.5bn (based on the core scenario we used in RIIO-ED1) and £3.2bn (based on a 'high' take-up of heat pumps and EVs). As a company, we deploy a mind-set that we only invest in assets as a last resort, in order to save customers money wherever possible. We are in the process of rolling out learning from our innovation projects to support flexible, market based solutions to network constraints as opposed to asset ones. In addition, we are looking to deploy monitoring equipment in specific areas to gain real time data on our assets. This will help identify where flexible solutions are a better option than asset ones. Consequently, we consider the risk of assets becoming stranded is a low one.

Risk of stranded technology investments

As we transition into a DSO, we will be looking to make investments in technologies to deliver the new capabilities we need. These include areas like predictive diagnostics, visualisation and simulation, real time dispatch and system operability.[43] The benefits these investments can provide are predicated on a continued rise in the volumes of DER which connect to our networks, which is likely but not certain. We are mitigating these risks through rolling out enabling technology in a proportionate way, based on our customer and network's needs. So again, we believe the risks of stranded technology investments are low.

Risk of under-recovery of costs

As highlighted above, changes in customer behaviour, including more behind the meter generation, and potentially storage in the future, mean that the overall number of units distributed is falling. However, customers are still reliant on our networks to provide them with electricity when they cannot generate their own (particularly at peak times). Our costs are largely driven by the capacity installed on the network, not how much electricity we transport. However, the current distribution charging regime largely recovers costs through volumetric (p/kWh) charges. This means that there is a danger that this structure of charges does not allow us to accurately recover our allowed revenues from our customers. We think that this is a small risk for RIIO-ED2 and one which if it emerges can be solved through changes in the structure of charges to more capacity based charges. We have expanded on this issue in our response to Ofgem's Targeted Charing review.[44]

20. How do we need to adapt the RIIO framework, and the uncertainty mechanisms in particular, to deal with this uncertainty?

We believe that the current uncertainty mechanisms have generally worked well in protecting customers and company shareholders from bearing unreasonable risk. These mechanisms play an important role in managing the risks we face which are outside of our control. This has allowed borrowing costs to stay low, enabling our customers to benefit from lower charges.

Going forward, we believe that there could be merit in exploring the option of a single, all-encompassing reopener, which would better reflect the move to a totex approach to setting allowances and also reinforce the

[41] http://www.energynetworks.org/electricity/futures/open-networks-project/

[42] https://www.eatechnology.com/projects/the-transform-model/

[43] http://futuresmart.ukpowernetworks.co.uk/wp-content/themes/ukpnfuturesmart/assets/pdf/FutureSmart-Consultation-Report.pdf- see page 39.

[44] https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch (see separate zip file)

desire to see no bias between capex and opex solutions. A single totex based reopener would have implications for the overall efficiency incentives and would require careful calibration so as not to be a blunt instrument that rewards licensees with additional revenues merely for overspending. However, with the right drivers it could enable both customers and licensees to share in the rewards where innovation or changes in business approaches leads to substantially reduced costs. Equally, it could protect companies from additional costs brought about by genuine increases in requirements, i.e. additional demand brought about through the electrification of heat, or mass roll-out of electric vehicles. We also believe that this option could provide benefits in simplifying the price control, making it easier for customers to understand and engage with and reduce the regulatory burden on Ofgem and companies in reporting against and applying for a range of specific re-openers. We acknowledge that such a mechanism would need to be considered in conjunction with our proposal on a tiered sharing factor as outlined in our response to question 9.

21. Is an eight-year price control period with built-in uncertainty mechanisms still appropriate given the greater range of plausible future scenarios?

As we have stated previously, we support a shorter price control period in light of the increased range of plausible outcomes for the RIIO-ED2 period. Moving back to a 5 year price control period would provide greater opportunity to set ex ante allowances with better information for all participants. Companies would be able to better understand how the future energy scenarios are translating in practise. Ofgem and stakeholders would be more able to assess assessing plans and evaluate the choices companies present. As outlined in our response to question 10, we also believe that a shorter price control would reduce the scope for forecasting errors in the price control. We recognise that there are some disadvantages of a shorter price control period, which include:

- Potentially reducing the scope to innovate and earn a return;
- Potentially reducing the strength on incentives, as investments will have to pay back over a shorter time frame; and
- Potential additional costs as running price controls more frequently will bring back into the system the administrative costs that Ofgem sought to reduce when it moved to an 8 year control.

However, in a rapidly evolving landscape, affording stakeholders more regular opportunity to express what they want and how much they value it, appears to align well with delivering a price control that delivers the best outcome for consumers.

22. What improvements should be made to the assessment of business plans?

We consider that the general approach to assessing business plans worked well in RIIO-ED1. We are supportive of Ofgem's use of totex and disaggregated benchmarking and consider that RIIO-ED1 included the right mixture of these. We think this approach should form the basis of cost assessment in RIIO-ED2, while recognising the need to update elements for new or better cost drivers and new outputs.

