To:
Jonathan Brearley
Senior Partner, Networks
Ofgem
9 Millbank
London, SW1P 3GE

4 Sep 2017

Dear Mr Brearley,

RE: Enzen response to Ofgem Open Letter on RIIO-2 Framework

We would like to thank you for the opportunity to read and respond to your Open Letter on the proposed RIIO-2 Framework. Enzen is a professional knowledge practice that focuses on gaining, refining and sharing expertise in the energy and utilities sector; providing and delivering outcome driven solutions to leading UK and global businesses, governments, non-governmental organisations, and not-for-profit organisations. We work with customers across the energy and water value-chain to deliver sustainable and lasting improvements to their efficiency and performance, adding value that benefits both consumers and investors. The RIIO regulatory regime, with its output performance incentives, aligns well with what we aim to achieve on behalf of our customers.

Please see below Enzen's reply to your Open Letter. We have collated our response to the questions, by grouping them into themes, to avoid repetition and overlapping answers across different questions. We have focused on the areas that we believe demonstrate real opportunities to improve the RIIO framework to benefit consumers.

A. Giving consumers a stronger voice in setting outputs, shaping and assessing business plans

Consumer voice and business plans

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

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

Enzen Response:

Current and future customers / consumers: RIIO was designed by Ofgem to encourage energy networks to take full account of customer and stakeholder views in their decision making. Whilst improved customer satisfaction has been one of the key primary outcomes in the RIIO framework, the focus has been on addressing the satisfaction of the existing customers. During the 8-year RIIO period, a number of new customers will also emerge who now start paying bills for the energy they consume. In addition, decisions taken now will also impact those who are not yet customers but will become so the in future, even beyond the 8-year period. Hence network business plans must be flexible and dynamic in order to accommodate changing customer expectations. We acknowledge that many of the network operators have taken major steps to get closer to their existing customers and their initiatives have been well received. It is important to build on the progress made in RIIO-1 and give

more detailed consideration to the long-term implications of decisions for future customers beyond the RIIO-2 period and consult widely on these too.

Increased participation by younger consumers: The active political role played by the youth population in both the Brexit vote and UK general elections 2017 cannot be ignored. The participation of the millennials (18 to 24 year olds) in the UK general elections 2017 was 64%, which is the highest in the last 25 years (since 1992). There is an increasing trend of awareness and participation of youth demographics in the both local and world affairs, especially areas of policy that will directly affect them in future. This trend should not be ignored, and the aim of the energy sector should be to educate and engage this segment of consumers.

Proactive voice of the customer / consumer: We suggest that Ofgem encourage networks to identify some of the most successful consultation initiatives such as "Voice of the Customer" and share these with their peers. By looking for and adopting best practice in this area, network operators will gain a much better understand of current and future customers' views and needs. This is important with an increased number of prosumers, who's needs are increasingly different from normal consumers. This process would be complemented by deepening the knowledge of the role that networks fulfil for customers through education and public relations. Many customers are not even aware that the organisations they pay their energy bills to do not own and operate the networks connected to their homes. Increasing the awareness amongst customers is a key enabler for active engagement. Such engagement would enable the energy networks to move from a reactive customer engagement to a proactive one. It is also true that customer satisfaction is currently measured across a relatively small proportion of affected customers and is not fully representative of the full range of customers served by networks. We would recommend that this be addressed moving into RIIO-2.

Role of social media: The power and reach of social media platforms today cannot be ignored. Social media platforms played a key role in sparking political and social upheaval, triggering movements which have resulted in changes at national levels. Recent examples in UK including the Brexit referendum and the general election result, demonstrate the reach and power of social media. These channels were used to effectively communicate the social impact and benefits of voting for either side engaging demographics that were previously hard to reach via traditional media channels. Analysis revealed that there were two to five times more Brexit activists on social media than on the ground, illustrating how the use of this media to obtain the required outcome.

