

Ofgem
10 South Colonnade
Canary Wharf
E14 4PU

Sent via email to RIIO2@ofgem.gov.uk

Ørsted response to RIIO-2 Sector Methodology: System Operator

16 March 2019

Our ref. ANDMH/RIIO2

The Ørsted vision is a world that runs entirely on green energy. In the UK, we develop, construct and operate offshore wind farms as well as battery storage and innovative waste-to-energy solutions. We also offer flexibility solutions to our industrial and commercial customers as well as supplying them with electricity and gas. Headquartered in Denmark, Ørsted employs 5,600 people, including nearly 1,000 in the UK. Ørsted is the largest offshore wind farm developer, generator and owner in the UK.

We welcome the opportunity to respond to the proposed sector methodologies for RIIO-2 where we have focused our response on proposals for the ESO. The changes facing the ESO and the electricity sector are neatly summarised in the opening introduction of the Smart Systems and Flexibility Plan¹

“Our energy system is changing. There is more low carbon generation. There are many more distributed and localised resources. New technologies such as storage are emerging, and the costs of many of these technologies are falling rapidly. Some consumers are interacting differently with our energy system”

Generation in the UK is actively decarbonising in order to meet the challenge of climate change. Consumers are also in turn becoming more complex and sophisticated energy users, where electrification is expected to increase demand by as much as 45% from today's levels². To meet this change, the role of System Operator will need to become more proactive to facilitate the evolution from both generators and demand users whilst delivering value to consumers.

We see the price control as a key opportunity for network companies to develop their framework to deliver change. The 2021-2026 price control period is also an extremely important time period to set the further momentum required in order to meet the longer-term decarbonisation trajectory that will require a smart, flexible energy system to do so.

¹ BEIS Ofgem (2017) Upgrading our Energy System – Smart Systems and Flexibility Plan. p5

² National Grid Future Energy Scenarios 2018 – Community Renewables Scenario

Given that system change will be increasing in pace, we believe the timing is right for a legally separate ESO to seek a new business model to enable it to more actively identify and implement solutions that meet the needs of fast changing market. Against this backdrop, our response to the ESO sector methodology can be split into three overarching themes.

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1. Incentivising an ESO to be agile

The RIIO-2 time period will see rapid changes in how we generate electricity. The Climate Change Act and its ambitious fourth and fifth carbon budgets requires building further momentum to decarbonise the energy mix. The Government recently revealed its ambition to more than triple the amount of offshore wind in UK waters by 2030³. This will mean that offshore wind would provide up to a third of the UK's electricity demand. In fact, we anticipate a world which could support 50GW offshore wind by 2050. Alongside the increase in decentralised generation, the ESO will need to become a forward looking, fast-acting organisation to facilitate the transition.

In addition to the ESO's four roles and principles outlined within the ESO's Forward Plan and RIIO-2, there are four guiding principles⁴ from the Secretary of State for Energy that need to also guide the actions for the system operator and energy industry at large. Amongst these four principles, we feel the agility principle especially applies to the RIIO-2 price control to incentivise an agile and responsive ESO to be more ambitious in tackling the challenges that it will face in the next price control period. The agile approach by the UK Government seeks to ensure that 'regulation must be entrant- and innovation friendly, whilst, of course, maintaining investor confidence⁵.' This should be compatible with a price control that has similar aims⁶.

More precisely, we believe that a two-year price control period would benefit from belonging within a longer-term five-year planning requirement to balance both short and long-term ambition without creating undue risks. By itself, a two-year cycle may allow the maximum opportunity to react to short term change, but overly influence the ESO to prioritise short term deliverables.