In our response to question 2, we have highlighted where the voice of the consumer can be strengthened in price control decisions. In addition to those points, we have highlighted below some areas where potential improvements to the assessment of plans should be considered:

i) Enabling stakeholders to compare business plans

Providing companies with freedom to develop their own plans helped to ensure that high quality plans were developed, through allowing companies to take real ownership of the plan. However, these benefits need to be balanced against the need to ensure that plans are comparable across companies. Stakeholders needed to read a huge volume of information across different plans to allow any form of comparison. For RIIO-ED2, we would propose that there is a more common structure to business plans and some common templates which DNOs use to present cost information in the plans. This will avoid companies presenting information in their plans in different ways, making it easier to compare.

ii) Clarity of assessment methods early in the price control process

In RIIO-ED1 we were supportive of developing the cost assessment techniques through working groups. In general this provided clarity on the approach prior to developing business plans. We would want to see a similar process followed for RIIO-ED2. This should also include all the cost assessment methodologies which will be used in the slow-track assessment. We note that the approach to the smart grid adjustment and RPEs was only developed after the fast track decision and that companies had no visibility of the methodology being

used until draft and final determinations. These two areas had a reasonable financial bearing on final determinations. We suggest that for RIIO-ED2, these types of areas are discussed in advance and the methodology, along with how the separate elements of analysis are combined to form an overall view, are explained and tested with companies and stakeholders ahead of being used. This will help improve the legitimacy of the results of cost assessment in the eyes of stakeholders and customers.

iii) Consistency of definition and reporting

We consider that some of the reporting information could be made more consistent to ensure better benchmarking. For example, linked to point ii) above, for the smart grids adjustment, DNOs were asked late in the process to submit evidence of savings which they had made from innovative schemes. There was no agreed definition of 'innovative' which led to different interpretations being used to benchmark companies. As highlighted above, if this methodology had been agreed earlier in the price control process, it would have enabled time for a consistent definition and better quality information.

In addition to these points, we would also highlight our response to question 10 which highlights improvements which could be made to reduce forecasting errors.

23. Should we give further consideration to companies' historic performance against their business plans?

We believe that it is vital for Ofgem to use historical data to provide an objective assessment of company performance. Good performing companies should be rewarded in future price controls based on what they have delivered for customers. However, we think that to set an effective price control, historical information needs to be supplemented with forecast information to:

Cater for more ambitious output targets: We have practical experience of taking over a network company with a new management team. Part of our approach was to set challenging new targets to improve the business. If Ofgem had placed more weight on historical performance, we would have been more limited in our ability to set these forecasts and our customers would have been lumbered with the same, historical level of performance. Ofgem needs to enable management teams to set ambitious targets to deliver benefits for customers.

Deal with new developments: As highlighted in our response to question 24 below, forecasts allow us to reflect the new information our stakeholders are telling us. We have a number of dedicated customer engagement sessions which directly influenced the development of our plan.[45] In addition, as we transition into becoming a DSO, our business plan will need to look slightly different – including greater deployment of monitoring, communications and control equipment. This level of expenditure would not be included in historical expenditure and yet it will be vital to continuing to deliver a high quality of service for our customers, particularly as we see an increase in the numbers of EVs and heat pumps on our networks.

Provide freedom to innovate: One of the key principles of RIIO, which we believe has worked well, is that companies need to manage their business to meet outputs for customers, rather than slavishly following a set plan. This has provided us with discretion to adapt our plan to changing circumstances to deliver savings for customers. For instance, in DPCR5 we decided not to go ahead with a number of high value schemes because the need for them became less certain. The funding for these schemes was returned to customers as part of the DPCR5 close-out. The opportunities for innovation are likely to become greater during our transition to being a DSO. We need the flexibility to be able to deviate from business plans and make the right decision for our customers, safe in the knowledge that this will not be held against us, when Ofgem assesses future business plans.

As outlined in our response to question 22, we believe the RIIO-ED1 cost assessment framework provides a strong foundation to build upon. We consider there are merits in reconstituting Ofgem's cost assessment working group to refine the cost assessment tools and ensure they remain fit for purpose in RIIO-ED2. This would also provide Ofgem, DNOs and stakeholders a better view of current levels of efficiency in delivering

[45] http://www.ukpowernetworks.co.uk/internet/asset/a00bba1c-82f8-48c9-9aa0-c1693a0e323B/City_of_London_Engagement_15May13.pdf

today's outputs and how a historic assessment of performance could supplement the existing cost assessment process.

24. Should we determine the revenues an "efficient" network company requires before seeking information from the companies themselves?

Our understanding is that Ofgem are proposing to determine an initial set of revenues based solely on historical performance. We have concerns with such an approach. One of the key successes of RIIO has been to make companies responsible for the development of their business plan and placing the emphasis on them to engage with stakeholders to understand how to best reflect their needs in the business plan. The proposal to determine revenues before receiving information would reverse this principle and represent a backward step in a number of areas:

Inability to incentivise good performance and punish poor performance: One of the key successes of the regulatory framework is that it benchmarks companies to set an efficient cost allowance which reflects the upper quartile of performance. This means that poor performing companies are required to reduce costs and the best performing companies are allowed to retain some of the cost savings they have demonstrated. As we have stated throughout this response, this framework has driven real improvements in the quality of service customers receive while reducing bills. If Ofgem seeks to set revenues based on historic performance, we are concerned that this means poor performing companies will continue to receive the same (inefficient) allowances, while the best performing companies will receive no reward. This would remove the incentive to innovate and find cost efficiencies which customers can benefit from.

Inability to assess 'efficient' revenues in fast changing industry: As Ofgem highlighted in its open letter, the energy system has changed substantially over the last decade and is likely to change further in the next decade. Our DSO strategy document highlights how we see our role evolving over the next few years and the steps we are taking to embrace this change. We expect that there will be further change ahead which we will need to respond to. Given this backdrop of change and uncertainty in the sector, we consider it will be very difficult for Ofgem to determine what efficient revenues are without seeing information from the companies themselves. One of the benefits of RIIO, is that it places the emphasis on companies to engage with their stakeholders and industry players, and consider how they need to adapt to change to continue to provide a high quality of service to its customers. We believe that we are best placed to understand these developments and implement changes in our business accordingly. If Ofgem decided that it would set revenues independently of this type of information, it would likely lead to predetermined outcomes and stifle innovation.

