

Louise Schmitz
National Grid ESO
Faraday House, Gallows Hill
Warwick
CV34 6DA
box.soincentives.electricity@nationalgrideso.com

cc: transmission operators, distribution network operators, generators, suppliers, traders, aggregators, consumers and other interested parties

Direct Dial: 0207 901 7000

Email: ESOperformance@ofgem.gov.uk

Date: 13 May 2020

Dear colleagues,

Ofgem Formal Opinion on the Electricity System Operator's Forward Plan for 2020-21

The ESO regulatory and incentives framework

The Electricity System Operator (ESO) incentives framework is built around us being clear from the outset about the behaviours and outcomes we expect of the ESO and it places the onus on the ESO to engage with stakeholders to identify how to best meet and exceed these expectations. The framework divides the ESO's activities into three roles (see Figure 1) with supporting guidance¹ to set clear minimum expectations for what we expect the ESO to deliver. There is a requirement on the ESO to produce an annual Forward Plan, following stakeholder engagement, demonstrating the activities it will undertake over the year to add additional value for consumers. Since its introduction in April 2018², the high-level framework has remained largely the same, but we have introduced some smaller refinements to streamline the process based on lessons learnt administering the scheme.³

¹ The ESO Roles and Principles guidance document supports the framework by describing the ESO's key activities and setting out our expectations for how these activities should be performed: https://www.ofgem.gov.uk/system/files/docs/2020/03/eso roles and principles quidance 2020-21.pdf

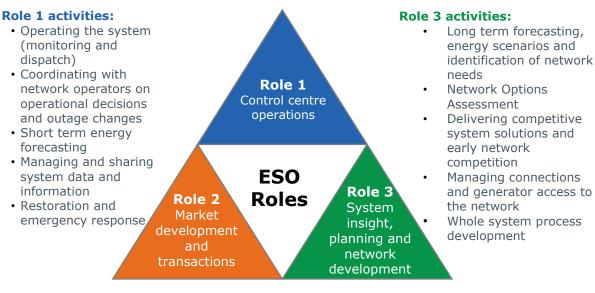
Our decision to introduce the new ESO Reporting and Incentive Arrangements from April 2018 can be found here: https://www.ofgem.gov.uk/system/files/docs/2018/03/decision to modify ngets licence to introduce new eso reporting and inc.pdf
 For 2020-21, we have made a number of modifications to move to three roles and to merge the evaluation criteria on

³ For 2020-21, we have made a number of modifications to move to three roles and to merge the evaluation criteria on consumer benefits in order to streamline reporting: https://www.ofgem.gov.uk/system/files/docs/2020/03/decision_on_changes_to_the_2020-21_incentive_framework.pdf

The ESO Forward Plan - purpose & our expectations

The ESO's Forward Plan, produced before the start of the regulatory year, should meet the requirements set out in our ESO Reporting and Incentive Arrangements (ESORI) Guidance.⁴ It should set out the ESO's **longer-term vision** for how it intends to drive consumer benefits under the ESO's three roles (see Figure 1). It should also set out the specific steps the ESO intends to take in the year ahead to meet these aims. The plan should contain an unambiguous set of **deliverables** with a clear articulation of what the ESO intends to deliver alongside the dates and milestones for this delivery.

Figure 1: Summary of the ESO roles and activities for 2020-21



Role 2 activities:

- Balancing and ancillary service market design
- Service procurement and settlement
- Revenue collection
- Policy advice and delivery of market framework changes
- Code administrator

The Forward Plan should also propose a set of **performance metrics** linked to each of the roles. Each performance metric should be supported by performance benchmarks, which should set out and clearly justify performance that is: below expectations; in line with expectations; and exceeding expectations. A high quality set of metrics serves several purposes. The metrics create transparency around the ESO's performance by helping stakeholders to track the ESO's progress throughout the year. The metrics should also provide certainty for the ESO in regards to agreed levels of performance that constitutes above or below expectations.

⁴ The ESORI guidance document describes the key stages of the annual incentives process, including the evaluation criteria and guidance on how we will assess the ESO's performance: https://www.ofgem.gov.uk/system/files/docs/2020/03/esori_quidance_document_2020-2021_final.pdf

The Forward Plan will be a key input into the end of year financial incentive decision. Therefore, it is important that the ESO develops a comprehensive and stretching set of deliverables and metrics. Overall, the plan should be ambitious. By that we mean:

- 1. A clear long-term strategy and vision in relation to each role;
- 2. A comprehensive breadth/coverage of tangible steps/activities/deliverables covering all the ESO roles and;
- 3. A sufficient level of stretch in what constitutes expected performance levels, based on previous performance and/or stakeholder expectations.

The ESO must also evidence clearly how its Forward Plan meets and/or exceeds baseline expectations for each role area and the extent of additional consumer benefits its actions will create. Furthermore, the ESO also needs to demonstrate that it has engaged and responded to stakeholder feedback when consulting on the Forward Plan in order to validate the deliverables and performance metrics.

The evaluation process

The ESO Performance Panel⁵ will use the following criteria to evaluate the ESO's performance and determine a score for each role area at the end of the year: (1) ESO evidence of benefits (delivered benefits and/or future benefits); (2) stakeholder views; (3) plan delivery and (4) outturn performance metrics and justifications.⁶ The end of year incentive decision will be determined by Ofgem.⁷ We expect a high level of service, based on commitments under RIIO and obligations in the ESO's licence, and incentive payments will be rewarded for going above and beyond our baseline expectations for a competent ESO.

Ofgem's Formal Opinion

The purpose of our Formal Opinion is to assess the ambition of the ESO's Forward Plan. This includes the extent to which the ESO has articulated a clear long-term strategy and vision for each role area, the level of coverage and stretch of the deliverables and performance metrics and the extent to which the deliverables and performance metrics go beyond, or fall below, baseline expectations.⁸ The aim is to increase certainty and transparency about our expectations of the ESO in order to drive performance in the interests of consumers. In order to do this, we responded to the ESO's consultation on its draft Forward Plan⁹ and have produced this Formal Opinion in response to the final version of the plan. The Formal Opinion will be taken into consideration when the ESO Performance Panel assesses the ESO's performance against plan delivery (criterion 3)

⁵ The role of the ESO Performance Panel is addressed in the ESORI Guidance document for 2020-21: https://www.ofgem.gov.uk/system/files/docs/2020/03/esori_guidance_document_2020-2021_final.pdf

 $^{^{6}}$ Pages 21-32 of the ESORI Guidance describe the performance evaluation criteria.

⁷ For the 2020-21 incentive year, the maximum reward/penalty the ESO can achieve is $\pm £30$ million. As a default, this will be split equally among each of the three roles ($\pm £10$ m per role).

⁸ Paragraphs 2.19. – 2.27 of the ESORI Guidance describe the purpose and content of the Ofgem Formal Opinion.

⁹ Ofgem's response to the ESO's Forward Plan consultation for 2020-21:

https://authors.ofgem.gov.uk/system/files/docs/2020/02/ofgem_response_to_eso_draft_forward_plan_2020-21.pdf

and outturn performance metrics and justifications (criterion 4), as set out in the previous paragraph. When undertaking this assessment, Ofgem's views at the beginning of the year (in the Formal Opinion) will be one relevant piece of information that will give the panel an indication of the level of ambition in the Forward Plan (i.e., how stretching and ambitious the ESO's deliverables, performance metrics and performance benchmarks are). It will also be used to help the ESO Performance Panel understand baseline expectations (the extent to which the deliverables and performance metrics for each role either meet, exceed or fall below Ofgem and stakeholders' expectations).

The Formal Opinion forms part of a holistic, evaluative assessment. We expect the ESO to take this Formal Opinion into consideration and respond wherever possible, for example by adapting delivery accordingly or providing the necessary evidence/information requested through its monthly reporting.