Establishing a two-year plan whilst retaining five-year elements would give the ability to become more proactive and make longer term, strategic and transformative initiatives that may require a longer investment horizon. This two-track cycle would blend out the risk of the certainty of the entire ESO business revenues being confined to a forward two-year period which would severely limit the ability for the ESO to commit to investments. We believe this kind of approach balances agility whilst incentivising the ESO to keep pace with the strategic long

³ The UK Government's Offshore Wind Sector Deal (announced 7 March 2019) will deliver 30GW of installed offshore wind capacity by 2030

⁴ Secretary of State Greg Clark MP's speech, *After the energy trilemma, 4 guiding principles for the power sector*, 15 November 2018. The four principles encompass a market principle, an insurance principle, an agility principle, and a no free-riding principle.

⁵ *ibid*

⁶ As outlined in page 5 of the RIIO-2 Sector Specific Methodology

term thinking that network users maintain when deciding to invest in connecting assets.

Our ref. ANDMH/RIIO2

We recognise the potential increase in administrative burden that such an approach may bring for both the ESO and for industry to apply the appropriate scrutiny, but ultimately believe that this may be beneficial to network users and customers in the long run to ensure the ESO remains agile and flexible.

2. A transparent, ambitious ESO to accelerate change

Additionally, an ESO that is able to be more ambitious can benefit from not only applying market-based principles for procuring services essential for system operation, but also to itself to succeed in meeting the challenges that an evolving energy sector presents.

We welcome the increased transparency that the proposed remuneration methodology would bring. A pass-through with margins-based approach to remuneration based on the ESO's activities make sense given the asset-light nature of the system operator that makes a conventional RAV*WACC approach unsuitable. We are familiar with the individual activities proposed⁷, which will allow us to scrutinise the price control in the same way we have been able to under the ESO's Forward Work Plan 2019-2021 which we have seen as an improvement over BSIS and its more mechanistic approach.

However, it will be critical that the incentives and margins that are set for this approach be calibrated in order to balance out the rewards and risks of delivering ambitious change in a shortened two to five-year timeframe.

An ex-post qualitative approach will provide a method to evaluate more transformative action that is initially difficult to measure quantitatively, but there is a risk that the ex-post nature will decrease the level of ambition for the ESO, which may be concerned with making investments that are disallowed ex-post. A balance will need to be achieved to ensure that downside risks are balanced with sufficient incentive to take on transformative work.

3. A price control should encompass a wider whole system view

Beyond the ESO price control, we believe the proposed scope for what Ofgem considers to be whole system thinking is too narrow. The proposed definition to only consider the coordination between the network companies in each RIIO-2 sector neglects consideration for how other sectors will influence the energy sector, and how in return the energy sector impacts these sectors. We do not think the narrow definition will encourage wider cross-sector actions, as it encourages the network companies to operate within a silo.

We believe there is merit to exploring how the energy sector can encourage other sectors to contribute to delivering a smart, flexible energy system. It will be in the

⁷ As outlined in section 6.11 of the RIIO-2 ESO Annex

greater interest for network companies to be motivated to interact with demand users to become more sophisticated energy users. For example, there should be involvement between network companies and the automotive sector to understand how EV charging will impact the network, and accelerate work into how smart charging or power-to-grid arrangements may produce mutual benefits to consumers and enhance network planning. In order to facilitate some of this thinking, it may be helpful to establish a common analytical baseline, such as the Future Energy Scenarios as the basis for which all network companies could use as a starting point when determining their regions' future development.

Our ref. ANDMH/RIIO2

We have set out our views in more detail in the appendix overleaf, which contains our answers to the questions in consultation. Please do not hesitate to contact me (andmh@orsted.co.uk, 07827 283123) should you have questions about our response.

Yours sincerely,

Andrew Ho
Senior Regulatory Affairs Advisor

Appendix - answers to questions

Our ref. ANDMH/RIIO2

Electricity system operator questions

ESO roles and principles questions

ESOQ1. Do you agree with our proposal to maintain the current roles and principles framework for RIIO-2?

Yes. We are supportive of the four roles and seven principles that are currently being used. We view these as being compatible with meeting the requirements of the future energy system. The increasing decarbonisation of generation alongside the increasing sophistication of demand users and changing consumption patterns requires a forward-looking ESO to facilitate a whole system outcome whilst managing efficient system operation, which a well thought-out, competitive market can facilitate.