Detrimental impact on the quality of business plans: It is widely accepted that the advent of RIIO has ensured a step-change in the quality of network company business plans. In its RIIO-ED1 fast-track consultation document, Ofgem commented that "*the potential to be fast-tracked has driven all DNOs to raise their game in terms of delivering more for less. Plans show efficiency savings of more than £2 billion versus their previous forecasts*".[46] This has been enabled through providing companies with the freedom to develop their own plan and engage with stakeholders to help scope this plan (although as highlighted in our response to question 22, there could be more commonality over how information is presented in the plans). If Ofgem sets efficient network revenues before receiving any information from companies, it will mean that companies' business plans simply become a response to Ofgem's assessment rather than a complete plan. We think this could make it more difficult for stakeholders to engage with those plans and ensure that it contains what they want to see. It will also mean that the quality of plans suffers as the companies will not own them.

Inability to reflect new developments: The current RIIO process enables companies to engage with stakeholders to help shape the business plan. For our RIIO-ED1 plan, our engagement with the Mayor of London's office[47] helped us to identify where we would need funding for large scale developments in London – such as Nine Elms and White City.[48] Ofgem would not be aware of such initiatives without receiving information from the companies and consequently, the "efficient" revenues would not reflect what companies actually needed to deliver for customers.

[46] https://www.ofgem.gov.uk/sites/default/files/docs/2013/11/assessment_of_riio-ed1_business_plans_letter_0.pdf
[47] https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-chapter-five-londons-response/poli-4
[48] http://library.ukpowernetworks.co.uk/library/en/RIIO/Main_Business_Plan_Documents_and_Annexes/UKPN_LPN_Core_Narrative.pdf

Removing responsibility to deliver the business plan: One of the advantages of the RIIO approach is that companies have greater ownership of the plan which they can then deliver against. We are more likely to successfully deliver the outputs associated with a business plan which we have spent 18 months developing, compared to those in a plan which has been largely set by Ofgem without any input from companies. The greater ownership of plans is likely to mean far more consistency between forecast and actual costs, improving the confidence which Ofgem and stakeholders have in delivery of outputs. We are concerned that the trust which this has enabled us to build with stakeholders could be eroded if we are forced to deliver against a business plan which we have had limited input in to.

Interaction with efficiency incentive: We are unclear on how Ofgem's proposal to assess efficient revenues before receiving information from companies would interact with the current efficiency incentive. We are concerned it could lead to Ofgem awarding a company a higher allowance than it would have requested – either leading to rewards for submitting plans which come in below Ofgem's pre-set view, which customers would not have otherwise paid for, or for companies to accept Ofgem's pre-set view and outperform against the allowance. Under either scenario, we are concerned that customers will lose out.

Given our concerns and the potential customer detriment, we would like to discuss this further with Ofgem and understand the thinking behind the proposal and further details on how it could work in practice to mitigate the risks we highlight above.

25. What has an eight-year price control period allowed network companies to accomplish or plan for that would not have occurred under a shorter price control period?

As highlighted in our response to question 21, there are in theory, some benefits of a longer price control period:

- The scope to innovate and earn a return is increased;
- The strength of incentives is likely to be greater as rewards and penalties are fixed for 8 years; and
- The cost of regulatory business plan submissions should reduce given the less frequent price controls.

Of these, we consider that the main benefit which we have seen is the reduced business costs of regulatory submissions. We do not consider that there have been any other significant benefits (although we note that we are only two years into an eight year price control period). We have outlined in our response to question 21 that we support a shorter price control period for RIIO-ED2, particularly given the greater uncertainty which is likely to exist in the period.

26. How well has the IQI and efficiency incentive worked in revealing efficient costs through the business plan process and encouraging efficiency throughout the price control period?

We consider that the IQI and efficiency incentive have been instrumental in revealing efficient costs and incentivising innovation to deliver efficiencies over time. We take each in turn below:

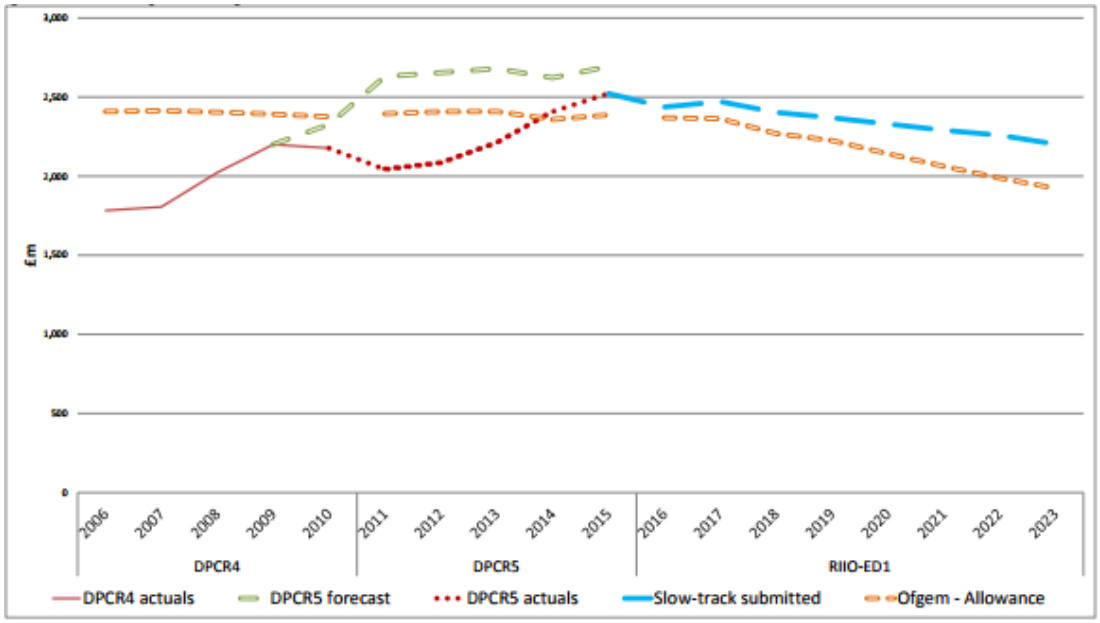
<u>Revealing efficient cost through the business plan process</u>
The objectives of the IQI are simple in that it seeks to reward companies whose forecasts are closely aligned to Ofgem's view of efficient costs. It has been successful in that companies have revealed costs which are then used to set the upper quartile performance for all companies. Customers benefit from this through all companies being challenged to perform at a high level. We recognise that the IQI matrix has become a highly complex tool and that it is difficult for our stakeholders to engage with and understand how our revenues have been set. Therefore, we would welcome any simplifications which could be made to the way the purpose of the IQI is communicated to customers and stakeholders.

