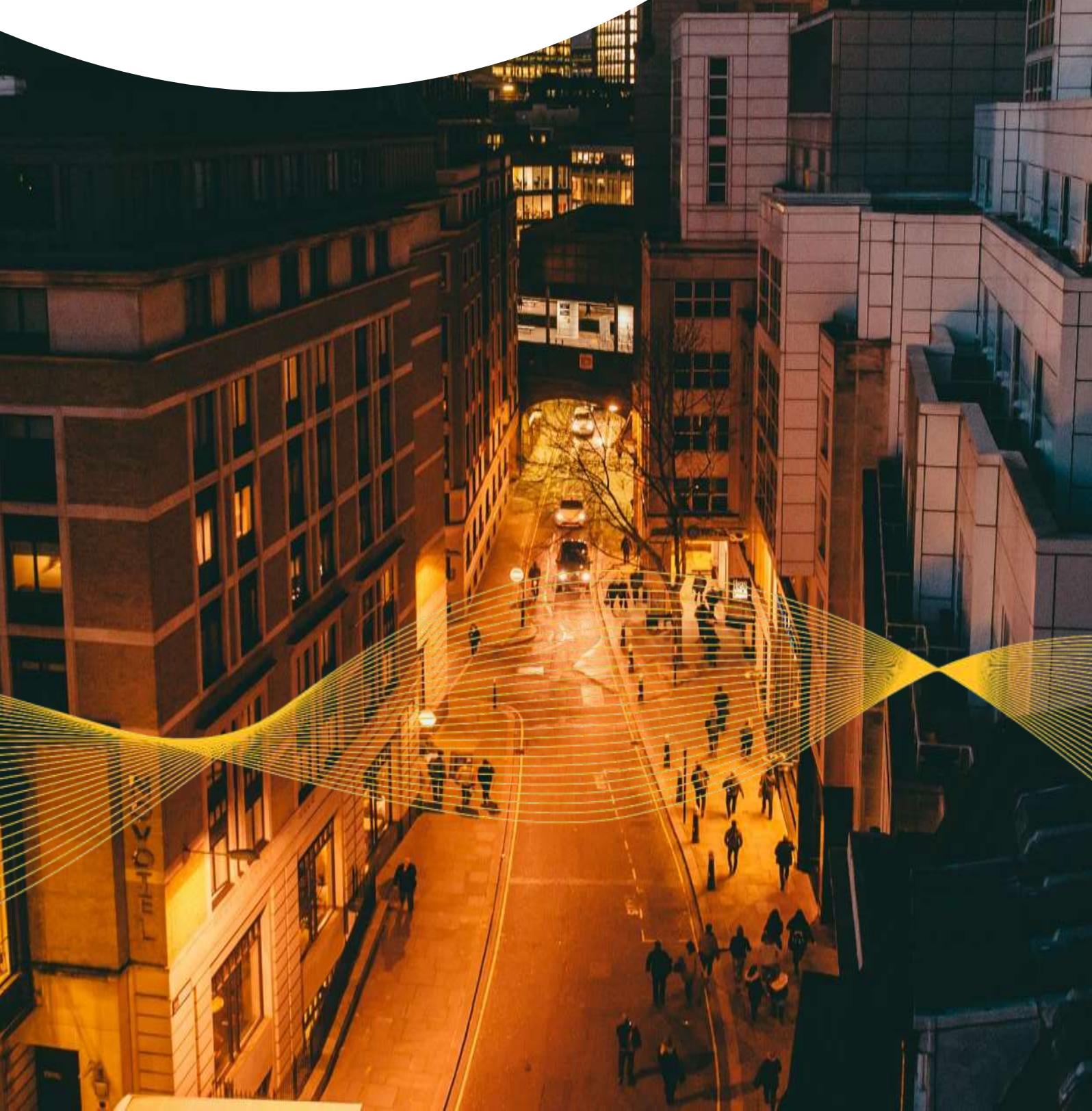


Our response to Ofgem's feedback

July 2020



Appendix 1: Our response to Ofgem’s Formal Opinion

We have reviewed the feedback given by Ofgem in their Formal Opinion¹. In many cases, we will address this feedback via our regular incentives reports. In other cases, we have taken the opportunity to amend the deliverables and metrics tables to accommodate the feedback received. However, there are also some cases where it is not practical to make a change resulting from the Formal Opinion feedback: in these cases, we explain our rationale within this appendix.

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¹ https://www.ofgem.gov.uk/system/files/docs/2020/05/ofgem_formal_opinion_2020-21.pdf