Consumer group / forums for regular engagement: Consumer expectations need to be understood right at the beginning of the RIIO period. There should be a process to address these expectations through the RIIO period by discussing changes to the plan with consumer groups using a multi-channel approach. Ofwat mentioned in the consultation paper for PR19 that it is thinking of formalising the way the companies engage with consumers. We believe that Ofgem should encourage a multi-channel approach of stakeholder engagement and consumer satisfaction measurement. OFGEM do not need to stipulate the specifics of such a multi-channel approach, so Networks can innovate and choose to respond to different stakeholder consumer requirements as appropriate (e.g. social media sentiment analysis for measuring satisfaction of a wider/younger pool of end consumers). Such an approach can be supplemented with periodic feedback and discussions with consumer groups throughout the RIIO period and be subject specific in order to demonstrate the progress made by the networks in addressing current and future consumer needs.

Precedence from the Water sector: Ofgem should look at the role played by the independent Customer Challenge Groups (CCG) for each company in the UK water sector. UK water industry companies must periodically engage with this independent customer body that represents consumer

interest. Perhaps such a model with the relevant adaptation to the energy sector is required in RIIO-2.

Overall, while the suggestions aim to detail how better consumer and stakeholder engagement may be realised, it will remain a challenge to communicate effectively with these groups. The RIIO regime, its regulatory formulas and rules (and the associated business plans) are complex. Clear and effective explanations of the key RIIO parameters and choices, communicated in an effective way, will be essential to gain substantive consumer and stakeholder engagement.

Outputs Framework and Clarifying outputs

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

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?

6. Did the outputs target the right behaviours?

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

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

Enzen Response:

Asset health as a primary outcome: The primary outputs have been logically grouped into safety & reliability, quality of service, costs and environmental impacts and we feel drive the right level of behaviour from the networks. This has worked well during RIIO-1. Networks are at different stages in developing an approach to defining the level of monetised risk on their network. With the development of common Network Output Measure methodologies allowing them to enable peer-to-peer comparison. The new methodologies provide an estimate of the balance of risk across our networks and assess how our interventions impact total risk through time. As this process will be used as one of the tools to confirm delivery of RIIO-GD1 outputs and as a key input to preparing our RIIO-GD2 plans, we would expect to see it given greater prominence during RIIO-2 as a primary output measure.

Consumer value delivered as an outcome and managing the cost of decarbonisation: Many output measures currently adopted for RIIO-1 have been internally generated by the network operators, and whilst they are valid measures, do not have any great significance to customers and stakeholders. We believe that all RIIO-2 output measures need to have established links with actual consumer benefits. This simplification of the outputs framework would make it more customer focussed and also facilitate more focussed regional measures and solutions to achieve consumer benefit outcomes. Such an approach would ensure that outputs would be prioritised based on impacts on the customer. Ofgem should introduce methods to measure the network's short, medium and long-term impacts on consumer bills. To assess the outputs that matter most to the customers, RIIO-2 should require that primary customer research (e.g., "Voice of the Customer" surveys) are regular undertaken to enable outputs to be tested against consumer expectations throughout the RIIO period and assess customers' ongoing willingness to pay.

B. Allowing regulated companies to earn returns that are fair and represent good value for consumers, properly reflecting the risks faced in these businesses, and prevailing financial market conditions

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?

Enzen Response:

Spend reflective indexing: The Retail Price Index is more aligned to the actual costs that the electricity and gas networks incur via the supply chain, and we believe, is therefore a more accurate indicator. However, we understand the wider drive towards CPIH (Consumer Price Index including a measure of owners' housing costs) across the UK government. If the intention is to use an index that truly reflects the categories where networks spend their money, then we encourage Ofgem to pick the most appropriate one based on a balance between the price benefits to consumers and the actual costs to the networks.

C. Incentivising companies to drive consumer value by shaping or proactively responding to changes in how networks are used and services are delivered

Incentivising whole system coordination

Potential for greater price control alignment

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

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

Flexibility

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?

Managing asset utilisation risk

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?

Options for managing uncertainty

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

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

Enzen Response:

The RIIO framework is built to ensure that the existing companies deliver value for money customer benefits, but ignore the fact that the overall energy systems need to deliver the same.

It is time for Ofgem to think again about how RIIO will work across the entire gas and electricity energy networks such that utilisation, availability and value for money are optimised for the future.

Pricing and models synergised across the value chain: Enzen concurs with Ofgem's thinking that alignment of price controls could result in potential net benefits to the consumer. Aligning electricity and gas price controls between distribution and transmission is vital and will enable network companies to make aligned strategy decisions, allowing the industry to act in a coordinated manner. In the face of the ever-changing energy scenario in the UK, it is imperative that both transmission and distribution network planning be based on a consistent set of scenarios, assumptions and challenges. We believe that the Regulator must define a framework to increase collaboration amongst networks and incentivise them to work collaboratively.