ESOQ2. Do you agree with our proposals to keep the ESO's code administration, EMR delivery body, data administration, and revenue collection functions in place for RIIO-2? Do you believe that any of these functions (or any other functions) should be opened up to competition, either now or in future?

We are generally happy with the ESO's performance within the EMR Delivery Body's role in administering the Contracts for Difference, and with revenue collection. However, with code administration, we share both the positive and negative thoughts around the ESO's role and performance as pointed out in 3.11 of the RIIO-2 ESO Annex.

With the large amount of code modifications and the pace of change required to build a smart, flexible energy system, we can understand the pressure on the ESO to provide effective code administration. We look forward to the work on code governance reform and see this as an important piece of work to ensure that poor code administration does not become a blocker to the energy transition.

ESOQ3. Do you consider the ESO is best-placed to run early and late competitions?

In terms of meeting the criteria for who is best placed to define the system need (as per 8.82 of the RIIO-2 Sector Specific Methodology document), we believe the ESO may be best placed given its role as system operator. We believe it has a leadership position in identifying system needs through its current work on Future Energy Scenarios, the Electricity Ten Year Statement, and Network Options Assessment.

However, consideration needs to be given on how the ESO would be incentivised and resourced to take a more ambitious, forward-looking view to continuously

improving or significantly reforming a competition regime to continue to bring value to consumers and benefits to network users.

Our ref. ANDMH/R1102

For example, our experience with Ofgem within the OFTO regime has seen only incremental changes to this 'very late' competition framework, which whilst welcome, have not addressed more fundamental issues with the competition framework. Against the growing number of OFTO transactions, the resource-constrained team has been unable to offer some of the more transformative work needed to advance an aging framework that is beginning to restrict activities and reduce the ability for the framework to offer cost reductions.

We therefore view resource allocation to be essential if the ESO is to succeed in the other criteria as outline in 8.82 if it were to run any competitions that can react to changing conditions and new ideas that can offer benefits to consumers.

ESOQ4. Do you agree with our proposal to move to a two-year Business Planning cycled price control process for the ESO? If not, please outline your preferred alternative, noting any key features (e.g. uncertainty mechanisms or re-openers) that should be included.

We would like to see more information with regards to how the two-year Business Planning cycle fits within the longer-term five-year price control. Much emphasis is placed within the R110-2 ESO Annex on the two-year element without sufficient detail on which incentives and margins, if any, that would belong within the longer term.

A two-year price control period would benefit from belonging within a longer-term five-year planning requirement to balance ambition without creating undue risks. By itself, a two-year cycle may allow the maximum opportunity to react to short term change, but overly influence the ESO to prioritise short term deliverables. We would like to see the ESO become less reactive and adopt proactive measures that would allow the ESO to anticipate change ahead of time and lead the energy transition.

A two-year element would offer the ESO flexibility to pivot quickly, whilst retaining five-year elements would give the ability to make longer term, strategic and transformative initiatives that may require a longer investment horizon. This would blend out the risk of the certainty of the entire ESO business revenues being confined to a forward two-year period which would severely limit the ability for the ESO to commit to investments. We believe this kind of approach balances agility whilst incentivising the ESO to keep pace with the strategic long term thinking that network users maintain when deciding to invest in connecting assets.

ESOQ5. What stakeholder engagement mechanisms should be put in place for the ESO's Business Planning and ongoing scrutiny of its performance? Do you agree with our proposal to maintain, and build upon, the role of the Performance Panel?

We are supporters of the current stakeholder engagement mechanism undertaken by the ESO to gain stakeholder feedback as part of its business planning.

Our ref. ANDMH/R11O2

An ESO Performance Panel makes sense in having a dedicated group to scrutinise the performance of the ESO against its set objectives under R11O-2 on an annual basis. As it may involve a detailed understanding of each output, we believe there would be an operational nature to the work being performed that is separate to scrutinising the strategic direction of the ESO.