Role 1 Formal Opinion feedback on deliverables

Deliverable	Ofgem Comments	ESO response to feedback	Address via reporting, explanation, or change to deliverables table?
Produce plan for widening access to API system	<p>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[ing] the scaling requirement for the API system”, but will only produce a plan if this is required. 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.</p>	<p>We have reviewed our approach and we are going to widen access to the API, and have re-named the deliverable to show this. This is going to be done in two ways:</p> <ul style="list-style-type: none"> We are reviewing the applicable communication standard and will relax the size threshold (currently 100MW) for use of the API. This document which requires Grid Code Panel approval will be completed in September 2020. We are now allowing use of the API across all market routes subject to the communication standards. 	Change to deliverable (now called Widen Access to API system) and description
Expand dispatch facility to handle a large number of small Balancing Mechanism Units, subject to market take-up (priority)	<p>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. Therefore, we expect the ESO to make necessary changes to reduce any undue barriers to entry for VLP participation where possible. We expect that the ESO will build on this over 2020-21 and integrate the interim manual process into automated control room systems, so that the ENCC are able to dispatch a large number of small BMUs by the end of the year. Furthermore, stakeholders would like further clarity on what the ESO means by a “large number” of small BMUs.</p> <p>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 effectively participate. We note that the scale of this expansion will be kept under review, and depends on how many VLPs come forward. Therefore, we have some concerns that this review may not result in tangible action being</p>	<p>The comments are relating to pre-qualification and registration activities. Article 162² of the SOGL (Regulation (EU) 2017/1485) sets out a maximum of 5 months for prequalification.</p> <p>As part of these activities, we are supporting market participants to register as VLPs, prequalify their units and integrate with IT systems including dispatch platforms. VLP wider access has been live for 6 months and therefore the process is still at an early stage. We are continually reviewing the process to reflect the experience which has been gained from early adopters and to incorporate improvements to ensure VLPs are live in the BM as soon as practicable and within the five-month timescale.</p> <p>We continually monitor and forecast the future volumes of number of market participants, prioritising and delivering the backlog of system changes and identifying system upgrades that are required to ensure the existing systems are capable of handling the increasing number of participants.</p> <p>We have changed the wording “large number of small BMUs” within the description, as it is not a specific statement. Currently, our dispatch system can accommodate up to 100 small units. We plan to scale this, such that by the</p>	Change to deliverables table and will address via reporting

² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R1485>

	<p>taken. 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.</p> <p>Alongside these deliverables, we previously suggested that it might be worthwhile for the ESO to report on the number of VLPs entering the BM, in order to see 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 mid-year stage).</p>	<p>end of September it can accommodate a larger number of units. We will keep the scale of this expansion under review, depending on how many market participants come forward to participate. With respect to the number of VLPs, we would be happy to report this throughout the year in the incentives quarterly reports.</p>	
Interconnector Programmes	<p>We are mindful that the go-live date for each interconnector will affect timings, but we expect the ESO to demonstrate proactivity in this area. The ESO should have a more 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), to 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 stakeholders to facilitate good stakeholder relationships as well as the smooth integration of interconnectors into their operational systems.</p> <p>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 should be doing more work in this area to understand the implications of this – particularly on wholesale prices and the socio-economic welfare of GB consumers – and demonstrating what it is doing to manage this going forward.</p> <p>We also note that the ESO has not included its ongoing consultation around the 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.</p>	<p>We have reviewed our activities relating to Interconnector (IC) Programmes, in light of comments made. Firstly, we have added more information on our current and additional activities in the deliverables table broken down into:</p> <ul style="list-style-type: none"> • New IC connections/ systems • IC engagement • IC curtailment/ consultation <p>Deliverables that have been added include:</p> <ul style="list-style-type: none"> • Sharing our summary milestone plans with Ofgem for all imminent IC connections and material system changes . • We will engage with the broader industry in Q2 2020 to seek views on the optimum future model for ICs, to better understand their impact on system operability • In relation to IC curtailment, we are currently engaging with Ofgem to develop a pathway to better understand the impact for GB consumers and the steps required to conclude the Net Transfer Capacity (NTC) commercial arrangements consultation. We remain committed to working with the industry to implement an enduring solution in a timely manner. 	<p>Change to deliverables table, summary milestone plans provided to Ofgem</p>
Platform for Energy	<p>We welcome the provision of more granular forecasts but there is limited information on the</p>	<p>ESO's strategic forecasting cloud Platform for Energy Forecasting (PEF) is underpinned by scalable & flexible</p>	<p>Change to deliverables table</p>