COVID-19

The ESO published its final Forward Plan for 2019-21 on 30 March 2020 following consultation with stakeholders. ¹⁰ The ESO was explicit that this Forward Plan presented its 'pre coronavirus' deliverables and timelines. We are aware that, since then, the ESO has been reviewing the impact of coronavirus (COVID-19) on its Forward Plan, taking into account changing priorities on the ESO's activities. We have published a letter to the ESO separately, setting out the process the ESO should follow when reviewing planned activities in order to address the challenges raised by COVID-19. ¹¹

Given the new challenges posed by COVID-19, we need to have early sight on potential risks to the system and any impact on the ESO's ability to effectively deliver its obligations and deliverables following the process set out in our letter to the ESO. Our ESO incentives framework allows for this flexibility as long as any changing priorities are justified, evidence based and communicated to stakeholders transparently. Any significant changes to the Forward Plan throughout the year should be clearly signposted and published via an addendum¹² and/or via the Forward Plan tracker on ESO's website.¹³

We've set out our Formal Opinion on the Forward Plan, as published by the ESO on 30 March 2020, and on the basis of delivery under normal circumstances. In this Formal Opinion, we have not reflected on any potential changes as we understand that the ESO is still reviewing the impact of COVID-19 on a number of areas. Once the ESO confirms any changes to its priorities (as a result of COVID-19), then we will similarly communicate any changes to this Formal Opinion.

General comments on draft ESO Forward Plan

¹⁰ The ESO's Forward Plan for 2020-21: https://www.nationalgrideso.com/document/166441/download

¹¹ Ofgem letter to ESO on priorities during COVID-19: https://www.ofgem.gov.uk/publications-and-updates/impact-covid-19-energy-network-companies-enabling-framework-regulatory-flexibility

¹² Paragraph 2.29. in the ESORI Guidance:

https://www.ofgem.gov.uk/system/files/docs/2020/03/esori quidance document 2020-2021 final.pdf

¹³ ESO Forward Plan tracker: https://www.nationalgrideso.com/documents/168471-forward-plan-tracker

We have reviewed the final Forward Plan document and have assessed the stakeholder feedback the ESO received to its Forward Plan consultation. Our Formal Opinion is in relation to the activities and deliverables described in the Forward Plan for 2020-21 as published by the ESO on 30 March 2020. As set out above, the ESO Forward Plan, the stakeholder feedback and this Formal Opinion are based on delivery in normal circumstances. We have provided our main comments below and have also included a detailed assessment for each role in the Appendix.

We recognise that the ESO has made continued improvements to its reporting (specifically the structure and coherence of its Forward Plan). We also welcome the positive engagement to date with stakeholders (in particular, a longer consultation window and a well-received stakeholder event).

<u>Long-term vision:</u>

The ESO has built on its long-term vision originally described in its Forward Plan for 2019-21 and linked this to the ESO mission for 2025. It describes success around four ambitions of operating the system carbon free by 2025, a whole system strategy that supports net zero by 2050, competition everywhere and the ESO being seen as a trusted partner. This is an ambitious long term vision, and we appreciate the additional information (provided on pages 5-9) on how the ESO will deliver this in practice.

In the Forward Plan for 2020-21, the ESO has listed which of its deliverables across the three roles are most relevant to achieving its mission and there is a high-level explanation around how these deliverables will progress through to 2025. We think this is a good first step at providing a clearer link between the ESO's mission, priority deliverables and metrics, but more detail should be provided in due course to create a clear 5-year plan for meeting its 2025 goal, especially as the current operational challenges associated with lower demand levels could arise more frequently by 2025.

<u>Deliverables:</u>

When assessing the deliverables, we are looking for these to meet our requirements in the ESORI Guidance. Deliverables must be:

- <u>Specified</u> it should be clear what is being delivered in practice in order for successful delivery to be measured.
- <u>Time bound</u> deliverables should contain clear dates and milestones.
- Relevant they should be justified against the delivery of the long-term vision.
- <u>Beneficial for consumers</u> they should be intended to deliver consumer benefits and make clear what type of measurable outcome/benefit is associated with its successful delivery.
 The ESO should clearly articulate and/or quantify the expected consumer benefits associated with a deliverable.
- <u>In line with industry priorities</u> it should be clear why deliverables have been prioritised and how industry feedback has been responded to.

In most cases (but not all) there are specific dates and milestones attached to each deliverable. However, many deliverables don't contain the level of specificity required to form an unambiguous view of what will be delivered and therefore how to measure successful delivery. This level of uncertainty in the ESO Forward Plan increases the difficulty we have in articulating a clear view about whether delivery of this plan would be in line with our expectations of the ESO. It therefore reduces the strength of the opinion that we can provide at the start of the year and also makes tracking delivery throughout the year more difficult.

We suggested in our response to the ESO's draft Forward Plan that deliverables could be broken down into smaller, interim milestones spaced out over the year. This would make it clearer to understand what is being delivered and easier to track the ESO's progress. We note that the ESO has provided this clarity for some deliverables. This will give us, industry and the ESO Performance Panel some comfort that these areas are being progressed throughout the year, especially on areas that are important for industry and that have been delayed previously. We will be monitoring how these activities are delivered throughout the year, alongside the ESO's justification for any changes, to determine whether the ESO has met or exceeded our expectations.

The ways in which the ESO's activities are delivered and the effectiveness of these will be a strong factor in our end of year incentives decision. Based on the specificity of information provided in the Forward Plan many deliverables could be met but with a wide spectrum of performance. *How* the ESO delivers these activities will be considered hand in hand with *what* activities have been delivered. This point is relevant for all deliverables, irrespective of whether a deliverable is a standard, business-as-usual ESO activity or more stretching, innovative activity.

Performance metrics:

As part of this Forward Plan process, the ESO should propose a set of performance metrics linked to each of the roles. These metrics should create certainty and transparency around the ESO's expected levels of performance and help stakeholders track the ESO's progress against its Forward Plan.

Performance metrics should be:

- Specified it should be clear how exactly performance will be measured with full details
 of the metric shared with stakeholders.
- Relevant the ESO should clearly articulate how the performance metrics relate to the deliverables and the outcomes identified in the long-term vision.
- <u>Benchmarked</u> performance benchmarks should be challenging with clear evidence provided around how they are challenging (and deliver above baseline expectations).

We think the reporting of the performance metrics has improved significantly. There are much clearer descriptions and we appreciate the inclusion of all performance benchmarks (although these should have been included at the consultation phase to allow stakeholders to comment). In

a few cases the performance benchmarks have been revised to be more challenging, and we welcome these and the link between historical and/or current performance. However, there are still a number of metrics that we don't consider to be relevant and/or aren't challenging enough and we have set this out in more detail in the Appendix. For instance we have significant concerns around metric 1a on balancing costs and the adjustment factors chosen by the ESO. While these concerns exist, we will rely to a greater extent on the five year rolling average of balancing costs as a benchmark to measure the ESO's performance.

We recognise that it may be relatively more difficult to produce metrics for some areas, most notably those in Role 3. As part of the regular within-year reporting, we expect the ESO to provide greater clarity on the deliverables (and interim milestones) in these areas in order to track the ESO's performance throughout the year.

We note the inclusion of 'performance indicators' which do not have any performance benchmarks. Our framework does not require these, but we understand the ESO's reasoning to propose these. As they are not metrics, they will not be used as part of metrics criteria in the 2020-21 scheme to assess the ESO's performance. However they may provide additional useful information and context for the performance assessment.

ESO ambition:

In order to provide the ESO with as much ex-ante certainty as possible, we have summarised our views on the level of ambition contained within the ESO's Forward Plan for each role. This is not a list of everything the ESO needs to do to meet or exceed expectations. This should be read alongside the Appendix, which provides a more exhaustive response to the deliverables and metrics.

Role 1 - Control Centre Operations:

- When assessing Role 1 previously, we and the panel agreed that the majority of commitments in this area reflected business as usual activities for the ESO. We asked the ESO to bring forward some of the RIIO-2 deliverables in relation to control room IT and the panel asked for stronger evidence of innovation and clear leadership in solving operability challenges. At present, we welcome the commitments that have been brought forward, but still consider there is more ambition the ESO could demonstrate. Therefore the ESO would meet our baseline expectations if it completed the outlined Role 1 deliverables and also had strong performance against its associated performance metrics.
- To meet our expectations in this area, we would like the ESO to develop and maintain its information systems so that stakeholders experience no undue barriers in entering and competing in the Balancing Mechanism. Key deliverables will be around widening access to the Application Programming Interface (API) system and expanding dispatch to incorporate smaller Balancing Mechanism Units (BMUs) as well as reducing barriers to participation through full implementation and use of the Power Available signal. We note the various challenges on forecasting and we would like the ESO to deliver all forecasting

- commitments and would expect to see balancing costs remaining in line with historical costs trends (and/or strong evidenced justifications for any significant change).
- To exceed our expectations in this area, we would like to see the ESO taking a more proactive approach by publishing all information the Electricity National Control Centre (ENCC) uses to make decisions on its data portal, in order to improve transparency of information. We would like to see the planned forecasting deliverables lead to tangible results (eg, through improved forecasting accuracy or capability). We also reiterate stakeholder and panel feedback to go further than just foreseeing areas of rising balancing costs, and define a coherent set of actions that will be taken to reduce/maintain balancing costs in the short-term (clearly indicating where costs are likely to change and why) and demonstrate a clear, way forward for how it is working to get to net-zero operation of the system by 2025.