We note that the advent of fast-track has further increased the reward for companies to submit highly efficient business plans. As highlighted in our response to question 34, it is not clear that both the fast-track reward of 2.5% of totex and a 70% efficiency incentive are needed to provide this incentive. We are concerned that the level of fast-track reward could incentivise companies to submit forecast costs in business plans which they cannot deliver, just to secure that reward. We think that it is worth looking at the IQI matrix to make sure that a fast-track company is appropriately penalised for any overspend to remove this incentive.

Encouraging ongoing efficient costs through the price control

As highlighted throughout this response, we consider that the efficiency incentive has been instrumental in encouraging companies to innovate to find efficiencies to lower costs to customers. Customers benefit from this in two ways. Firstly, their costs reduce within the price control period (as they share a proportion of the cost savings). Secondly, for a set level of outputs at the next price control, Ofgem has evidence of where companies have been able to outperform cost allowances and can tighten these allowances to reduce costs to customers further. This is a key principle of incentive regulation and has been widely recognised as an example of how to drive efficiencies for customers.[49] We consider that there is strong evidence to show how it has been successful. For example, *Figure* 3 below highlights where DNOs have made efficiencies against allowances and how Ofgem has used this information to set lower costs for the next price control period.

Figure 3: DNO allowances: actuals and forecasts 2006-2023[50]



The range of the sharing factor should be reviewed for RIIO-2. We believe there may be merit in scaling back from the top rate of 70% but we note that this should be considered in conjunction with our proposal for a tiered sharing factor as set out in our response to question 9.

27. What alternative approaches could we consider to encourage companies to give us high quality information that minimises the damage from their information advantage?

By the time of the RIIO-ED2 price control assessment in 2021, Ofgem will be in possession of 11 years' worth of consistently reported information and be in receipt of forecasts for the remainder of RIIO-ED1 and a RIIO-ED2 control of up to 8 years. In total Ofgem will have 21 years of information from the DNOs. This is a wealth of information and places Ofgem in the position of ultimately having greater overall information on the sector than an individual licensee has. Ofgem should work up its price control assessment framework in a way that encourages companies to give high quality information, but to also ensure that it makes the best use of the information it has and will have at its disposal when it carries out the price control assessment.

We would also highlight that a shorter control will also afford Ofgem greater opportunity to reset allowances and output targets based on actual realised performance, rather than relying on forecasts or assumptions either made by companies, stakeholders, or Ofgem.

[49] We provide some examples here: http://www.eurelectric.org/media/285583/innovation_paper-2016-030-0379-01-e.pdf ; https://www.ceer.eu/eer_consult/open_public_consultations/pc_on_incentives_schemes_for_regulating_dsos

[50] https://www.ofgem.gov.uk/sites/default/files/docs/2014/11/riio-ed1_final_determination_overview_-_updated_front_cover_0.pdf see page 23.

28. What impact has the innovation stimulus had on driving innovation and changing the innovation culture?

We believe the innovation stimulus has had a significant impact on driving innovation and we have seen a culture change across DNOs. In the first 2 years of RIIO-ED1, we have already delivered £120m of benefits from projects funded through the innovation stimulus. These include projects such as Flexible Plug and Play (FPP) which has saved DG customers over £100m in connection costs. We plan to complete the roll out the FPP approach across our South Eastern and Eastern networks by 2021. We note that Pöyry's report on the benefits of innovation funding cited over £1bn of benefits already delivered[51]. The report also concluded that network companies had moved from a low to a moderate level of innovation. We believe this is a significant achievement given the handful of years companies have had access to innovation funding for and the very low base of innovation companies started from. In a relatively short space of time, we have:

Implemented a structured innovation process: We have embedded a clear internal process for innovation projects to help develop them from problem statements into trials, and then into business as usual. Our internal KPIs demonstrate that we are generating more innovative ideas and reducing the time taken from concluding trials to deploying the solution as business as usual.

Developed our DSO strategy based on innovation learnings: Our portfolio of innovation projects has laid the foundation for the new capabilities we need to adopt as DSO. Our recent Future Smart publication is a ground-breaking vision for the role we need to play to help deliver the Government's decarbonisation plan at lowest cost to customers.[52] It is evidence of how we have used innovation funding to consider our role in the future system and develop the capabilities we will need in the future to continue to deliver a high level of service to our customers.

Initiated flexibility tenders for network services: The success of innovation projects such as Low Carbon London has led us to tender for flexibility services across our networks.[53] We want to ensure that where it is efficient, we can use flexibility services wherever they are available to provide network capacity for our customers.

Consequently, we believe that the innovation stimulus has enabled GB DNOs to become some of the most advanced in the world in testing and deploying smart grid solutions and generate many of the capabilities needed to transition into DSOs.

29. Have the incentives inherent in the RIIO model encouraged network companies to be more innovative and what should we consider further?

We have separated our response to this question into two parts, first covering the incentives inherent within the RIIO model and secondly on what Ofgem can consider further.

Incentives inhered in the RIIO model

The RIIO model has received widespread acclaim for incentivising innovation among regulated network companies. Table 2 below highlights how the current aspects of the RIIO model encourage innovation and what can be considered further.