<p>Forecasting (PEF)</p>	<p>“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 this new system over the next year.</p> <p>Aside from releasing more forecasts, the Forward Plan offers limited detail as to how the ESO plans to make forecasts “more accurate...and 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.</p> <p>We note the ESO’s Energy Forecasting Strategic Project Roadmap³ (published in June 2019). In the document, two roadmaps have been provided: one for Platform for Energy Forecasting (PEF) delivery and one for the high-level energy forecasting strategic project. We are disappointed that the deliverables in this 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). We expect the ESO to honour these deliverables and ambitions committed to in both roadmaps or justify why it can’t meet them. We would like these deliverables to feature in the updated version of the Energy Forecasting Strategic roadmap, to be published in Q1 2020-21.</p>	<p>technology hosted on an advanced cloud platform. The team use the advanced cloud computation power to run tens of thousands of concurrent models using some of the latest machine learning, deep learning and reinforcement learning integrated with statistical approaches. The use of this technology will enable more accurate energy forecasts to be transparently available to the control room and the open market. This technique is essential given that much of the embedded renewable generation is not controlled centrally, but rather locally by market participants based primarily on cost and weather. Accurate prediction of this decentralised ecosystem is critical to achieving cost and carbon efficient residual balancing operation of the transmission-connected assets. National Demand forecast (Referred as INDO on BMRS) and National Solar power generation forecast are fully developed and are already in use already.</p> <p>As an Agile project, PEF has been able to reprioritise and bring forward part of the National Demand forecasting product (non-machine learning approach), facilitating improvements in the short-term National Demand forecasts. This re-designed national demand forecasting has been running on PEF since Q3 2019-20.</p> <p>Localised grid supply point (GSP) level forecasts have been developed using a new machine learning approach. The GSP forecasts has been further enhanced into three sub-components: GSP Net Demand, GSP Wind and GSP solar, further contributing to improved accuracy by explicitly incorporating forecasts for distribution connected generation. This GSP forecasts are currently in a trial and validation phase, ensuring this work can deliver maximal benefit. Further benefits have been creating by including additional metering and weather data, and increasing ease of use by visualising the forecasts using Business Intelligence software. Early analysis suggests a positive step change improvement.</p> <p>We have also added more information about the deliverables in the updated roadmap published in June 2020. We are currently committed to deliver all PEF deliverables as per the updated roadmap published in June 2020. One deliverable from the June 2019 roadmap, Energy Volume (MWh) Forecasts, will now be delivered as part of the National demand forecast.</p>	
<p>Design Authority</p>	<p>We welcome that the ESO has responded to feedback around bringing forward RIIO-2 deliverables to the 2020-21</p>	<p>The Design Authority mobilisation has already commenced, and we are looking to establish this group toward Q3 as per the original plan. The Design Authority</p>	<p>Change to deliverables table</p>

³ The Energy Forecasting Roadmap can be found at: <https://www.nationalgrideso.com/document/145941/download>

	<p>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.</p> <p>We challenge the ESO to progress IT scoping work as much as possible in 2020-2021, to ensure that the Design Authority is able to scrutinise the ESO's scoping work 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 long-established 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.</p>	<p>will challenge, guide and steer the mobilisation of the major programmes, the first elements to be presented will be the strategic roadmaps currently being developed.</p> <p>We note Ofgem's desire for as much scoping work as possible to be completed in 2020-21 so the Design Authority can review them. We envisage the DA reviewing the balancing and network control roadmaps during 2020-21. However, our major IT projects will be progressed in an Agile manner, meaning that scoping exercises will be undertaken throughout the RIIO-2 period.</p> <p>We have explained in the deliverables table the transparency and consumer benefits associated with the Design Authority, and our current progress towards establishing it.</p>	
Improving information access	<p>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</p> <p>It sounds like the ESO will use 2020-21 to build a strategy for its data platform. Smaller milestones would have been more helpful in order to understand the scope and timelines of this work (eg 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.</p>	<p>As part of the planned Data and Analytics Platform Investment we will develop our data strategy (as part of the wider digital and data strategy) which will define a Design Authority made up of internal ESO and external stakeholders to detail and prioritise user stories and data requirements. These will help determine the detailed roadmap and priorities for connecting systems and projects to the Data and Analytics platform in an Agile way.</p> <p>The roadmap will detail the sequencing of data publication. The intention will be to publish all data but the order that this will be implemented will be based on Stakeholder priorities and other interfacing project timescales.</p> <p>The timescales we are working to are:</p> <ul style="list-style-type: none"> • Digital and Data Strategy – Q3 2020-21 • Data Roadmap and Investment Plan – Q4 2020-21 • Data and Analytics Systems Architecture – Q3 2020-21 • Data Foundation project (begin implementation of the foundational elements of the architecture – Q3 2020-21 <p>We have added the milestones to the deliverables table.</p>	Explanation provided and changes made to deliverables table
More clarity of operational decision making	<p>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.</p>	<p>Our reasoning behind asking stakeholders for input on the datasets that are most valuable to them is explained in our RIIO 2 business plan (p123): <i>"Supported by underlying changes to our data management capabilities, in RIIO-2 we will build on the steps we have taken in RIIO-1 and</i></p>	Explanation provided

	<p>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.</p> <p>We also 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 MBSS reports.</p>	<p><i>transform the quantity and quality of datasets we can make available. The implementation of our data and analytics platform will allow real-time access to all of our operational data. It will enable us to automate data, publish all of our raw data, and add new datasets quickly and efficiently.”</i></p> <p>Until we have the necessary infrastructure to efficiently publish new datasets at a large volume, we are focusing on the datasets most valuable to our stakeholders.</p> <p>In addition to publishing the information that will be required by P399, we have identified a number of other options that could help improve the transparency of our trading actions, including changes to the presentation, location and accessibility of existing published information, as well as additional information that is not currently made available. Our intention is to discuss these ideas with wider industry and give our counterparties and market participants the opportunity to tell us what would be most helpful to them. We will use this information to prioritise our actions, and to create a timeline for delivery.</p>	
Publishing BMU ID for trades	<p>We expect a competent ESO to be taking forward and implementing all recommendations from all industry code modifications.</p>	<p>National Grid ESO and Elexon as a whole are responsible for implementing the P399 code change to publish BMU ID for trades legally. Our Information System (IS) teams are currently writing a new impact assessment that will showcase the cost and timeline of doing the IS change. The initial request and solution would cost too much for the perceived benefit and would be time-consuming to implement, so we are trying to find ways of keeping the cost down and delivering the solution quickly.</p>	Explanation provided
Deliver second phase of Power Available integration	<p>We encourage the ESO to support access for intermittent generation.</p> <p>The framework for providing Power Available signals was approved by Ofgem as part of Grid Code modification GC0063 in January 2015⁴. However, Power Available signals are still not fully integrated into ESO 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.</p>	<p>Phase 1 of the Power Available project has been successfully launched which has made the ESO compliant with the Grid Code Modification, albeit through manual means rather than the automated process which will be used in the future. Therefore, even with a delay to phase 2, we are already compliant with the Grid Code.</p> <p>We have put together a plan⁵ for intermittent generation to compete in balancing services, shared it with Renewable UK stakeholders through the wind advisory group and published it on our website.</p>	Explanation provided