Smart alternatives in Distribution for better system wide solutions: Ofgem in RIIO-2 should encourage networks to make both alternative and smart investments to avoid costly network reinforcement. For example, with the proliferation of distributed generation, the impact going to be on the electricity distribution networks is much higher than planned. Ofgem must take steps to encourage the development of flexible markets and incentivise DNOs (Distribution Network Owners) and GDNs (Gas Distribution Networks) on the number of alternative connections, possibly by creating a new output measure. For example, an incentive designed to encourage embedded generation units (numbers and voltage/impacts), in the same way that encouragement was defined for fuel poor connections in RIIO-1.

UK-wide collaboration leading to local investments: Energy networks (transmission and distribution, gas and electricity) are only a part of the overall energy ecosystem in this country. Other sectors play an important role including local government, transport and agriculture. It is essential to increase collaboration across these sectors at a local level. Local governments have realised the value of such collaboration, leading to the creation of new, greater mayoral areas across England. It is more important to facilitate regional/local investments, aligned for consistency to the new greater mayoral areas in England. We have observed a real drive for innovation through Local Enterprise Partnerships (LEPs) This should be harnessed, and Networks providers incentivised to engage and seek to leverage the benefits of joint planning and investment. This is particularly relevant to local resilience planning to reduce the impact of extreme weather events.

New products and pricing by Distribution Networks: The new DSO environment will change the way investments are made in the networks. The risk of asset stranding is high with the rise of prosumers in UK (expected to reach 24 million by 2050). At present, utility companies engage in an 8-year forward procurement mechanism which may result in stranded costs if demand is lower than planned. As more people go off-grid (either fully or in part), there is a risk that in the face of reduced utilisation, networks could attempt to recover their return on previous investments through exponentially high charging of the remaining customers in order to maintain current levels of service. Thus, Ofgem must encourage investment in alternative solutions to reinforce electricity, keeping the network investment to a minimum. It must also consider revising the networks' charging models (TUOS and DUOS); developing new products; letting networks/retailers compete in alternative energy markets; or allowing for an acceptable higher rate of return for networks to recover existing investment. This can create a new business model with innovative products, for example, Networks as an insurance policy.

Considering regional variations for output measures: Having mentioned the increase in distributed generation, we acknowledge that these developments will be largely regional in nature. While some areas of the country experience large amounts of investment in distributed generation, as we've seen in East of England, others are still reliant on electricity delivered through traditional networks. Hence, it is suggested that not all networks be measured using the same yardstick. Some regions are more suited to certain types of energy solutions than the others. Output framework should recognise

common outcomes which could be related to customers as well as a set of regional performance outputs which reflect the variations and constraints in each region.

Decarbonised Gas Networks for future energy security: For the gas sector, there needs to be an increased focus on the UK's decarbonisation agenda and its targets. We believe that the industry (possibly facilitated by the government/regulator) needs to think through scenarios of 2030 / 2050. It is important to mitigate the risk of delayed infrastructure investments, and any related impacts on the costs to be paid by future generations. Any approach should consider the feasibility and potential for incorporating new technologies. This should primarily be around carbon capture and the usage of hydrogen, with a focus on economically viable models which give the UK a chance to meet emissions reduction targets. Either government departments and/or the BIES need to set targets as part of a long-term energy statement. There needs to be a continued focus on cross industry consultations (electricity, gas, consumers) or even a new, specific forum to reduce uncertainty, as well as a joined-up energy policy. The recent Cornwall Energy Island project proved that without answering the heat and the energy storage requirements, a decarbonised energy economy cannot be a reality.

Eight-year pricing with materiality based re-openers: Enzen believes an eight-year price control period is appropriate since it gives networks and investors adequate reassurance and greater visibility to plan for projects of a longer duration. However there need to be more flexible re-openers. (e.g., to respond to market/material changes). We believe it is crucial to have a fair and well-defined process that understands and incorporates any changes across periods where relevant. For example, in case industry defined or approved planning assumptions prove to be wrong. Such re-openers and the required materiality of change need to be reviewed / enhanced especially for Electricity Distribution Networks due to higher levels of uncertainty in that sector.