[51] http://www.energynetworks.org/news/press-releases/2016/november/energy-network-innovation-shown-to-be-cutting-costs-and-reducing-carbon-emissions.html
[52] http://futuresmart.ukpowernetworks.co.uk/wp-content/themes/ukpnfuturesmart/assets/pdf/FutureSmart-Consultation-Report.pdf
[53] http://www.ukpowernetworks.co.uk/internet/en/have-your-say/listening-to-our-connections-customers/flexibility-services.HTML

Table 2: How aspects of RIIO have encouraged innovation:

Incentives and Mechanisms	**How it encourages innovation**	**What should be considered further?**
Totex Incentive Mechanism (Sharing factor)	The ability to retain 53% of any underspend against our ex ante allowances is a real driver to invest innovation and drive genuine efficiencies.	See our response to question 9 which outlines a tiered sharing factor.
Interruptions Incentive Scheme(IIS)	The IIS provides us with challenging targets to meet. We are rewarded if we can beat these targets and these financial rewards can help provide the business case for innovation which can deliver a higher quality of service for our customers.	As highlighted in response to questions 5 and 8, we consider that in order to retain the innovative properties, the IIS needs to be symmetrical.
Broad Measure of Customer Satisfaction (BMCS)	The BMCS provides us with challenging targets to meet across a range of different customer service areas. The financial rewards available through beating these targets provide the business case to invest in new innovative approaches to customer service and has helped deliver improvements in the service our customers receive.	As highlighted in response to questions 5 and 8, we consider that in order to retain the innovative properties, BMCS needs to be symmetrical.
Network Innovation Allowance (NIA)	The funding available through NIA (on a "use or lose basis") has allowed us to develop a wide ranging innovation programme, including testing problem statements and developing new approaches to managing DG and EVs. In particular it is useful for progressing solutions with a lower technology readiness level (TRL) which present a strong opportunity for long-term benefits. It has been fundamental in helping drive a culture of innovation within our business.	As outlined below, we believe that with a culture of innovation now well embedded within DNOs, the NIA can be removed, so long as there are strong incentives to reward good performance and supports development of solutions that may not deliver benefits within the specific price control period.
Network Innovation Competition (NIC)	The funding available through the NIC has allowed us to undertake some large scale, complex projects such as Low Carbon London, FPP and Power Potential. The learning from these projects are already transitioning into business as usual and helping to deliver over a £120m of savings to our customers.	As outlined below, we believe that the NIC should be refocussed on large scale projects with long term or whole system benefits. We believe that access to NIC should be made easier to ensure that they type of innovation continues to take place.
Innovation Roll-out Mechanism (IRM)	The IRM provides a mechanism to ensure customers can benefit from innovation with a longer term pay-back. We think it is crucial in allowing our innovation outlook to extend beyond the traditional price control periods.	n/a

What should Ofgem consider further

As highlighted in our response to question 28, the current innovation stimulus (NIA and NIC) has been vital in generating an innovative culture both within and among DNOs. The learning produced has helped to lay the foundation for the transition to becoming DSOs and we believe that the funding has enabled GB to become a world leader in smart grids technology and deployment. However, we would highlight that the current innovation stimulus places a considerable burden through the need for:

- Companies to develop and prepare bids for the NIC;
- Ofgem (and the Expert Panel, plus consultants) to assess NIC bids;
- Companies to report ongoing developments in the projects every 12 months along with benefits of NIA and NIC projects; and
- Ofgem to assess the potential benefits of NIA and NIC projects in order to remove them from future totex allowances (as per the smart grids adjustment in RIIO-ED1).

By the end of RIIO-ED1, DNOs will have had 13 years of access to innovation funding. We believe that innovation cultures are already fully embedded within DNOs, and that by 2023 DNOs should have been able to move beyond the moderate level of innovation cited in the Pöyry report.[54] Subsequently, for RIIO-ED2 it may be appropriate to transition to a new approach to facilitating innovation that closely reflects the dynamics of a competitive market. This can be achieved through strong incentives to reward good performance. This would enable companies to bear more risk in terms of funding innovative projects in pursuit of their share of the totex savings they can deliver. We think this is a more efficient process than Ofgem running competitions and overseeing mechanisms to provide for innovation funding and then trying to calculate the benefits of this funding and claw back those benefits in future price controls (as it did with the smart grids adjustment in RIIO-ED1). We acknowledge that for this approach to work, these strong incentives need to apply to whole system approaches which are not covered by the current totex allowances or incentives. We have highlighted throughout this response the need to develop these for RIIO-ED2.

We propose that, dependent on how quickly these whole system incentives are developed and can bed-down, in RIIO-ED2, there may be the need for continued access to innovation funding for large scale, whole system focussed projects. This could be in a more easily accessible form than the current NIC. We believe that strong incentives would allow the NIA to be removed altogether and place the emphasis on companies to innovate to deliver future efficiencies. By RIIO-ED3, we would expect that any specific innovation funding will have fallen away and that strong incentives should drive continued innovation among DNOs.

30. Do you agree that the scope of competition should be expanded in RIIO-2? What further role can competition play?

We believe that RIIO-2 should continue to promote a role for markets where they can provide benefits to customers. We believe there are a number of areas where we can continue to use competitive markets to benefit our customers:

Facilitating competitive markets as a flexible solution: As part of our DSO strategy, we will be looking to act as a neutral facilitator for new markets.[55] This means we will be issuing more information about the operational status of our networks, the value of specific services at specific time and locations and enabling access to markets through co-ordinated dispatch of generation with the SO. This will enable competitive markets to provide solutions which can help us to manage our networks at the most efficient cost, delivering savings for our customers.