⁴ The Authority’s decision for GC0063 can be found at: <https://www.nationalgrideso.com/document/13411/download>

⁵ The plan can be found at <https://www.nationalgrideso.com/document/167886/download>

<p>Implement State of Energy Signal</p>	<p>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".</p> <p>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 the deliverable has been delayed by a quarter. To address this, the introduction of interim milestones would have been helpful. Furthermore, there is no information around 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.</p>	<p>We are continuing to work with Market Participants (MPs) on the information /data they should provide to facilitate their participation in the market. Where framework changes are required to take into account batteries and other distributed resources, consideration will be given to preparing the code changes for wider industry roll out. The learning through operational experience and industry dialogue will continue, and be further supplemented by operational trials. We are committed to transparency on the outcomes of the aforementioned work.</p> <p>We have recently conducted an Operational Trial which we see as step one of a series to ensure access to the market. We will publish the outcome of the trial as a joint publication in Q2 2020-21.</p> <p>The impact of COVID-19 is continually being reassessed, and incremental changes to our CNI IT systems will be incorporated into planned changes where these do not require the diversion of critical Control Room resource. Full implementation will move into the 2021-22 plan year.</p>	<p>Change to deliverables table and explanation provided</p>
<p>Inertia Measurement</p>	<p>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 2017⁶. Therefore, we expect to see clear, tangible benefits arising from this deliverable by the end of the incentive year. At present, the benefits are unclear. 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 have appreciated both qualitative and quantitative commentary regarding how this deliverable will feed through to a reduction in RoCoF spend, since this currently constitutes a large proportion of the ESO's total constraint spend.</p>	<p>We will use the Inertia Measurement tool to support and refine our inertia forecasting techniques by validating the existing calculation methods against the measured value.</p> <p>We have added more information about the benefits from our new inertia measurement.</p>	<p>Change to deliverables table and explanation provided</p>
<p>Deliver competitively tendered black start contracts</p>	<p>We consider this deliverable to be tracking well so far and hope to see continued progress over 2020-21.</p>	<p>We will continue tracking the delivery of tendering process with a more open and transparent procurement approach.</p>	<p>No changes made due to Ofgem feedback</p>

⁶ The ESO's System Needs and Product Strategy (SNaPS) can be found at: <https://www.nationalgrideso.com/document/84261/download>

Role 1 Formal Opinion feedback on metrics

Metric	Ofgem Comments	ESO response to feedback	Address via reporting, explanation, or change to metrics?
<p>1a: Balancing Cost Management</p>	<p>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.</p> <p>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.</p> <p>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, <i>this metric will be used to measure the ESO's performance, alongside the narrative that the ESO provides in their performance reports.</i> 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 RII0-2.</p> <p>Our previous comments regarding this metric still stand and we note that stakeholders continue to share this concern. We appreciate the addition of more detailed breakdown of this metric, including the methodology (as required under the ESORI Guidance). However, the ESO has provided insufficient evidence to fully explain why their balancing cost benchmarks are justified.</p>	<p>We welcome Ofgem's feedback.</p> <p>We note that the ESO's balancing costs spend is expected to be significantly higher than the benchmarks stated here during the period where demand is impacted by the COVID-19 pandemic. During this period, we will continue to report our performance in comparison to the benchmark, but will focus on providing a detailed narrative which sets out the costs we have incurred. We also welcome Ofgem's review of costs incurred over the summer period, and would like to be as transparent as possible with our stakeholders about the actions we have taken.</p> <p>We note Ofgem's comments on the way our benchmarks are constructed, and would welcome the opportunity to work with Ofgem to create a revised benchmark which can be applied in the future.</p> <p>As discussed previously, we have reservations about using a 5 year average to benchmark against costs going forward. The benchmark methodology disproportionately weights costs from 2-3 years ago against more recent costs.</p> <p>With regard to the calculation of the 5 year rolling mean we have used actual balancing costs for 2017-19. In order to get a comparable 5-year average number for these years, we need to project the future years.</p> <p>Adjustment factors: Energy Costs were steady for a number of years before increasing recently, and we expect energy costs to rise again this year. We feel this isn't adequately reflected in the benchmark prior to adjustment, due to the change in trend experienced from previous years. When calculating the uplift, we projected the increase and then subtracted the uplift implicit in the 5 year rolling average. That is to say, we only applied the uplift beyond that which was already included from the 5 year average methodology.</p> <p>Similarly, RoCoF has also only increased significantly in the last 2-3 years so isn't correctly weighted in the 5 year average. Using the same methodology, we subtracted the uplift implicit in the 5 year average. We projected the RoCoF increase and subtracted the uplift already present from the 5 year average and then also subtracted £10m for the expected</p>	<p>Explanation provided, and metric description updated due to COVID-19 and delays to Eleclink commissioning</p>