Role 2 - Market Development and transactions:

- Previously we said that delivering balancing service reforms on time would be a key
 measure of performance under this role, with a large emphasis on how this has met
 stakeholder expectations. We challenged the ESO to ensure it has the capability and inputs
 to deliver as promised.
- We consider that the ESO has prioritised the right areas in this Forward Plan, but the majority of deliverables are business as usual activities that we expect the ESO to be undertaking. The response and reserve roadmaps, reactive power roadmaps, and improving the way the ESO facilitates code change are particularly important to stakeholders, but many have been delayed. The associated deliverables (particularly in relation to reserve and reactive implementation) are still concerned primarily with publishing more plans/strategies or further engaging with industry, rather than implementing tangible, on-the-ground developments. This is at odds with the strong stakeholder desire to see implementation of improved balancing and ancillary services markets.
- We are concerned that some of these delays may be due to reduced focus in this area, which will create a gap in delivery during the 2020-21 delivery year and the start of the RIIO-2 price control period¹⁴. As many stakeholders have noted, many of these new markets and products are essential prerequisites for delivering the ESO's longer-term ambitions. A slowdown in activity until the RIIO-2 period does not match the level of ambition we expect for the 2020-21 Forward Plan.
- We are also concerned that the ESO has not set out in the plan how it will meet the obligations in the Clean Energy Package (CEP). Meeting these legal obligations (or having a clear plan for doing so with justified timelines) is a minimum performance expectation.
- Therefore, delivery of the planned Role 2 deliverables, as it currently stands, would not meet our expectations.

¹⁴ We note that, on p88 of the Forward Plan, the ESO stated that it is: "currently working within [its] RIIO-1 allowances, it is not currently possible to progress any additional work within 2020-21 without compromising the Forward Plan deliverables".

- To meet our expectations the ESO would have to complete all Role 2 deliverables in this Forward Plan and the associated product roadmaps, with no further unjustified delays, to a satisfactory level (assessed using stakeholder feedback/engagement¹⁵ and comparing the outcome to the original scope). It would also need to demonstrate compliance with its CEP requirements and we would like to see improved stakeholder satisfaction with the ESO's role as a code administrator compared to last year, with the ESO moving towards becoming at least average in performance.
- To exceed our expectations the ESO would have to deliver tangible new markets and product developments within 2020-21. These markets and products should be implemented in a manner that ensures fair competition and a level playing field for market participants through competitive, close to real time procurement and standardised requirements. Likewise, to exceed expectations the ESO's code administration performance should be considered to be within the top-tier of code administrators (e.g., via the stakeholder satisfaction scores or wider industry feedback).
- We are concerned that the ESO has not emphasised the role it is taking as an important member of our Access SCR delivery group. To meet our expectations, the ESO must take a leading role providing transmission-level analysis to inform our development and assessment of the options.
- To exceed expectations the ESO could also demonstrate strong thought-leadership that contributes directly to the development of new approaches to transmission network charging, which maximise long-term benefits for consumers. To deliver this, the ESO should use its technical understanding of the transmission system and charging methodologies to provide qualitative and quantitative policy inputs that are beyond simply modelling the tariffs to support the Access SCR during the policy development phase, and through its position chairing the second Balancing Services Charges Taskforce. We would need to see strong performance against the performance metrics, and in relation to metric 2a, the ESO would need to outperform its proposed performance benchmarks (as described in the Appendix).

Role 3 - System insight, planning and network development:

- Previously we said that we wanted to see well-defined deliverables and justifications for any delays. We are still not clear what exactly is proposed to be delivered in a number of areas, and why some commitments have been delayed. The lack of clarity over exactly what would be delivered under some key deliverables means it is difficult to provide a definite view on whether delivery of the planned Role 3 activities would meet our expectations.
- We agree with the ESO's prioritisation of the loss of mains programme and the pathfinders.
 Given the long history of the loss of mains issue¹⁶ and the significant cost implications of

¹⁵ Paragraphs 3.17, 3.18 and 3.19 in our ESORI guidance describe how we will assess stakeholder feedback: https://www.ofgem.gov.uk/system/files/docs/2020/03/esori_guidance_document_2020-2021_final.pdf

¹⁶ This work is associated with a long-running modification process and addresses operational issues that have be known for many years.

- not progressing this work, the ESO's continued support to this programme is a high baseline priority.
- To meet our baseline expectations the ESO should take a proactive and collaborative role in the Open Networks programme to implement standardised processes and methodologies for flexibility procurement across network and system operators. We consider the Network Options Assessment (NOA) communications deliverable and the suite of insight documents to be part of baseline expected levels of performance for the ESO. Similarly, we consider the ESO's 2020-21 pathfinder deliverables to now be part of expected performance. The ESO was rewarded with positive financial incentive rewards for the pathfinder work in our 2018-19 incentives decision. However we expect to see timely progress and conclusions to the pathfinders' procurement exercises with open, fair competition and a level playing field for all types of participants. We also expect to see progress to fully integrate these into core network planning processes (the panel also fed back that the processes should be linked to the NOA).
- There is strong demand from stakeholders and anticipated consumer benefit from improving competition in network development so that a wider range of solutions can compete effectively to meet transmission system needs in both the short and long term. To exceed expectations the ESO should make further progress in expanding the scope of the NOA methodology to ensure that market-based flexibility solutions and distribution solutions are considered comprehensively in the NOA alongside traditional network reinforcement solutions. The panel also noted the lack of deliverables and ambition relating to the progression of the NOA methodology, feeding back that the NOA should be better informed by the Pathfinders.

We have provided more detailed comments on the ESO's deliverables and metrics in the annex.

Next steps

We appreciate all the work that has gone into developing the Forward Plan and the stakeholders that have engaged with the framework and provided comments thus far.

We expect the ESO to take the comments in this Formal Opinion into account as it begins to deliver against its plan. In a number of cases we have requested further evidence and information in relation to the deliverables and metrics. This information and justification should be provided throughout the year, wherever possible, in the ESO's monthly reporting cycle. Any significant changes (including delays) to the Forward Plan deliverables should be justified and communicated to stakeholders via signposting and publishing an addendum to the Forward Plan and/or via the ESO's Forward Plan tracker.¹³ If the ESO does make significant changes to the Forward Plan we will set out any changes to this Formal Opinion.

The end of year assessment will be based on a holistic evaluation of the ESO's overall performance for each role using the published criteria. We will consider the impact of COVID-19 in our end of year incentives decision, and the actions the ESO took to manage the system in response to this.

We are aware that our regulatory processes place resource requirements on energy companies and wider stakeholders and are mindful of the resource limitations on consultees during the COVID-19 pandemic. We wish to work with energy companies and other stakeholders to manage these burdens. Therefore, we encourage stakeholders to continue engaging with this process in whatever capacity they can. If you have any feedback on the ESO's performance throughout 2020-21, you can contact us at: ESOperformance@ofgem.gov.uk. We are happy to receive less formal feedback through email and conversations.

Yours sincerely,

Grendon Thompson

Head of ESO Regulation

Annex - Feedback by Role

We have provided more detailed comments on the deliverables and metrics for each role below.