Seeking innovative solutions before investing in assets: Before taking a decision to invest in assets, we will assess where alternatives could provide savings for our customers. We are already looking to tender for flexible solutions (network services tenders) to understand where such an option is viable. We note that this process is common in other jurisdictions, including New York State where companies must demonstrate to the

[54] See footnote 51

[55] http://futuresmart.ukpowernetworks.co.uk/wp-content/themes/ukpnfuturesmart/assets/pdf/FutureSmart-Consultation-Report.pdf see page 30

regulator that they have tendered for 'non-wires' solutions before being able to secure funding for new assets.[56] Our tendering process can help facilitate new markets to help reduce costs for our customers.

Facilitating competition in connections: We will continue to lead the way in innovative developments to promote and extend the boundaries to competition in connections to ensure customers retain a genuine choice over who constructs and runs new network assets. We note that the levels of competition for new connections have increased substantially in recent years with the proportion of connections undertaken by parties other than DNOs increasing from 14% in 2010 to 36% by 2015. We are looking to build on this record and in the last couple of years we have been actively facilitating competition across our networks for the provision of new connections. This includes providing the information which Independent Connection Providers (ICPs) require to self-determine the point of connection and self-design approval.

Cost efficiency in Major Projects: We will continue to use competitive markets to review how best to deliver assets and output costs effectively, and safely for customers. We have run a robust open tender process which awarded contracts to four contractors who work together to deliver Major Projects works with us during RIIO-ED1.

However, there are some areas where we think further expansion of competition would not be in customers' interests. We are concerned that the draft legislation to extend competition to new and separable onshore transmission assets includes scope for tendering new distribution assets.[57] We note that the Offshore Transmission Operator (OFTO) regime has been successful for two reasons: first because the assets being tendered are quite clearly separable from existing assets; and secondly the business model is low risk and OFTOs do not have a wide range of outputs and incentives with associated rewards or penalties. This has enabled the assets to be de-rated and financed through higher gearing than is permitted for TOs or DNOs. We believe that this form of competition would be highly inappropriate for distribution customers for the following reasons:

Difficult to identify separate parts of the distribution network for tender: We consider that at distribution level it will be even more difficult than for offshore and onshore transmission to identify separate assets which can be subject to a competitive tender process. The distribution network is far more interconnected and interdependent. We are concerned that if new, high value distribution assets are subject to tendering, this will have an impact on how we run our existing networks and the service will be able to provide to our customers.

A risk that customers do not get the same level of protection: We are concerned that Independent Distribution Network Operators (IDNOs) and Competitively Appointed Transmission Operators (CATOs) are not subject to the same outputs and incentives as DNOs and TOs. Consequently, customers on those networks may not receive the same quality of service – particularly around response to faults, engaging with customers and broader stakeholders to understand their needs and helping to deliver social obligations. Equally, the regulatory framework is driving us to proactively consider how we play a role in delivering the benefits of a smart, flexible system. We are concerned that IDNOs and CATOs will not have these incentives and that this may limit the extent to which they can play a role in delivering lower cost whole system solutions for customers. As highlighted in this response, outputs and incentives in these areas have driven real improvements for customers on our networks. We do not want the expansion of competition to be at the cost of a poorer ongoing service for customers.

31. Which elements add the most complexity and how do you think that these and the broader RIIO framework could be simplified?

The evolution of price controls has led to them becoming far more complicated than those initially undertaken post-privatisation. Much of this additional complexity has been deemed necessary to deal with specific issues and factors that a simpler, higher level of control has failed to address adequately. As we move into a period of potential greater change and new demands are placed on networks, there is naturally a danger that further bespoke arrangements and mechanisms are designed. We welcomed the introduction of totex benchmarking into cost assessment in RIIO-ED1 as this provides greater scope to capture trade-offs and reduces the likelihood of capex bias, but this ultimately resulted in Ofgem using three forms of cost assessment modelling. In itself this is not a problem as deriving an answer for something as fundamental as the cost

[56] See the New York Public Services Commission REV Two track order: http://www3.dps.ny.gov/W/PSCWeb.nsf/All/C12C0A18F55877E785257E6F005D533E?OpenDocument

[57] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/493848/Draft_Legislation_on_Energy.pdf

allowances warrants detailed analysis and reaching a view from different models is likely to reduce the scope for reaching an incorrect view. However, running three separate sets of benchmarking models does make the price control more complex, so a balance has to be struck.

Likewise, when it comes to the actual assessment of individual categories of expenditure and the justification that is required to support the numbers there can be inconsistencies in the detail provided and subsequent Ofgem interrogation and analysis. There may be scope for agreeing materiality levels both for the narrative expected up front and the level of scrutiny that Ofgem employ on receipt of plans. Where Ofgem find that areas are well justified and/or their questions have been addressed, they may choose to reallocate or refocus their resources on other areas of the plan.

Being clear on the remit and interplay between multiple working groups would also help all stakeholders navigate the complexities of the price review. During RIIO-ED1 there were groups working across key areas of the control, sometimes with scope for overlap. We would like to see that clarity on the hierarchy of RIIO-ED1 working groups and clear scope and remit to allow stakeholders to understand which working group they should attend and how best to get their voices heard.

32. What improvements could be made to the format and presentation of the business plans?

We welcomed the ability to develop our own business plan based on the feedback of our stakeholders for RIIO-ED1. As outlined throughout this response, we believe it is crucial for companies to retain ownership of their business plans and be free to engage with their customers and stakeholder to reflect their wants and needs into the business plan.

We think the ability to differentiate and deliver high quality plans is a useful tool for Ofgem when assessing whether a licensee should be fast-tracked. Notwithstanding our desire to retain flexibility we would welcome discussion over the degree and type of detail required by Ofgem and stakeholders in evaluating business plans. Possible enhancements would be a limit on the number of pages submitted overall, and potentially a guide on the expected detail to support levels of expenditure. For example an area representing £10m of spend may have double the level of detail for an area with £5m of forecast spend.