	<p>Calculation of 5 year rolling mean: The ESO has not explained why its methodology has not used actual balancing cost data for 2017-19. Outturn balancing cost figures for 2017-19 should be inputted into the five year rolling mean, instead of using a linear trend projection for the years 2017-19.</p> <p>Adjustment factors: The ESO has proposed five adjustment factors, which include: energy uplift, RoCoF and ElecLink. The adjustment factors should be for <u>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.</u></p> <ul style="list-style-type: none"> • Energy uplift: energy costs have been relatively stable over the past five years, 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 and so we question 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 included in the five year rolling average. of 2019-20. • RoCoF: our analysis shows that these costs have been trending steeply upwards over the past two years (increasing nearly sixfold in the between the periods April 2015 – February 2016 and April 2019 – February 2020), and therefore some of this would be incorporated into the rolling five-year average. Therefore, we don't consider an additional adjustment factor to be necessary <i>unless</i> the ESO expects 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 	<p>benefit from the Loss of Mains programme.</p> <p>The Eleclink interconnector has now been delayed beyond this year, so we have removed this adjuster from the benchmark.</p>	
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	<p>interconnectors will be coming online this year and that the combination of ElecLink, IFA, Britned and NEMO in the same geographical area “<i>has the potential to cause constraint issues if all the interconnectors are flowing in</i>”. 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.</p> <p>We also would like to reiterate the panel’s feedback that commentary on the downward cost drivers, 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.</p>		
<p>1b: Energy Forecasting Accuracy</p>	<p>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.</p> <p>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 565MW. 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 5.07%. This is a slight increase from last year’s provisional figure (5.11% for 2019-20).</p> <p>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</p>	<p>We will include our improvement activities in our monthly reports. We will also make adjustments in our reporting when Optional Downwards Flexibility Management (ODFM) has been enacted.</p>	<p>To be addressed via reporting</p>

	<p>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 look forward to seeing this narrative in subsequent performance reports.</p>		
1c: Security of Supply	<p>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.</p> <p>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.</p>	<p>Our frequency and voltage excursion data is currently published via the National Electricity Transmission System Performance Report (C17) under the licence condition required by Electricity Safety, Quality and Continuity Regulations (ESQCR), Security and Quality of Supply Standard (SQSS) and Grid Code. We also publish post event reports for significant incidents or specific queries. The second by second system frequency is also available on our data portal. We believe that this frequent reporting is more valuable to stakeholders than introducing tighter criteria for reporting.</p> <p>As all reported excursions should be formally investigated, introducing tighter criteria would significantly increase our workload. Thus, in our view this may lead to cost inefficiency without adding sufficient value for our consumers or stakeholders. GC0105 proposes modifications in ESO incident reporting; this includes frequency excursions to be reported with a higher resolution. The proposal was voted by the GC review panel and has been submitted to Ofgem for a final decision. ESO has raised an alternative that just continues with the existing reporting methodology rather than adding to it.</p>	Explanation provided
1d: System Access Management	<p>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.</p> <p>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.</p>	<p>We will continue to ensure that we seek to minimise costs across the whole system and all timescales when making a decision to recall or delay an outage on the transmission system. We will demonstrate our performance in our regular incentives reporting.</p>	To be addressed via reporting
1e: Customer Value Opportunities	<p>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 a better considered as part of the 'evidence of benefits' evaluation criteria rather than as a metric. We will place relatively little weight on this as a performance metric because the</p>	<p>This is a new metric that NGENO introduced to measure how we create additional value through our system access planning process. We have made this metric more ambitious via adding 10% to the outturn result of 2019-20 performance. However, the outturn result was not available when we were drafting the 2020-21 Forward Plan. Thus, we have updated the benchmark in this Addendum.</p>	Benchmark changed

	<p>benchmarks have not been properly justified and it is not clear that they are sufficiently challenging.</p> <p>We note that as of Q3 2019-20 the ESO had delivered around 8,400GWh of savings in this area. If the ESO follow a similar trajectory in Q4, they will deliver around 11,200GWh in 2019-20 – exceeding not only their 2019-20 “exceeding expectations” benchmark, but the 2020-21 “exceeding expectations” benchmark as well. The 2020-21 benchmarks should be updated using 2019-20 performance. We will 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.</p>		
<p>1f: CNI System Reliability (Performance Indicator)</p>	<p>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.</p> <p>We expect very high CNI system resilience as part of our expectations of a competent and effective system operator.</p>	<p>We currently do not have enough historical data to design appropriate benchmarks. We will collect data from this year’s performance and design ambitious benchmarks for RIIO2. We will keep reporting our CNI system outages on a quarterly basis to increase transparency to the industry.</p>	<p>Explanation provided</p>