Role 1: Control Centre Operations

<u>Deliverables</u>

Deliverable	Our comments
Produce plan for widening access to Application Programming Interface (API) system	Although this has been highlighted as a priority, it is not clear what tangible improvements will be made this year to build upon previous work and enable wider access to the Balancing Mechanism (BM). It appears the ESO will be carrying out a cost-benefit analysis and "review the scaling requirement for the API system", but will only produce a plan <i>if this is required</i> . It is not clear how the ESO will decide if a plan is necessary. We have concerns that this review may not result in tangible action being taken. If the ESO decides not to produce a plan, we would require clear evidence why this decision was taken, how the ESO engaged with stakeholders regarding this decision and why it was in the best interest of consumers in order to meet expectations in this area.
Expand dispatch facility to	We note that Balancing Mechanism (BM) participation as a Virtual Lead Party (VLP) through the Wider Access arrangements went live in December 2019. We have heard stakeholder feedback that this process can be time consuming and expect the ESO to make necessary change to reduce any undue barriers to entry for VLP participation. We expect that the ESO will build on this deliverable over the year – integrating interim manual processes into automated control room systems – so that the Electricity National Control Centre (ENCC) are able to dispatch a large number of small BMUs by year-end.
handle a large number of small Balancing Mechanism Units, subject to market take-up (priority)	Furthermore, stakeholders would like further clarity on what the ESO means by a "large number" of small BMUs. The ESO should be proactive in delivering this expansion of dispatch facility, ensuring that stakeholders wishing to enter the BM through the VLP route are able to do so effectively. We note that the scale of this expansion will be kept under review, and depends on how many VLPs come forward. Regardless of how many VLPs come forward, we consider that the ESO should be doing what it can to amend processes in order to remove any barriers to entry, especially as the ESO has identified this area as a priority. We consider that this will then encourage more VLPs to come forward.
	Alongside these deliverables, we previously suggested that it may be worthwhile for the ESO to report on the number of VLPs entering the BM. This could be an indicator of how well the arrangements are facilitating entry into the market. We would like this to be reported throughout the year (either at the quarterly or midyear stage) to provide context to this deliverable.
Interconnector Programmes	We are mindful that the go-live date for each interconnector will effect timings, but we expect the ESO to demonstrate proactivity in this area. The ESO should have a detailed plan in place to enable each interconnector to go-live, as well as to facilitate operational changes to interconnector systems (for example, changes to auction timings). This would ensure integration into the ESO's operational systems is as smooth as possible. We would also expect the ESO to have in place a clear plan for regular engagement with relevant stakeholders as.
	Over the past year, we understand the ESO has needed to curtail interconnectors more frequently to manage system issues such as the rate of change of frequency (RoCoF). We think the ESO could be doing more work in this area to understand the implications of this – particularly on wholesale prices and the socio-economic

	welfare of consumers in Great Britain – and demonstrating what it is doing to manage this going forward.
	We also note that the ESO has not included its ongoing consultation around the net transfer capacity (NTC) compensation framework which will be continuing this year. The ESO should be demonstrating in the Forward Plan and throughout the year, how it is planning for this and how it expects to deliver this by the end of the year.
Project for Energy Forecasting (PEF)	We welcome the provision of more granular forecasts, but there is limited information on the "strategic, cloud-based machine learning system". As a result, it is difficult for us to assess and provide an opinion on the development of this new system, how it improves upon existing tools and what progress the ESO plans to achieve with the new system over the next year.
	Aside from releasing more forecasts, the Forward Plan offers limited detail as to how the ESO plans to make forecasts "more accurateand granular". We believe the ESO could go further in publishing methodologies and more detailed information regarding the calculations and accuracies of their forecasts. We note this has been addressed in p91 in the Forward Plan. We don't agree with the ESO's response – that "it is not clear that this effort would add any value for consumers" as we consider that it would improve transparency and trust, especially as this is an area the ESO highlights as a priority on p10.
	We note the ESO's Energy Forecasting Strategic Project Roadmap ¹⁷ (published in June 2019). Within this, two further roadmaps have been provided: one for Platform for Energy Forecasting (PEF) delivery and one for the high-level energy forecasting strategic project. The deliverables in this PEF roadmap document have not been included in the 2020-21 Forward Plan, as previously requested (e.g. addition of specific models, such as wind models and short- and long-term demand models to improve forecasting accuracy). In order to meet our expectations, we expect the ESO to honour the deliverables and ambitions in both roadmaps, or justify why it cannot meet them. We would like these deliverables to feature in the updated version of the Energy Forecasting Strategic roadmap, due to be published in Q1 2020-21.
	We welcome that the ESO has responded to feedback around bringing forward RIIO-2 deliverables to the 2020-21 Forward Plan. The Design Authority will scrutinise the ESO's IT investments during the RIIO-2 price control. Therefore, we believe forming the Design Authority in time for RIIO-2 represents baseline expectations of a competent and co-ordinated ESO.
Design Authority	We challenge the ESO to progress IT scoping work as much as possible in 2020-21, to ensure that the Design Authority is able to scrutinise the ESO's progress as soon as it is formed. We believe this would give the ESO the best chance of implementing the tools and systems necessary to undertake their core system operation roles. The need for these new tools and systems is partly due to the ongoing energy transition and partly due to the ESO's inability in developing and implementing these tools earlier in the RIIO-1 period.
Improving information access	We welcome that this deliverable has been brought forward from the ESO's proposed deliverables for RIIO-2. We challenge the ESO to publish all data (where possible) that the Electricity National Control Centre (ENCC) uses to make decisions as a default, instead of relying on stakeholders to come forward and request data.
	It appears the ESO will use 2020-21 to build a strategy for its data platform. Smaller milestones would have been welcome, in order to understand the scope

¹⁷ The Energy Forecasting Roadmap can be found at: https://www.nationalgrideso.com/document/145941/download

More clarity of operational decision making	and timelines of this work (e.g. how it will build a "detailed strategy" for its data platform, how it will engage with stakeholders). The absence of this means that this deliverable does not have sufficient detail and is not sufficiently time-bound. Greater transparency around balancing actions and data is a key area that stakeholders have requested in the past. We welcome that the ESO has added interim milestones and more granular detail. However the interim milestones for Q3 and Q4 2020-21 are not specific enough. For example, we support the ESO "improving" the transparency of its trading decisions, but this is not a tangible deliverable. We would like to know how it will do this in order to assess its ambition. We echo the strong stakeholder sentiment that the ESO should publish all operational data as the default via their Data Portal, instead of asking stakeholders what data is valuable to them. We also note that stakeholders would like to understand why ESO actions are taken, what factors contribute to assets being selected 'out of merit' (linked to this, some stakeholders suggested publishing 'skip' rates' and the frequency of assets being selected 'out of merit' in the BM), and what the broad drivers are for the different categories in the monthly balancing services summary (MBSS) reports.
Publishing BMU ID for trades	We expect a competent ESO to be taking forward and implementing all recommendations from all industry code modifications.
Deliver second phase of Power Available integration	We encourage the ESO to support access for intermittent generation. The framework for providing Power Available signals was approved by Ofgem as part of Grid Code modification GC0063 in January 2015 ¹⁸ . However, Power Available signals are still not fully integrated into the ESO's systems and processes. Considering the benefits that this deliverable would unlock, we would recognise the timely completion of this deliverable as demonstrating baseline performance. Stakeholders have also called for the ESO to go further and put together a plan for intermittent generation to compete in balancing services.
Implement State of Energy Signal	We welcome the ESO's ambition to give visibility to the limited-duration technologies in the Control Room. This is compatible with the ESO's ambition of "Competition Everywhere". Whilst the ESO has briefly described the activities that will be carried out in 2020-21, there is a lack of specific detail regarding how the ESO plans to progress this deliverable over 2020-21 and why it has been delayed by a quarter. We look forward to seeing what solutions are proposed at the end of the year and how the ESO will engage with stakeholders to ensure that the State of Energy signal provides a level playing field in the market – regardless of technology type.
Inertia Measurement	Managing system inertia and RoCoF has been a long-term consideration for the ESO, as outlined in their System Needs and Product Strategy (SNaPS) in 2017 ¹⁹ . Whilst the delivery dates of its inertia measurement solutions (and an estimated percentage improvement in RoCoF measurement accuracy) are stated, there are no firm commitments past this. We would like to see clear tangible benefits arising from this deliverable by the end of the incentive year, including how this deliverable will feed through to balancing costs. The ESO should provide clarity on how this relates to similar innovation-funded projects.
Deliver competitively tendered black start contracts	We consider this deliverable to be tracking well so far and hope to see continued progress over 2020-21. In order to exceed expectations, the ESO would need to build on what was delivered over 2019-20 and make progress toward developing a market for restoration.