Equally, as outlined in our response to question 22, there may be merit in greater commonality between DNOs over how information is presented within business plans. This should not restrict the ability of companies to own the plans but ensure that data is presented in a consistent format, making it easier for stakeholders to compare plans between companies and understand the key differences.

33. Should the plans be revised at any stage during the price control, for example annually?

We do not consider that business plans need to be revised on an annual basis. We believe that that this would add little value for the work it would require, from companies, Ofgem and stakeholders. We would highlight that we already undertake extensive annual reporting through the regulatory returns and our business plan commitment report. Ofgem also publishes its annual report based on the annual information we provide. We think this is a useful process to capture not just the performance of network companies but also how that performance has deviated from the outputs and commitments made in the business plans. We consider that this means there is already a wealth of information available to stakeholders on company performance.

In addition, through our ongoing engagement with our customers, we have avenues to explain where we are undertaking new actions (not detailed in the business plan) to improve the service we provide to them. We think this is a better approach to explaining ongoing changes within our business than publishing revisions in detailed plans which many of our customers and stakeholders will not engage with.

34. Should we retain fast tracking and if so, for which sectors?

We would highlight that fast-tracking was introduced to further encourage licensees to submit high quality business plans at the outset and move away from a “negotiated” settlement. The concept was in its infancy when applied to RIIO-GD1 and RIIO-T1. Ofgem took the experience gained in those controls to be more explicit, up front, on how fast-tracking would work for RIIO-ED1. We think this is a good example of how RIIO has already evolved to improve the process and that it demonstrates it can continue with this evolution.

We are supportive of mechanisms that recognise high performing businesses, both at the time of setting the price control and during the price control period. One of the challenges associated with fast-track is around understanding what constitutes good performance. It could be deemed to be spending in line with allowances, or finding innovative ways to drive efficiencies and under-spend against allowances. We think that greater clarity on what behaviours fast-track is there to reward, would be helpful for companies and allow them to deliver on these behaviours for their customers.

While we support the retention of fast-tracking we are concerned that the current reward of fast-tracking could incentivise companies to submit forecast costs in business plans which they cannot deliver. We would propose three refinements to the fast-track rewards to reduce this impact:

Review the size of the up-front fast-track reward: The up-front reward for fast-track was set at 2.5% of totex. Fast-track companies receive this, as well as avoiding any cost adjustments made as part of the slow track process. These avoided cost adjustments can be substantial – Ofgem's analysis indicated that WPD would have had its allowances reduced by over £800m had it not been fast-tracked in RIIO-ED1.[58] In light of these benefits, we consider that Ofgem may need to consider whether the levels of fast-track rewards are still appropriate.

A review of the fast-track sharing factor: Currently, fast-track companies are subject to a 70% IQI incentive rate (or sharing factor). This means that a fast-track company will retain 70% of any underspend against its allowance and fund 70% of any overspend against its allowance. As highlighted above, we think Ofgem should review this in light of the other benefits companies can earn through fast-track. In addition, as highlighted in our response to question 26, we would propose that the IQI incentive rate is tweaked to ensure that fast-track companies which overspend their allowance are penalised through the sharing factor to an extent which reduces any incentive to submit a highly ambitious business plan solely for the up-front totex reward.

Introduce a claw-back for material fast-track rewards earned through forecasting errors: As highlighted in our response to question 10, we believe that fast-track companies should be subject to a claw back mechanism if it is clear that material rewards have been earned as a result of forecasting errors within their business plan. The full details on this are outlined in our response to question 10.

35. Do we collect the right information in the right format and are there better ways to monitor the performance of companies?

We broadly consider that Ofgem collects the right information in the right format but that there are a few areas where it can be improved to enhance the way Ofgem monitors company performance. We have addressed this question in two parts, first whether Ofgem collects the right information and secondly, the way Ofgem monitors the performance of companies.

Collecting the right information

Ofgem collects a significant amount of information annually and at the time of price control reviews. Much of this information is used directly in either setting the next price control and/or informing the current price control and the multitude of mechanisms which underpin it. We have been, and remain, supporters of providing consistent data both across companies and across time, to Ofgem annually. Having separated from EDF Energy and established UK Power Networks as an independent entity, we have invested over £100m to make major progress in our business operations. This was done with a view to improving the information we report to Ofgem and ensure it is as robust as possible. In this vein we do not believe there needs to be a wholescale change to the information Ofgem collects and we would be keen to avoid fundamental changes to reporting without due consideration. However, there are areas of reporting that could be streamlined such as:

- **Connections reporting** – We would question the merit in providing information on every quote issued and every job completed; and
- **Innovation reporting** – We currently report the ongoing benefits of innovation projects annually through the E6 return. Providing this information is already a significant undertaking. We are concerned that new Ofgem proposals around reporting the benefits of innovation will add to this burden and believe there is room to streamline them.

[58] https://www.ofgem.gov.uk/sites/default/files/docs/2014/11/riio-ed1_final_determination_expenditure_assessment_0.pdf See pages 12-15

As the level of reporting has built up over time, there are undoubtedly elements which have been superseded by other reporting, or for which the original need for collecting has passed. We would welcome visibility from Ofgem of what use it has, or intends to make, of the full suite of information it currently collects, so that we can work collaboratively on streamlining where appropriate. The development of new areas such RIIO Accounts, the Strategic Performance Overview and Approach to CBAs all needs to be joined up wherever possible.