Role 2 Formal Opinion feedback on deliverables

Deliverable	Ofgem comments	ESO response to feedback	How feedback will be addressed
<p>Product roadmaps on response and reserve implementation (priority)</p>	<p>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.</p> <p>The commitments made in the roadmap that do not feature in the Forward Plan have been listed below:</p> <p>Frequency response:</p> <ul style="list-style-type: none"> “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.” <p>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 its important that stakeholders see this clarity on the direction of travel.</p> <p>Frequency response auction trial:</p> <ul style="list-style-type: none"> “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 <p>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.</p>	<p>In response to Ofgem’s feedback, we have added the commitments made in our product roadmap for response and reserve to the relevant deliverables.</p> <p>Frequency response</p> <p>Consultation on final design of end-state services, publish implementation plan</p> <p>We intend to share with industry an implementation plan for the future frequency response products. The publication date of this plan is dependent on the plan and delivery of Dynamic Containment. Although we announced delays to the procurement of Dynamic Containment due to COVID-19, we are currently reviewing our plans to get us back on track in developing the new suite of response services.</p> <p>Dynamic Containment is the first product in the new suite of frequency response reform. The delivery of this service has been prioritised over the other two frequency response products due to operational requirements. The principles within the design of Dynamic Containment will feed into the design of Dynamic Moderation (DM) and Dynamic Regulation (DR). The product design and service rules ultimately feed into principles that will extend across all future response and reserve services.</p> <p>Our intention is to review our learnings from the delivery of Dynamic Containment before we establish an implementation plan for DM and DR, and then for reserve reform. This is to ensure we are setting reasonable timescales for industry engagement and participation, and for the necessary development of internal ESO systems and procedures.</p> <p>The publication of an implementation plan for the final suite of services is dependent on ESO resource availability due to COVID-19 impacts, and the outcome of feedback from stakeholders. Specifically, we require our ESO experts to finalise the design of the product, and we are also seeking to understand the readiness timescales for providers to meet the requirements set out in the product design. These two factors are key drivers in our implementation plans.</p> <p>Providers will have the opportunity to engage with us further on the design of the new suite of response services in the coming months. An engagement plan for Dynamic Containment will be shared with industry once our project team reconvene. We expect to be able to publish this plan in July.</p>	<p>Deliverables updated to include commitments from response and reserve roadmap. Further explanation provided.</p>

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 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 consulting 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.

Mitigating barriers to entry

We have several ongoing projects that address barriers to entry, such as Power Available, Power Responsive and State of Energy. However, stakeholders are telling us that bringing procurement of frequency closer to real-time will remove a barrier for participants who cannot accurately forecast their availability to provide frequency response over longer time horizons.

With that in mind we will be sharing our barriers to entry document later than originally planned to allow us to share our intentions for moving closer to real-time procurement. This will include first sight of our implementation (and engagement) plan and outline our intentions for day ahead procurement, in line with the Clean Energy Package. We intend to publish the barriers to entry document when our engagement on Dynamic Containment (and the end state of response overall) has concluded. This has been communicated to industry via the Future of Balancing Services (FoBS) email subscription, and on our FoBS website in Latest News.

Frequency response auction trial

We are on track to report our learnings in Q2. We intend to share our plans to remove the unit caps in the trial once the impacts of COVID-19 on resource availability are mitigated.

With reference to stakeholder feedback requesting that the ESO accelerates the progression moving to day-ahead procurement, we have prioritised this and are currently exploring the internal requirements for our systems and processes to get us closer to real-time procurement.

We recently conducted a feedback survey with auction participants to provide us with an initial view of the timescales they would need to work to, and the requirements they would have within their own organisations in order to move to day ahead procurement. We intend to share this feedback with industry once the survey is closed and we have collated and reviewed the feedback.

We intend to share a high level implementation plan (including engagement activities) for day-ahead procurement with industry this summer.

Reserve markets

We intend to consult with industry in the development of reserve reform. This milestone has been delayed while we consider the reserve design in light of how the new pan-European Standard product TERRE will be used, and what the impact of wider access will be on the

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) obligations. 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.

makeup of the Balancing Mechanism. We will be progressing reformed reserve products once we have more clarity on these areas. We will communicate updates and progress on reserve reform via the Forward Plan tracker and our Future of Balancing services newsletter and web page.

We have taken stakeholder feedback on board regarding the importance of providing clarity on how existing products will be phased out and we commit to sharing information on the phasing out of current services within implementation plans of new products and services.

We will review the deliverable titled ‘Strategy for moving to Optional Fast reserve products into more competitive procurement’ in line with our other commitments in the Forward Plan, and will update documentation accordingly. We appreciate the need for consistency across our suite of documents and we will share an update with stakeholders when this review has taken place.

We acknowledge the question regarding how the ESO will increase competition and transparency in procurement of fast reserve, and will endeavour to address this in future updates on reserve reform.

Clean energy package obligations

Currently NGENSO has submitted two derogations against the CEP.

The derogation against Article 6.4 covers using Pay-As-Bid versus Pay-As-Cleared for Short Term Operating Reserve (STOR) and the Balancing Mechanism (BM).