¹⁸ The Authority's decision for GC0063 can be found at: https://www.nationalgrideso.com/document/13411/download
19 The ESO's System Needs and Product Strategy (SNaPS) can be found at: https://www.nationalgrideso.com/document/84261/download

Metrics

Metric Our comments We have significant concerns with how this metric has been constructed for 2020-21. As a consequence, we will rely on the five-year historic average of costs as a benchmark for assessing the ESO's balancing costs performance during the 2020-21 incentives scheme. Firstly, we would like to clarify that Ofgem and the ESO agreed on the overall approach to determine balancing cost performance (i.e. using a five-year rolling mean average, with the possibility of additional adjustment factors), but the detailed methodology and the proposed adjustment factors have been developed and proposed by the ESO unilaterally and without inclusion in the draft consultation. We agree that this metric is not a target, and agree that it should be used for the purpose of comparing balancing costs to previous years. However, like all other performance metrics, this metric will be used to measure the ESO's performance. alongside the narrative that the ESO provides in their performance reports. Simply being above or below the benchmark cost does not equate directly to poor or high performance. We understand that there are many different factors which impact balancing costs and some drivers that are outside of the ESO's control, which is why the ESO's narrative is important alongside its outturn performance against the benchmark. As there are many drivers of costs which are within the ESO's control, it is important that this balancing cost outturn is used to measure the ESO's performance. We are also separately considering how to improve this metric for RIIO-2. Our previous comments regarding this metric still stand and we note that 1a: Balancing stakeholders continue to share this concern. We appreciate the addition of more detailed breakdown of this metric, including the methodology (as required under Cost Management the ESORI Guidance). However, the ESO has provided insufficient evidence to fully explain why their balancing cost benchmarks are justified. Adjustment factors: The ESO has proposed five adjustment factors, which include: energy uplift, RoCoF and ElecLink. The adjustment factors should be for foreseeable one-off factors or new system changes which wouldn't have been captured in the 5-year rolling mean, that are expected to affect costs for the upcoming year. **Energy uplift:** energy costs have been relatively stable over the past five years, but we noted an increase in 2019-20. However, we expect this increase to now be captured in the data. The ESO has not adequately explained why a further adjustment is required. An adjustment factor for energy costs would only be necessary if the ESO expects the increase in 2020-21 to be substantially greater than that of previous years. **RoCoF:** our analysis shows that these costs have been trending steeply upwards over the past two years (increasing nearly six fold between the periods 2015-16 and 2019-20). An adjustment factor for RoCoF might be required here, but we haven't seen any justification/data to support this. We don't consider an additional adjustment factor to be necessary unless the ESO expects and can justify the increase in 2020-21 to be substantially greater than that of previous years. We already note that the loss of mains programme is expected to deliver £10m of benefit this year. **Eleclink**: the ESO notes that two new interconnectors will be coming online this year and that the combination of ElecLink, IFA, Britned and NEMO in the same geographical area "has the potential to cause constraint issues if all the interconnectors are flowing in". We would need to see analysis on

	what the likelihood of this is going to be before considering whether an adjustment factor is necessary. Furthermore, we would expect the ESO to "unwind" this upward adjustment factor when these links are unavailable, or if the interconnectors aren't all importing energy.
	We also would like to reiterate the panel's feedback that commentary on the downward cost drivers of balancing costs, in relation to the ESO's deliverables, would be useful. The panel would also like more information on what the ESO will do in this upcoming 12-month period to drive down balancing costs.
1b: Energy Forecasting Accuracy	We welcome that the ESO has redesigned this metric, in response to stakeholder feedback. This metric now consists of an annual benchmark for both demand and wind forecast accuracy. We will use this as part of our performance assessment, but we will also be looking at our own analysis of forecasting accuracy and welcome additional input from stakeholders.
	We welcome the narrative the ESO has provided around the challenges faced in providing accurate day-ahead national demand forecasts and day-ahead BMU wind generation forecasts. The proposed benchmark for day-ahead demand annual mean absolute error for 2020-21 is 571MW. This is a slight increase from last year's provisional figure (551MW for 2019-20). The proposed benchmark for the day-ahead wind annual percentage error is 5.27%. This is a slight increase from last year's provisional figure (5.11% for 2019-20).
	Some of our comments from last year's Formal Opinion still stand, around how the calculation of benchmarks using a three-year average may "lock in" less ambitious benchmarks. Whilst the ESO has provided narrative around how producing accurate forecasts is becoming more challenging, we challenge the ESO to be proactive in this area by improving forecasting capabilities in response to the changing system. We would like to see the ESO's forecasting improvements deliver tangible results (either through improved forecasting accuracy or capability). We look forward to seeing this narrative in subsequent performance reports.
	The ESO has set a baseline target of one excursion for either voltage or frequency in 2020-21. We note that in the ESO's RIIO-2 business plan, the ESO proposed a target of zero excursions for both voltage and frequency. We will use this metric in the ESO's performance evaluation but we consider a competent ESO should be targeting zero excursions as a baseline.
1c: Security of Supply	The reporting of voltage and frequency excursions is based on whether or not the excursion occurs for longer than a prescribed time period (15 minutes for voltage and 1 minute respectively for frequency). We encourage the ESO to also report notable excursions that occur for less time (<15 minutes for voltage and <1 minute for frequency), so that greater insight can be provided around the security of supply.
1d: System Access Management	We welcome the more ambitious benchmarks for this metric and we will use these benchmarks as part of our performance assessment. We look forward to further narrative demonstrating how the ESO has effectively worked with TOs and DNOs to improve performance in this area. We echo our previous comments on this metric, that the ESO must ensure it is seeking to optimise overall system costs rather than focussing on minimising planned outages to meet a target.
1e: Customer Value Opportunities	We welcome the further detail the ESO has added to this metric, including the description about what the ESO is doing to create this additional value and how the MWh value of energy saved is calculated. We consider that this might be better evidenced as part of the 'evidence of benefits' evaluation criteria rather than as a standalone metric. We will place relatively little weight on this as a performance metric, because the benchmarks have not been properly justified. Therefore, it is not clear whether they are sufficiently challenging. We would like these benchmarks to be updated to reflect 2019-20 performance. We will instead view how this year's

	total energy savings compare with the last year's savings as an indicator of the ESO's performance in this area.
1f: CNI System Reliability (Performance Indicator)	As this is a performance indicator and not a metric, it will not be used as part of metrics criteria in the 2020-21 scheme to assess the ESO's performance. The ESO plans to report on its ability to forecast and deliver planned outages for key critical national infrastructure (CNI) systems as a performance indicator ahead of RIIO-2. If historical data already exists regarding the outage time for CNI systems, the ESO should have included appropriate benchmarks for this in order to present this as a metric instead of a performance indicator.
	We expect very high CNI system resilience as part of our expectations of a competent and effective system operator.

Role 2: Market Development and transactions

<u>Deliverables</u>	
Deliverable	Our comments
Product roadmaps on response and reserve implementatio n (priority)	There are a number of deliverables and commitments made by the ESO in its product roadmap for response and reserve which do not feature in this Forward Plan for 2020-21. We encourage the ESO to meet the original commitments made in this roadmap. Overall, we consider the ESO has rightly prioritised these deliverables. At the end of the year, we will be looking for the ESO to demonstrate that it has been able to meet the original commitments made in its product roadmap, in a manner that meets our expectations.
	The commitments made in the roadmap that do not feature in the Forward Plan have been listed below:
	 Frequency response: "Consultation on the final design of end-state services, <u>publish implementation plan</u>" due Q1 2020-21. "We will therefore publish our strategy on mitigating barriers to entry for frequency response services in Q4 2019/20."
	The ESO refers to a consultation on the future frequency response (beyond dynamic containment) in the Forward Plan but does not clarify that it will publish an implementation plan for frequency response. At present, it is not clear if/when this implementation plan for frequency response will be delivered. We think it's important that stakeholders see this clarity on the direction of travel.
	Frequency response auction trial: • "Trial separate procurement of low-frequency and high-frequency response services" due Q3 2020-21 • "Publish plan for day-ahead procurement and consult on enduring auction design" due Q3 2020-21
	We note that the ESO has said it will publish a report on the auction trial in Q2 2020-21, but it has not mentioned the roadmap commitments above in its Forward Plan. The ESO should be meeting these commitments.
	We think it's important that the ESO considers how the auction trial will move to day-ahead procurement as this was the original intention in 2018-19 and now appears to be the intention for 2021 (on page 14). Stakeholders have reiterated this feedback to accelerate progression of day-ahead procurement. We believe it is fundamental that the ESO to put together a plan for delivering this over 2020-21 and consider the interdependency of this deliverable with its Clean Energy Package obligations.
	Reserve markets:

- "Consult on strategy for more competitive procurement of optional fast reserve" due Q1 2020-21.
- "Study impact of completed reforms and consult on further development of reserve services" due Q4 2020-21.