D. Using the regulatory framework, or competition where appropriate, to drive innovation and efficiency

Cost assessment of business plans

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

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

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

Enzen Response:

We believe there is sufficient consideration given to a company's historic performance and it is important to strike a balance and spend more effort considering an its future plans rather than analysing the past. It would be meaningful to determine the end consumer value (i.e. longer-term security of supply at least cost) that would be achieved by each company's business plan. Companies should be encouraged to articulate their long-term plans beyond the immediate regulatory planning period (e.g., 2030 or even 2050). In addition, Ofgem should consider and reward any such effective long-term planning by the networks that would result in net gains for the consumer above and beyond the defined RIIO 2 period.

Length of Price Control

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?

Enzen Response:

Networks (and therefore end consumers) benefit from the eight-year period as this facilitates more cost-effective supply chain contracts. Such a period also enables alliance contracts which are more likely to add value over a longer period. The increased stability of the period increases the probability of outputs being achieved. For a transmission network in particular, large projects cannot be delivered in shorter timescales - this was a challenge in the five-year pricing models. Networks introduce changes (to organisation, process, systems, data, technology, etc.) to better manage their assets, data and customer engagement. It takes years to design, implement and stabilise such changes and realise benefits from them. Extended regulatory reset periods allow networks to take a longer term strategic view of changes and the benefits to consumers.

Efficiency incentive

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?

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

Enzen Response:

Near real-time cost data: The IQI incentive, in our opinion, has not provided a strong enough incentive or reward for revealing efficient costs. Ofgem needs to further differentiate the quality of information provided by networks and the differential rewards based on relative comparisons of the quality of information provided by them. In addition, new enablers such as smart and digital technologies make it possible for networks to provide almost a real-time audit trail of information, with clear tracking of planned versus actual costs. The technology enablers available today can easily enable this and have already facilitated such a state in other industries like Oil & Gas. Adoption of such models would encourage timely completion of projects with suitable data updates (asset, finance, work), and adoption of best practices like Earned Value Management. Given the potential payback to customers, we believe the investment by networks in the creation of infrastructure and capabilities to make this possible should be encouraged.

Ofgem access to real-time cost data: If near real-time cost performance was continuously accessible to Ofgem, this would enable greater transparency, reduction of manually intensive evaluation and increased confidence in the quality of the data. A near real-time audit trail would drive the right behaviours and would also reduce the verification effort for both Ofgem and the networks by making it less labour intensive. This could avoid the large spike in effort that most networks have to undergo during the regulatory submission time scales. By extending such data sharing and transparency to consumers and other stakeholders, energy networks can gain trust and confidence in what they are delivering.

Innovation stimulus package

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

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

Enzen Response:

Consumer-value based innovation business case: The innovation stimulus has had a very positive impact towards creating a positive culture for innovation in the industry. There needs to be a continued focus on quantifying the consumer value that is expected from each innovation, built into a business case. Such an evaluation should be demonstrated and governed in the Network Innovation Allowance (NIA) provided to all energy networks. Ofgem should also consider linking consumer-value delivered by innovation to overall network output measures.

Encouraging adoption with returns: Ofgem should consider measures or approaches to encourage networks to be more collaborative with their innovation projects. Utility companies should be incentivised to spread/sell successful innovation projects (which allow networks to keep a portion of the consumer value generated by the adoption of an innovation). Such a return on innovation would encourage projects that have a better chance of industry wide adoption.

Higher risk-based, fail-fast approach for break-through innovation: We believe that so far, the industry has primarily been successful in incremental innovations, with insufficient progress being made in driving breakthroughs in disruptive change. If Ofgem were to measure success rates of innovation projects, it would get a clearer picture of the investment in innovation. Typically, low failure rates imply that companies are probably not attempting to be sufficiently innovative (i.e., have a lower risk appetite), and not considering disruptive innovations which have higher failure rates (e.g., graphite power lines, super capacitors). To encourage more disruptive innovations, Ofgem should encourage networks to adopt fail-fast approaches in their innovation projects.