There have been a number of follow up Q&A sessions with Ofgem and we are now awaiting their decision.

The derogation against Article 6.9 covers procurement at Day Ahead timescales for STOR.

In the interim we have suspended auctions for STOR and Firm Fast Reserve.

NG ESO submitted a request to include Optional Downwards Flexibility Management (ODFM) in the Electricity Balancing Guideline (EBGL) Article 18 terms and conditions, which Ofgem have now approved and confirmed compliance with CEP.

The final two existing products under consideration are Mandatory Frequency Response and Firm Frequency Response – we have shared our initial analysis with Ofgem, and after further debate it may require further derogations.

		<p>NGESO has already shared our plans for STOR with Ofgem and we are developing a plan covering all existing and new products.</p> <p>Our key communication channel with industry on EU matters is the monthly Joint European Stakeholder Group (JSEG) meeting. This is open to all parties and has a good record of attendance.</p> <p>We also hold two weekly meetings with Ofgem on compliance with CEP and at these meetings we will be reporting progress against the plans mentioned earlier.</p>	
Pan-European replacement reserve standard products (priority)	<p>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 it will be delayed until at least the end of October, due to Covid-19 reprioritisation. We have set out the process ESO should follow when reviewing planned activities in order to address challenges raised by Covid-19. We intend to discuss this further with the ESO. We hope to receive regular updates from the ESO during monthly monitoring meetings as this progresses through-out the year.</p>	<p>This is not a decision that has been taken lightly. However, in these unprecedented times our utmost focus is, and remains, the safety of our employees and the focus on the continual delivery of our core operations. We have segregated the shift teams across the control rooms and returned expert control users from projects to operational duties. As a result, we have reduced availability for User Acceptance Testing and Go-live transition. Our IT CNI function are also segregated, and focused on supporting the production systems and maintaining availability of these systems.</p> <p>Regular updates will continue be provided to Ofgem and the industry via the Joint European Stakeholder Group (JESG) meetings and Operational Forums.</p>	Explanation provided
Product roadmap for reactive implementation (priority)	<p>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 <i>how</i> it will integrate learnings from existing work. It does not appear that the ESO will be producing a plan by Q3 2020-21, more <i>a strategy to create a plan</i> at a later date. The ESO confirms that it will be engaging with industry on a wider scale in 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.</p> <p>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.</p>	<p>We are involved in many areas seeking improvements to the management of reactive power. This includes pathfinders, efficient reactive transfers, Power Potential, and CUSC modifications. Our priority is to consolidate progress on these to date before we begin discussions with industry on the state of reactive power and share our learning from the Mersey pathfinder. Our first planned engagement was at the Operational Forum in March, but this was postponed due to COVID-19.</p> <p>We are also working on combining voltage and stability projects where appropriate. This means that there is further learning to be completed and shared across our pathfinders.</p> <p>We will be using 2020 to consolidate our learning and conduct stakeholder engagement to help develop our plan for 2021.</p> <p>The roadmap publication in Q3 2020-21 will set out our plan for reactive power reform, where necessary, before the procurement publication in Q2 2021-22. We have added the procurement publication to the deliverables table.</p>	Explanation provided and deliverable updated to include procurement publication

<p>Facilitating code change</p>	<p>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.</p> <p>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.</p>	<p>Industry resource to support the code process is reducing; this is particularly acute for the codes we administer. There is also a trend of increased complexity and number of code change activities. As a result, industry have provided feedback that they need clearer, more succinct information to allow them to more easily understand the potential impacts of code change on their business and hence efficiently engage with the process. Acting on this feedback, we have carefully selected the deliverables in our Forward Plan, as these are the areas that industry told us they wanted us to improve on.</p> <p>The code administrator annual report will build on best practice from other code administrators who produce similar documentation. The report will provide more detail on how we're performing, our improvements and what changes mean for industry parties. This industry focussed communication will provide a level of detail that would not be possible to share in the Forward Plan or end of year report. Stakeholders have been supportive of this initiative.</p> <p>Following Ofgem's feedback we have actively engaged with key stakeholders to further confirm that the deliverables identified are appropriate and meeting expectations. There is continued support for the focus areas we have identified, we continually seek feedback from industry and will tailor our focus areas throughout the year.</p>	<p>Explanation provided</p>
<p>Facilitate electricity network charging reform through Charging Futures</p>	<p>We welcome the work the ESO is doing on charging futures but we note that there aren't any deliverables around the work the ESO is doing to support the Access SCR policy development (beyond promoting it through Charging Futures).</p>	<p>This is deliverable was omitted in error from our Forward Plan; it has now been added to the deliverables table.</p> <p>Our support for the Access Significant Code Review (SCR) has continued through from last year. There has been an increase in support in recent months to provide TNUoS modelling and inputs to Ofgem's CEPA modelling.</p>	<p>Deliverable added to demonstrate how we're supporting Access SCR</p>
<p>Introduce new 'new entrant' e-learning on charging</p>	<p>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.</p>	<p>We appreciate Ofgem's feedback on the detail we have added to this deliverable.</p>	<p>No changes made</p>
<p>Establish a 'cross party' approach to onboarding</p>	<p>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 TCR and RIIO-2 deliverables may initially limit progress initially.</p>	<p>We appreciate Ofgem's understanding on the necessary timescale for this deliverable.</p>	<p>No changes made</p>
<p>Lead code modifications</p>	<p>The ESO has listed the modifications it will "lead", and we</p>	<p>The ESO has been proactive in highlighting these issues and developing</p>	<p>In addition to the feedback provided, we</p>