We welcome the commitment to deliver a proposal for reformed reserve products (which was due in Q1 and is now estimated for Q4 2020-21). The above deliverable in the roadmap mentions <u>consulting</u> on further development of reserve but this commitment isn't mentioned in this Forward Plan. We would like the ESO to meet its original commitment to consult with stakeholders and if it is unable to consult with stakeholders then we would like this to be set out clearly with an explanation. We note that stakeholders would like more clarity on how existing products will be phased out.

We note that the deliverable titled 'Strategy for moving to Optional Fast reserve products into more competitive procurement' has been removed from the ESO's Forward Plan. The proposal for reformed reserve products should include the strategy for optional fast reserve, to tie it to the commitments made in the roadmap, and as requested by stakeholders. It is not clear if that is still the intention.

The proposal for reformed reserve products in the ESO's Forward Plan should also include 'the impact of completed reforms' to meet the original commitments made in the roadmap.

In the Forward Plan description, the ESO described that it will "increase competition and transparency in procurement of fast reserve". We welcome this, but note that there is no explanation for how it will achieve this. It is unclear whether this will be an aim of its proposal for reformed reserve products or whether this will be a separate piece of work.

Clean energy package obligations

The ESO also needs to ensure its existing response and reserve services and future reforms align with its Clean Energy Package (CEP) obligations²⁰. It is helpful to see an implementation plan included for how reformed reserve products will interact with frequency response and pan-European products. More generally, the ESO needs to have a clear and transparent engagement with industry on how it is implementing its current CEP requirements to the *existing* response and reserve product suite. Where further change is needed, it should have an ambitious implementation plan to align its products to the CEP requirements.

We note that there are a number of commitments the ESO must meet as part of the CEP around the timely procurement and use of balancing services. In the absence of a specific metric to track progress against this, we would like to receive regular updates from the ESO during the monthly reporting cycle.

Pan-European replacement reserve standard products (priority)

We note that since publication of the Forward Plan, the ESO has communicated that the implementation of GB's access to the Trans-European Replacement Reserve Exchange (TERRE) market will be delayed until at least the end of October, due to COVID-19 reprioritisation. We have set out process ESO should follow when reviewing planned activities in order to address challenges raised by COVID-19²¹. We intend to discuss this further with the ESO. We hope to receive regular updates from the ESO during the monthly monitoring meetings as this progresses through-out the year.

Product roadmap for reactive implementatio n (priority)

We welcome the additional detail provided for these deliverables, explaining how this work will progress throughout the year. From the existing description in the ESO's Forward Plan, it appears that the ESO will produce a strategy explaining *how* it will integrate learnings from existing work. It does not appear that the ESO will be producing a plan by Q3 2020-21, more *a strategy to create a plan* at a later date. The ESO confirms that it will be engaging with industry on a wider scale in

²⁰ Article 6, recast Electricity Regulation: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0943&from=EN

²¹ Our letter to the ESO on its priorities during COVID-19: https://www.ofgem.gov.uk/coronavirus-covid-19-information-energy-licensees-and-industry

	March 2020, but the timelines and approach is set out in its product roadmap (which has been delayed), therefore it is not clear what will happen and when.
	In the RIIO-2 Business Plan, we note that the ESO proposes to communicate next steps on reactive power procurement in Q2 2021-22. We are keen to see clear direction on the way forward on reactive power over 2020-21 in order to meet our expectations on this priority area.
Facilitating code change	These deliverables seem to be focussed on how the ESO communicates with stakeholders. We appreciate the additional detail and context provided around the number of codes the ESO is administering as part of its code administrator role. It is not clear how the proposed code administrator report will deliver additional benefits and we expect this reporting to be done as part of the standard incentives performance reporting process.
	We note that the majority of the deliverables are focussed on communications with stakeholders and reports – it is not clear why this set of deliverables has been chosen as a priority. The panel also felt that it is not why this will address the root causes of the poor code administration satisfaction scores seen in 2019–20. And we encourage the ESO to go beyond writing reports to deliver tangible change to processes.
Facilitate electricity network charging reform through Charging Futures	We welcome the work the ESO is doing on Charging Futures but we note that there are no deliverables around the work the ESO is doing to support the Access Significant Code Review (SCR) policy development (beyond promoting it through Charging Futures).
Introduce new 'new entrant' e-learning on charging	We appreciate that the ESO has expanded on the description in the 2019-21 Forward Plan and has provided more detail about how this builds on work done in 2019-20. It is clear to see what is being delivered and when.
Establish a 'cross party' approach to onboarding	We note that this work will involve working with Elexon, and the guidance will be produced over the space of a year. We asked whether this could be progressed quicker in order to be more ambitious and the ESO said that Targeted Charging Review (TCR) and RIIO-2 deliverables may initially limit progress initially. We would like the ESO to make progress with this deliverable to reduce barriers to onboarding.
Lead code modifications	The ESO has listed the modifications it will "lead", and we appreciate the additional context provided about why the ESO has listed these modifications specifically. However it still remains unclear what the ESO will do specifically to lead these modifications. We will need to see this detail in order to measure the success of this deliverable at the end of the year.
Capacity Market Modelling – facilitating broader participation in the CM	We appreciate the additional detail provided for why this has been delayed by a year, but it is still not clear what will be delivered by Q4 2020-21. The ESO references an investigation, a methodology and a new register of embedded assets, but it is not clear what will be delivered and when. We understand that this is part of a DCUSA modification, but some smaller working-level milestones would have helped to provide more transparency and track progress throughout the year.
Delivery of Power Responsive initiative	We note that another deliverable has been added. We can see that more detail has been provided to explain how the ESO will "facilitate constructive dialogue", but these deliverables are still not time bound as the target delivery date spans the whole year. If there are smaller milestones associated with this work, it would be helpful to have sight of this in order to track the ESO's progress throughout the year. Please refer to the Role 3 deliverable, 'Active engagement with DSO and coordinated flexibility' for our comments about the ESO's input into Open Networks.

<u>Metrics</u>

Metric Our comments

2a: Reform of We agree with the improvements made to this metric. We will use this metric as part of the ESO's performance assessment, but will not rely on all of the ESO's proposed benchmarks. services markets This metric is supposed to measure how the ESO is moving toward open and competitive procurement. This metric looks at the proportion of balancing services that are "competitively procured" or "bilateral" and we welcome the inclusion of benchmarks as requested. The ESO notes that it "must improve its performance from 2019-20" in order to receive a score of "in line with expectations". We have the following comments with regard to the ESO's chosen benchmarks: The benchmarks for reactive power, Black Start and constraints are suitable. And we consider the exceeding expectations benchmark for these markets (targeting 20% to be procured through open and competitive procurement) to be sufficiently challenging. Currently the ESO procures 43% of reserve through competitive procurement but it would still be in line with expectations if this dropped to 41%. This is not an ambitious benchmark. Currently the ESO procures 81% of frequency response through competitive procurement but it would still be in line with expectations if this dropped to 75%. This is not an ambitious benchmark. Therefore when reporting this metric, the ESO must show the current percentage procured through open and competitive procurement over 2019-20 in order for a direct historic comparison to be made, irrespective of benchmarks. The ESO says they will update this metric and provide market prices in each market and we look forward to seeing this reported during the year. The panel previously fed back that they would welcome the publication of procured volumes, market spend and market price, in each market, as part of this metric. 2b: Code We agree that this should be included for 2020-21. We appreciate the additional context provided around the number of modifications the ESO is administering, but administration we do not agree with the ESO's chosen benchmarks as they are not sufficiently ambitious. The ESO's code administration stakeholder satisfaction is currently below satisfaction average, therefore a benchmark of "maintaining performance within +/-5% for the average score across all three codes when benchmarked against previous CACoP scores" is not satisfactory. Last year the chosen 'in line with expectations' benchmark was "increased overall performance across all our three codes (STC/CUSC/Grid Code)". We consider the ESO's chosen benchmarks for 2020-21 to represent less ambition that last year. We expect a competent ESO to have average stakeholder satisfaction (relative to other code administrators) in order to meet expectations. 2c: Charging We agree that this metric should be included for 2020-21 and we appreciate that futures the baseline has been updated in line with 2019-20 performance. We will use this metric in the ESO's assessment but will not place much weight on the ESO's proposed benchmarks. We do not consider the 'in line with expectations' benchmark to be sufficiently challenging as it targets a range of "+/-5% of the baseline score". A reduction of 5% is not in line with expectations especially as last year, the ESO's ambition for this benchmark was "average survey scores equal baseline". 2d: Year We will place little weight on these metrics in the ESO's performance evaluation. We have previously expressed (alongside stakeholders) that further detail is ahead BSUoS required in order to understand why these metrics are challenging, especially as forecast and factors outside of the ESO's control contribute significantly to the performance of these metrics. We note that the ESO has improved its forecasting but will not be 2e: Month spending more resource on this due to ongoing policy development around BSUoS. ahead BSUoS Therefore we question how useful it is to have these metrics as part of the incentives