Increased supply chain engagement in innovation: Ofgem should encourage/facilitate greater engagement with the network operator's supply chain to participate in innovation. This would increase the chances of networks utilising all their innovation allowances, whilst encouraging disruptive ideas for change from a more diverse knowledge base, and also provide greater benefits for customers. Many staff members in networks have worked in the same organisation for their entire career. Widening this engagement to the supply chain would enable a greater cross section of the knowledge pool to be leveraged. This might involve incentivising the supply chain with a gain-share of the benefits delivered to energy customers. In addition, the current requirements on sharing Intellectual Property (IP), where companies cannot sell successful innovations both in GB and globally, is a barrier to the supply chain taking up the opportunity to collaborate with network companies in developing submissions for the network innovation. Allowing both the networks and the supply chain protection on IP and providing right incentives would encourage the supply chain to bring innovations from industries outside the energy sector for adoption by the networks.

Converting industry standards as an enabler not a blocker of innovation: Ofgem should consider minimising or avoiding non-safety-critical standards/codes which have the potential of slowing down the pace of innovations and/or discouraging them. It should explore engaging industry bodies that set the standards for innovation projects in order to provide a streamlined process by removing blockers of easy adoption of innovations.

The Role of Competition

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

Enzen Response:

Enzen agrees that the scope of competition should be expanded in RIIO-2. This is required as new participants in the industry have the potential to be competitors to the networks. This means some of the activities of network (e.g., micro-grids) may take place behind the meter, or some of these participants might not fit into the licensed roles (e.g. aggregators). Participants in these new roles are currently not regulated. There is a need for establishing new products that can facilitate the effective functioning and governance of new competitive scenarios (e.g. a new flexible charging mechanism for those who want to connect to the networks on a temporarily basis during adverse weather conditions). If a smooth entry for these disruptive players is not facilitated, the market will find a way for them to enter, leaving regulations to catch-up, as opposed to facilitating the establishment of these roles. Ofgem should find more ways of running tenders for the whole energy system solutions such as the recent Shetlands tender.

E. Simplifying the price controls by focusing on items of greatest value to consumers

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

Developing a common methodology for business plans

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

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

Fast tracking

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

Monitoring and information

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

Electricity system operator (SO) price control

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?

Providing for stakeholder engagement during the framework review

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

Enzen Response:

Using technology to automate evaluation, making it faster and more accurate: Business plan submission and regulatory reporting is currently an onerous exercise, and every year, hundreds of

man-hours worth of effort is spent extracting and refining the data, and then publishing it for annual submissions. Enzen suggests that to simplify the business plan submission process, Ofgem should establish a common methodology for submission across all energy networks. By conforming to a common methodology, Ofgem should be able to easily evaluate business plans and release the annual reports earlier in the year. The current format of annual RIIO performance reports is comprehensive, and has the right level of information and comparisons between companies. We support Ofgem in maintaining the current level of detail in the annual RIIO performance reports. Enzen suggests that Ofgem explore technology solutions for creating business plans, regulatory report submission and evaluation of the results/reports. Such technological advancements should guarantee transparency of data, reduced effort for reporting and enable near real-time reporting of the annual performance of networks. Sharing such data with the wider industry allows for much easier customer and stakeholder engagement.

License area level fast tracking: Enzen believes that fast tracking has driven the right behaviour amongst utilities and should be continued. Fast tracking should be considered at the licensed area level where organisations own more than one licenced entity. If, for example, an organisation owned three licenced gas networks then it should be possible for one to be fast tracked and the others to follow the standard process. Such fast tracking would be a true reflection of higher performance.

Need for Electricity System Operator (ESO) specific outputs: We believe that with the significantly different nature of the new legally separated Electricity System Operator from the network companies, there is a need for Ofgem to define new / ESO-specific outputs and incentives in RIIO-2. These outputs and incentives should encourage longer-term security of supply at least cost to consumer. Such an outcome will only be achieved only by whole system thinking (considering impact across Gas, Electricity, Transmission, Distribution, Storage, Transportation, Agriculture, Local Authorities, etc).

We hope that Enzen's response will be constructive in building a framework for RIIO-2 that delivers benefits to UK energy consumers of today and of the future. We would be delighted to have further discussions with Ofgem around our response and with interested, cross industry parties on the RIIO-2 framework.

Yours faithfully,

(On behalf of Enzen Global Ltd)
Harsha Anand
Global Head – Business Transformation
Enzen Global Ltd