With the development of R11O-2, the format of having a Stakeholder Group and an additional Challenge Group make sense in applying an appropriate level of scrutiny in proposed Business Plans at a strategic level. We understand that the participants for these groups are not only diverse, but are also senior figures who can appropriately scrutinise Business Plans from a high level.

In addition to these groups, we have seen the ESO also conduct stakeholder events for wider industry input, which we also welcome and would like to see continue going into the next price control period.

ESO output and incentives questions

ESOQ6. Do you agree with our proposed approach of using evaluative, ex-ante incentives arrangements for the ESO?

We believe there is a mistake in this question, which should refer to the ex-post incentive arrangements outlined in the annex, which is how we've approached our answer.

An ex-post incentive arrangement will require close calibration with the incentives and margins being offered to the ESO under R11O-2. It is possible for the ESO, or any business, to perceive an ex-post arrangement to contain more downside risk than upside risk. The risk of monies which have already been spent being exposed to disallowance will be present. This may outweigh any potential incentive to attempt to outperform through making more ambitious investments for any potential reward. The net result may be an ESO that favours more conservative measures, which is counterintuitive at a time of great change for the rest of the energy system.

ESOQ7. Do you agree that we should continue to apply a single 'pot' of incentives to the ESO, and that this should be a symmetrical positive/negative amount? If not, why not?

As per our response to ESOQ6, the issue of whether the incentive should be symmetrical or not will depend on the calibration between the margins, disallowances and incentives.

A symmetrical incentive for the ESO has the possibility of being interpreted as more downside than upside. The relatively small size of the ESO compared to the

value of its activities means that to-date we have seen a conservative approach by the ESO to favour more incumbent behaviours than accelerate change to bring in new service providers under an open market framework.

Our ref. ANDMH/RIIO2

For example, we believe that wind generation is able to provide frequency response in a greater capacity than what the framework currently allows for today, and the additional competition for this service would create value for consumers. However, in order to do this, the ESO would need to be comfortable with closer to real-time procurement from providers, which it has been uncomfortable with to-date. A symmetrical incentive may continue to delay the transition to day-ahead auctions for frequency response if, owing to the risks of strong disincentives, the ESO is instead incentivised to preserve existing BAU practices that keep prices higher but stable, instead of being incentivised to become a more sophisticated system operator that is better able to handle real-time procurement.

We are also unsure if a Black Start incentive should remain as a standalone cost disallowance as proposed in 5.23 of the RIIO ESO Annex. Whilst it makes sense from the perspective of maintaining a backstop for system restoration, we are concerned there would be no incentive for the ESO to bring forward new participants for procuring Black Start services beyond taking an incumbent led approach which limits the optionality for the ESO, with the potential impact of increasing the cost of Black Start in the future.

ESO cost assessment questions

ESOQ8. Do you agree with our proposed approach to assessing the costs of the ESO under RIIO-2? Do you think we should assess costs on an activity-by-activity basis? How would you go about defining the activity categories? Are there alternative approaches we should consider?

An activities-based approach with further splits into OPEX and CAPEX would allow greater transparency for stakeholders and is perhaps better aligned with the ESO compared with applying this approach to the other network companies, due to the way the ESO operates.

Benchmarking of these activities should use the experience with the current ESO Forward Plan to generate historical performance data for use in the RIIO-2 period.

ESOQ9. Do you consider the types of cost assessment activities we outline in this chapter are the right ones? Are there additional activities you think we should consider?

The proposed activities as per 6.11 of the RIIO ESO Annex are familiar to us and therefore increases our understanding of the ESO business and the transparency provided.

ESO finance questions

Our ref. ANDMH/RIIO2

ESQ11. Are there any risks associated with our proposed remuneration model that you do not think have been effectively captured and addressed? Do you think that we should put in place any of the mechanisms intended to provide additional security to the ESO outlined in this chapter – e.g. parent company guarantee, insurance premium, industry escrow or capital facility?

There are a lot of risks for the ESO within the remuneration model as it is currently proposed, without clarity on the margins and size of the incentive being offered that would balance out those risks.