process. We understand that stakeholders find this information useful, and so it

forecast and

may be best placed reporting this via the ESO's Open Data portal. We note the ESO has suggested removing these metrics for RIIO-2, noting that they don't sufficiently measure the ESO's performance but suggests keeping them for 2020-21. If the ESO intends to improve BSUoS forecasts over 2020-21, this should be set out in the supporting narrative to this metric.

Role 3: System insight, planning and network development

Deliverables

Deliverable (Our comments
Lead the of Loss of Mains Protection setting programme	We note that the ESO previously had two deliverables on loss of mains, which has now been consolidated into one under Role 3. Previously, the ESO said it would run four tender rounds through 2020-21 (a delay of a year due to approval of a distribution code modification) and will review its methodology. This has now been removed with no explanation. Given the cost implications for consumers of not progressing this work on an urgent basis, we would like the main actions to be clearly set out, in order to track progress of this priority deliverable.
Address actions raised in E3C treport of 9 August 2019	The ESO has responded to feedback by adding a specific deliverable to reflect the actions arising out of the Energy Emergencies Executive Committee (E3C) report on the power system disruption on the 9 th August 2019. The ESO has described these actions at a high-level and has committed to delivering them by Q1 2020-21. We note, however, that there is no reference to Ofgem's report on the 9 th August 2019 Power Outage. We expect the ESO to act on the recommended actions in Ofgem's report, as well as the actions raised in the E3C report.
efficient reactive power flows	In order to implement an approach for efficient reactive power flows between networks, the ESO says it will "continue to assess the effectiveness of different solutions" and undertake "further work". However it is not clear what further work will be undertaken and it is not clear how this will lead to the implementation of an approach in Q1 2020-21. We look forward to hearing more detail about this through the regular monthly incentive monitoring process and at the end of Q1.
Pathfinder projects (Stability, Mersey Voltage, Pennines)	The ESO has given priority to all the pathfinder projects however most of them have been postponed to later dates. We recognise that some of these delays are due to refinements made to tender timelines in response to stakeholder feedback, but we would like more clarity on the reasoning behind the other delays. Previously we said that this is an area that is due to deliver significant benefits and so we would like to see more granular milestones associated with this work in order to better understand what is being delivered and when. This will also help us to track progress throughout the year. We understand that visibility of interim milestones will be given through other ESO-specific communications, but we have consistently fed back that the Forward Plan should include all upcoming deliverables from all projects in one place. We consider the ESO's 2020-21 pathfinder deliverables to now be part of expected performance. The ESO was rewarded with positive financial incentive rewards for the pathfinder work in our 2018-19 incentives decision. We expect to see timely progress and conclusions to the pathfinders' procurement exercises with open, fair competition and a level playing field for all types of participants. The operational requirements the pathfinders (particularly stability and voltage) are seeking to satisfy are fundamental to secure system operation, and incur substantial costs. We therefore expect to see these fully integrated into core network planning processes rather than continue under the banner of a pathfinder. The panel previously fed back that it would like the tender/application process to be as transparent as possible in order to identify all opportunities.

	when this will happen during the year. From the description in the Forward Plan, it seems that the ESO will complete phase 2 of the pathfinder by Q4 2020-21, and in order to do this, it will develop and test processes to define
	requirements and then obtain and evaluate options to meet these requirements. Previously the ESO also said that it will develop a methodology for inclusion in the NOA methodology in Q1 2020-21. We would like to know if this is still going to be met as it isn't mentioned in the Forward Plan. We also note that the delivery date has moved back from Q3 2020-21 to Q4 2020-21, but no explanation has been provided.
	 The Mersey voltage pathfinder – this has been delayed from Q3 2019- 20 to Q1 2020-21 due to reprioritisation. The ESO plans to make a final decision in April to award the tender and we would like to know what, if any, work will be carried out afterwards. The ESO mentions post-tender evaluation, but it is not clear when this will be carried out and what the output will be.
	• The Pennines Voltage pathfinder - this was expected in Q3 2019-20, now Q3 2020-21. These deliverables have been delayed by a year due to Fiddlers Ferry closure and associated reprioritisation for voltage assessments. The ESO states that it will be reviewing whether it is in the interest of consumers to progress the Pennines voltage pathfinder at "this time", but it is not clear why this needs to be reviewed and what other timing options are being considered. It is interesting to see that the ESO will develop the necessary funding mechanisms to facilitate participation of DNO solutions, but it is not clear if this is dependent on whether this pathfinder is continued or not.
	 Constraint management pathfinder - we understand that this has been delayed to prioritise the pathfinders which resolve the most immediate system security issues. We have seen the costs associated with managing constraints increase significantly over the past year, and so we consider this should also be progressed as soon as possible in order to start alleviating some of those costs.
Early competition plan	We encourage the ESO to deliver this work as part of Role 3 and we appreciate the additional clarity from the inclusion of more granular milestones so we can track progress throughout the year.
NOA: Enhanced	This deliverable is focussed on improving the accessibility of the Electricity Ten Year Statement (ETYS) and NOA publications. We note that some of these were for delivery in 2019-20 (publication of needs through RFI packs was due in Q1 2019-20 and enhancements to ETYS to include requirements for a wider set of system needs was due in Q3 2019-20). We received an update that the 2019-20 deliverables have been completed, so we are unsure why they've been included in the 2020-21 plan.
Communicati on	The ESO mentions that it is "expanding the NOA to invite network and non-network solutions across the transmission and distribution networks to meet transmission needs" in the January 2020 update of the Network Development Roadmap ²² , previous Forward Plans and the original Network development roadmap ²³ . The ESO has considered 'ESO-led commercial solutions' through its annual NOA, but it's unclear how open/accessible the current process is to non-network solutions. We

²² Network Development Roadmap: Progress Update (January 2020):

https://www.nationalgrideso.com/document/162336/download

23 The original commitment in the Network Development Roadmap states that the ESO will "take steps over the next three years to expand the NOA to allow the longer-term comparison of network and non-network solutions across transmission and distribution ... [and will] develop our approach through our pathfinding projects." - Network Development Roadmap (July 2018): https://www.nationalgrideso.com/sites/eso/files/documents/Network%20Development%20Roadmap%20-%20Confirming%20the%20direction%20July%202018.pdf

would like to see more transparency in the process of developing 'ESO-led commercial solutions'.

It is still unclear to us how the ESO plans to build and deliver its commitment to "expand the scope of the NOA" and, in particular, whether (or how) the pathfinders and NOA process will merge into one coherent process going forward. We strongly expect this to be delivered in the first years of RIIO-2, and the ESO should be more ambitious to lay the foundations for this over 2020-21 in order to exceed expectations. The panel also considers that the NOA should be linked to proposed market developments, including pathfinders.