Monitoring the performance of companies

Regular publication of company performance is a key component of Ofgem's monitoring role. We were pleased to see the first RIIO-ED1 annual report published earlier this year and believe this provides a good overview of how companies are performing. We believe that the following refinements could be made to Ofgem's annual report to further improve its utility for stakeholders:

- The inclusion of a comparative measure of how companies are performing on safety, particularly as it is one of the six RIIO output categories (see our response to question 5);
- Traffic lighting of how much per customer each network costs – both to more readily convey to stakeholders the underlying costs behind the service they see and also to dispel any misinformation over bill increases and/or network company performance; and
- Clearer articulation of Ofgem's views on what good performance is – our stated strategy is to deliver all of our outputs whilst outperforming the allowances, as we believe this is in the best interests of both current and future customers. Spending in line with or even above allowances to deliver outputs leads to both higher costs for customers today and potentially higher bills in the future and we do not currently see Ofgem differentiating this in how it monitors companies.

36. What are your views on how the changing role of the electricity SO should be factored into the RIIO framework, including whether or not the electricity SO should have a separate price control?

As outlined in our response to question 16, system operation will be increasingly complex as the energy system becomes smarter and more flexible and customers behave in less predictable ways. The SO has a critical role in continuing to act as the residual system balancer, while also looking to facilitate competition in markets and help to deliver whole system, lowest cost outcomes for customers. This means that it will need to work more closely with a number of parties, including DNOs to deliver this role effectively and efficiently.

We consider that this merits a separate price control which will reinforce the increased independence of the SO. As we have highlighted throughout this response, the RIIO framework has driven better service and lower costs for customers and so we consider that there are merits of deploying more of the core principles of the RIIO framework to the SO. There are two key aspects of the RIIO framework which customers would benefit from being applied to the SO:

Stakeholder engagement incentives

To help facilitate the engagement required to rise to the new system challenges, we believe there is merit in placing incentives around this engagement for the SO. The regulatory framework should encourage the SO to consult with stakeholders in defining and setting its incentives and targets as part of a business planning approach. Such an approach would allow the SO to set out and obtain feedback on how it will achieve its objectives, how it proposes to be measured on them and the targets it proposes.

Additionally, as for TOs and DNOs, we believe that the SO should be assessed on its ongoing engagement with its stakeholders. We note that the ICE incentive has been a useful mechanism for DNOs to be held to account on the actions their stakeholders want to see. We believe customers would benefit from a similar incentive on the SO which would ensure customers benefit from the SO seeking to deliver the co-ordinated services its stakeholders require.

Targeted financial incentives

We believe that targeted financial incentives should be developed to promote the reduction in whole system costs and ensure that the SO balances short and longer term pressures. The SO incentives should form part of this framework but we would emphasise that the framework needs to cover both costs of the capacity markets, ancillary and balancing services and network investment (transmission), balancing drivers for efficiency and investment. Our experience is that RIIO's target based incentives that act over time (e.g. IIS and BMCS) are better for allowing companies to implement change and invest to deliver improved performance.

Consequently, we consider that similar incentives may be best for driving the efficient development of the system such as forecasting, balancing and cost reduction.

Finally, to fully encourage all parties to facilitate a whole system approach, we consider it will be crucial that the SO outputs and incentives are aligned with those of the TOs and the DNOs. These should drive the SO to seek solutions from TOs or DNOs where these are lower cost and vice-versa. Alignment of the timing of the price controls may also help in this area (as per our response to question 16).

37. Do you agree with our broad stakeholder engagement approach set out above?

We broadly agree with the approach which Ofgem has set out for broader stakeholder engagement on RIIO-2. We strongly support establishing working groups to consider the different themes which run through the open letter and that workshops can be a useful way to engage wider stakeholders. We are also pleased to see that there will be a decision document by summer next year which will provide clarity on the broad regulatory framework. We believe it is important to provide this clarity before considering the more specific questions for the RIIO-2 controls. We have some suggestions on how to build on this approach which we have separated into the stakeholders Ofgem wishes to target and the channels Ofgem outlines for that engagement:

Stakeholders

We agree with Ofgem's aim of engaging with as wide a range of stakeholders as possible - specifically network companies, end-consumers, suppliers, generators, local and national Government, and other regulators. We would like to see credit rating agencies added to this list, particularly for the proposals around the move to CPIH and the approach taken to financeability. Equally, as Ofgem outlines, the energy system is rapidly changing and "there may be other innovations that we are not yet fully sighted on". We therefore believe that the views of other, potentially non-energy related stakeholders should be sought as part of the consultation. These could include other industries that have undergone similar transformative change.

In addition, we would highlight that this response has been informed by the consistent views we have heard from our stakeholders over the past few years. Given the timescales for the response, we have not explicitly tested the questions or concepts in the open letter with our stakeholders. While we will continue to engage with our stakeholders on themes linked to the open letter, our expectation is that Ofgem will also provide ample opportunity for stakeholders to engage with the key decisions it will take on the RIIO-2 framework.

Channels

We note that Ofgem proposes to hold a number of workshops and will look to use alternative engagement methods such as webinars. We agree with both these channels, and recommend that rather than holding general stakeholder workshops, Ofgem seeks to target workshops and webinars at specific representative groups. We strongly welcome the proposal to establish small working groups to develop thinking on specific areas and agree these should be open to all stakeholders. We agree with the themes for the working groups outlined in the open letter (Consumer engagement, Finance, Responding to wider changes, Efficient delivery of solutions and innovation, and Simplifying the price controls). However, in a time of rapid change there is a risk some consumers get left behind, especially the most vulnerable, and we recommend Ofgem includes a working group on vulnerable consumers. We also think that Ofgem (and network companies) need to think about how the voice of the end customer can be best represented in this process. We note that for many customers, it may be difficult to engage and that it may be better to have informed customer representatives engage on their behalf, such as Ofgem's Customer challenge group which was used in DPCR 5 and RIIO-ED1.

Appendix 2: Bibliography

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