The cost disallowance mechanism as well as the symmetrical incentive that exposes the ESO to downside risk have been discussed as being potential risks for an ESO that would be unable to cover such losses. In these instances, the options being discussed in section 7.20 of the RIIO-2 ESO Annex are appropriate.

ESQ12. Do you agree with our proposal relating to remove the cost sharing factor? Can you foresee any unintended consequences in doing so, and how could these be mitigated?

If there are significant margins for the ESO, it would make sense to retain a cost sharing factor so as to retain value for network users.

ESQ13. Do you agree with our proposal to introduce a cost disallowance mechanism for demonstrably inefficient costs? What criteria should we apply in considering what constitutes ‘demonstrably inefficient’?

Referring to our response to ESQ7, an example of inefficient spending may be related to insufficient procurement of services such as Black Start where an inefficient market framework keeps the cost of procuring Black Start artificially high through barriers that restrict or delay market access.

ESO innovation questions

ESQ14. Do you agree with our proposals to retain an innovation stimulus for the ESO, but tailor aspects of this innovation stimulus to take account of the nature of the ESO business?

We consider it important for the ESO to be able to continue to innovate and have an incentive to do so. Broad alignment with other network innovation stimulus, but scope to tailor aspects for the ESO business make sense.

ESQ15. What ESO-specific issues should we consider in the design of the ESO innovation stimulus package?

Going into the RIIO-2 period (and even in the current ESO Forward Work period 2019-2021, it would make sense to increase transparency around the design of

innovation stimulus. If it is possible at an early stage define ESO specific innovation requirements this would be helpful.

Our ref. ANDMH/R1102

Another part of the challenge for the ESO will be not only to work with other network companies, but to work with generation and demand side as well to innovate together and find solutions. For example, whilst we are aware of current work under the Network Innovation Allowance to scope the current Technological Readiness Level of wind generation in providing Black Start, there could be further work to seek ongoing collaboration with industry to either validate views, or accelerate the work entirely.

Enabling whole system solutions questions

CSQ8. Do you feel we have defined the problem correctly?

No, the definition in 5.15 is too narrow. Given the level of influence the price control will have on incentivising network companies to adopt progressive plans to support a smart, flexible energy system, limiting the scope of action through a narrow definition limits ambition and promotes conservative measures.

CSQ9. What views do you have on our proposed approach to adopt a narrow focus for whole systems in the R110-2 price control, as set out above?

The narrow definition as given in 5.15 will limit the potential actions that can be taken to decarbonise the system and increase flexibility, which is one of the three primary objectives as set out in this consultation.

We appreciate that a price control only considers network companies, and the consideration of how they interact together and produce synergies, efficiencies are beneficial under the narrow definition. However, a wider scope would consider all of these points, as well as produce additional synergies in a wider context.

A failure to consider the changing environment that these businesses operate in, and how they need to interact with other sectors in order to respond to changes in consumer demand, to decarbonisation challenges for their customers and other sectors is short-sighted, especially with fourth and fifth carbon budgets that will prove challenging for the UK to meet.

CSQ10. Where might there be benefits through adopting a broader scope for some mechanisms? Please provide evidence.

We think section 5.17 of the R110-2 sector methodology document conflates the point. We do not expect network companies (and in turn network users) to pay for housing insulation.

Network companies however, will need to account for how they can incentivise users to be more flexible, which may involve collaboration with other sectors. This

in turn benefits the network company through optimised network usage and avoided reinforcement costs.

Our ref. ANDMH/RIIO2

Likewise, network companies should be aware that their actions (or actions by Ofgem) may incentivise or dissuade the take up in items such as electric vehicles. A broader scope to consider, and interact, with manufacturers to design compatible standards for EV smart charging, P2G initiatives, or specifications of smart goods for example, would be beneficial to both manufacturers and network companies.

We believe there is merit to consider broadening the scope to consider including other companies to collaborate with network companies, whether this be via BAU or via innovation incentives.