We also note that our ESO incentives decision for 2018-19 rewarded the ESO with the improvements it has made to add commercial solutions to the NOA process (via pathfinders). To exceed expectations, the ESO needs to demonstrate that it is going beyond what it has delivered in 2018-19 and ensure that requirements signalled in the NOA are open to market-based flexibility solutions and distribution solutions as a standard step in the NOA process and these solutions are considered on a level playing field with traditional network build solutions.

We appreciate that these deliverables have been rewritten to incorporate our feedback. We can see this work area has been delayed compared to the commitments made in the 2019-21 plan and little evidence has been provided to explain why there have been delays, therefore we do not consider this to be transparent or these delays to be justified. This is an important piece of work that will inform the development of distribution flexibility markets and the delays we see so far across these deliverables are disappointing. We will be looking to see progress made against these deliverables at the very least this year. Any further delays should be evidenced clearly with specific examples in order for us to take this into account in our end of year decision.

Regional Developmen t Programmes (RDPs)

- Commercial contracts for balancing services from Distributed Energy Resources (DER) the aim of this deliverable was to *implement* new commercial contracts to allow DER to participate in the provision of transmission constraint management services in the ESO's RDP areas. This was expected to be delivered by Q4 2020-21. This has now been removed, but no explanation has been provided. We assume this has been merged into the deliverable below and we note that instead of implementing commercial contracts, the ESO will be scoping commercial arrangements. We don't consider this is to be transparent or ambitious.
- **Development of commercial arrangements for transmission** constraint management service from DER - in the original Forward Plan for 2019-21, this deliverable was expected to be implemented by Q4 2020-21²⁴. Since then it has been pushed back to Q2 2021-22 and it looks like the ESO is planning on scoping commercial arrangements and publishing a delivery plan with WPD and UKPN respectively by Q3 2020-21. We are concerned that the actual implementation to support DER to provide transmission services has now been pushed back into the RIIO-2 period without any clear justification. We understand that this project involves third-parties, is 'design by doing' and agreement has to be reached with each respective DNO in order to progress work in this area. However we have not seen evidence of a specific problem outside of the ESO's control to warrant these delays. Due to these delays, and the subsequent reduced scope of work this year in relation to the original commitments made, we do not consider this to be ambitious enough. We also expect the ESO to be fully coordinating with the DNOs through the (Electricity Network Association) ENA and feeding into the development of

²⁴ This deliverable was originally referenced as 'Enhanced systems to facilitate balancing services from DER'.

standardised flexibility services for DER, and the ESO should not be developing separate bespoke arrangements where the standardised services used by the DNOs for managing their own network can also satisfy transmission needs.

- Co-ordinated DER intertripping functionality inter-tripping of DER for transmission fault management has been delayed due to the scale of coordination required between the ESO, TOs and DNOs, aligning delivery plans and due to required TO outages. This is some useful context to consider but still lacks detail. This year, the ESO intends to deliver intertripping for DER with UKPN and WPD and will work towards this with SSE-N. We would also welcome more narrative around the ESO's strategy around procuring commercial services in times of low demand.
- Generation Export Management Scheme (GEMS) to manage transmission constraints we appreciate the additional milestones added to this deliverable. We can see that the implementation of GEMS was originally due for Q1 2021-22, and this has been pushed back to Q1 2022-23. It is still not clear why this has been delayed by a year.

Identifying future RDPs – we note that the ESO is planning on producing another roadmap to identity future RDPs. The ESO should focus on delivering existing RDPs, without further delays, instead of publishing more roadmaps.

Active engagement with DSO and coordinated flexibility

We agree that this will be important and we appreciate that this new deliverable has been included following stakeholder feedback. We consider that the ESO has a key role to play in the development of co-ordinated flexibility markets and should be working with DNOs and as part of the Open Network project to progress this collaboratively. The ESO plays a pivotal role in the coordinated development of standardised services to meet whole system needs which is why their engagement is so crucial. This includes ensuring that flexibility products tendered by the ESO take account of and are as consistent as possible with other sources of value for flexibility providers (such as the Capacity Market and balancing and ancillary services).

The ESO says it will "actively input" into Open Networks. We have heard feedback from stakeholders that the ESO's engagement has been limited. Therefore we consider that the ESO could be more ambitious in this area by detailing what it will do to drive this work forward in a collaborative manner. Due to the limited detail provided, we will be looking for stakeholder feedback on this at the end of the year to understand how well this has been delivered. The panel also encouraged the ESO to engage proactively with non-network stakeholders throughout the duration of the work to ensure solutions are appropriate for the whole industry.

Voltage needs identification tools/proces ses

It is good to see that this is still progressing to time and hasn't been delayed, however we note that this is a Network Innovation Allowance (NIA) project. The ESO says it will apply the NOA approach of comparing network and non-network solutions to regional voltage challenges and will implement the learnings from the work done in conducting the voltage need identification process and document this in the NOA methodology. It would be good to understand how this will feed into the NOA process or if it will remain separate.

Whole system learning publication

We note that this deliverable was due in Q2 2019-20, and was delivered in Q4 2019-20. We consider this publication to be a summary of its Forward Plan deliverables and innovation projects that relate to will facilitate a whole system approach, but it is lacking a coherent strategy and collaborative way forward. The ESO previously committed to providing a further update on this publication in Q2 2020-21. This has been removed from this Forward Plan. We understand this is a complex area but we consider the ESO should be communicating this with stakeholders and could be taking a more proactive approach delivering this thought leadership.

<u>Metrics</u>

Metric	Our comments
3a: Right First Time Connection Offers	The ESO has updated its benchmarks in line with its performance over 2019-20. The ESO is targeting 95-99.9% of connection offers that are right first time in order to be in line with expectations. This is a baseline requirement that we would expect from a competent and effective ESO and so we consider these updated benchmarks to be reasonable. We will continue to track this metric, and use it to assess the ESO's performance. We note the ESO has kept this metric. Previously we said that this is a useful thing to track but we question whether this should be done via a metric. The purpose of metrics is to measure and track the ESO's performance throughout the year, and the
3b: NOA consumer value	metrics is to measure and track the ESO's performance throughout the year, and the ESO will only be able to update this metric once a year. We consider that the benefit this metric evidences could be better included as part of the 'evidence of benefits' criteria. The benchmarks for this metric should also be updated to reflect performance over 2019-20. Until this happens, we will not place much weight on this as a performance metric.
3c: Customer connections - customer satisfaction	We note that this is a new proposed metric that will look at the satisfaction of customers connecting onto the transmission and distribution networks, through an ESO-focussed survey. At this stage, the metric is very poorly defined and insufficient evidence has been provided to explain where these benchmarks have come from. We will therefore place relatively little weight on this metric through the evaluation.
3d: Whole system, Unlocking Cross Boundary solutions (performanc e indicator)	As this is a performance indicator and not a metric, it will not be used as part of metrics criteria in the 2020-21 scheme to assess the ESO's performance. This was previously a metric, and is now being proposed as a performance indicator as the ESO considers it is difficult to set benchmarks. We consider that constructing an effective metric in this area is challenging as it is difficult to isolate the impact of the Appendix G process effectively in order to assess the value of the ESO's actions. We would need to see evidence that these connections included in this metric wouldn't simply have happened anyway and aren't the result of an upward trend of increasing connections.
3e: Future balancing costs saved by operability solutions (performanc e indicator)	As this is a performance indicator and not a metric, it will not be used as part of metrics criteria in the 2020-21 scheme to assess the ESO's performance. This is a new proposed performance indicator, which will relate to the savings the ESO will make across the five areas of operability (thermal, frequency, voltage, stability and black start) from the constraint management, voltage and stability pathfinders. The ESO will consider the extent to which each of the projects listed above would reduce balancing costs in future years. This looks like a useful thing to track but we would like to see the methodology and analysis underpinning this assessment as well as how it will calculate the counterfactual spend in each of the five areas of operability. It may also be worthwhile to put in 2019-20 figures as context for this metric.
3f: Capacity saved through operability solutions (performanc e indicator)	As this is a performance indicator and not a metric, it will not be used as part of metrics criteria in the 2020-21 scheme to assess the ESO's performance. It relates to RDPs and appears to measure where these RDPs have delivered MW capacity, but it is not clear how the output of RDPs will be used in this indicator. In order to use this reliably, we would need to see the underlying analysis that would calculate the baseline capacity and capacity delivered from RDPs.