	<p>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, therefore measuring the success of this deliverable at the end of the year will be difficult.</p>	<p>the code modification proposals to support them. We will continue to do this by leading through the workgroups and encouraging the industry to identify timely and pragmatic solutions to the issues identified. This will include the ESO proactively assessing workgroup feedback to make sure that the use of industry stakeholder time is maximised and focus is maintained on the particular defect. We will also support the creation of links to wider stakeholder groups, such as Ofgem and Citizens Advice, when input directly to a modification will assist its timely development.</p>	<p>will make sure that further explanation of the ESO's role in these modifications are provided as part of our Forward Plan reporting.</p>
<p>Capacity Market Modelling – facilitating broader participation in the CM</p>	<p>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. 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.</p>	<p>The DCUSA data will provide a register of embedded assets. National Grid ESO will then combine this data with embedded generation output data already procured from Electralink. This will provide a consistent data set of embedded generation, including information on both the asset and its output. This will help National Grid ESO improve its capacity market modelling for embedded generation.</p> <p>These improvement projects happen annually and priorities are agreed with BEIS, Ofgem and BEIS' Panel of Technical Experts (PTE). Details of these projects are included in the Electricity Capacity Report (published annually). This data will allow a development project to be undertaken that will help the ESO improve its modelling of embedded generation, which could potentially lead to a change in the methodology for calculating embedded de-rating factors in the capacity market (this data may help us do this directly rather than making assumptions based on transmission data) or other areas such as helping inform assumptions on sensitivities that are modelled.</p> <p>Any changes to our modelling will be made in discussion with BEIS, Ofgem and the PTE who scrutinise our work. Any changes to de-rating factor methodologies will be subject to industry consultation.</p> <p>The development projects usually take place from September to February each year and are tracked through an established process involving BEIS, Ofgem and the PTE. We have included indicative timelines for the work below. These may be revised when we develop and agree project scopes with BEIS, Ofgem and the PTE as part of the EMR development project process.</p> <ul style="list-style-type: none"> • May 2020 – DCUSA approve DCP350 and recommend it is approved by the Authority • July 2020 – expect the Authority to approve the modification 	<p>Explanation provided and an indicative timeline added to the deliverables table.</p>

		<ul style="list-style-type: none"> • Aug – Dec 2020 – expect data to be published. We will then need to assess, process and analyse the data to determine potential options for evaluating embedded generation de-rating factors directly from embedded data. • Dec 2020 – agree with BEIS, Ofgem and the PTE on whether it is appropriate to change how we determine de-rating factors for embedded generation using this data • Jan – Feb 2021 – consult on potential changes with industry as required in the Capacity Market rules • March – April 2021 – implement for the 2021 Electricity Capacity Report <p>There are some potential risks to this timeline:</p> <ol style="list-style-type: none"> 1. Potential delays in National Grid ESO obtaining the data (e.g. the current COVID-19 pandemic that could change priorities for any of the organisations involved in this) 2. Data quality – if the data quality is low (e.g. gaps in the data sets or we find we are unable to align the data to the metered output data from Electralink) then the scope of work may change to address the issue of data quality, and a revised timeline would need to be worked out. 	
<p>Delivery of Power responsive initiative</p>	<p>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 timebound 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 co-ordinated flexibility’ for our comments about the ESO’s input into Open Networks.</p>	<p>We will update the industry with interim milestones for this deliverable as they are identified and agreed with the Power Responsive Steering Group.</p>	<p>Updates will be provided via the monthly Forward Plan tracker</p>

Role 2 Formal Opinion feedback on metrics

Metric	Ofgem comments	ESO response to feedback	How feedback will be addressed
<p>2a: Reform of balancing services markets</p>	<p>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.</p> <p>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".</p> <p>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:</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>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</p>	<p>We appreciate Ofgem and stakeholders' support for the improvements we have made to this metric, and we will continue to work on improving it during 2020-21. We also note the requirement to demonstrate progress against historical data. However, we would reiterate that a reduction in total spend could indicate that the market is becoming more competitive, which would be a positive indicator rather than a negative one. This is particularly acute for frequency response, where a small fixed volume is obtained via bilateral contracts. In this situation, where the volume being competitively procured is reasonably stable, the percentage spend in competitive markets is entirely dependent on the market price. If the price in the market goes down, it will reduce our spend and therefore lower the percentage, even though the reduction in market price is due to an increase in competition. As a result, we believe the benchmark for frequency response should not be changed.</p> <p>In the case of reserve, where a larger proportion can be purchased from competitive sources, we have updated our benchmark in line with discussions with Ofgem's RIIO-2 consultants (see metrics table for updated benchmarks).</p> <p>We will provide historic information on the metrics to allow longer term trends to be identified. We will also continue to develop complementary metrics, to give a fuller picture of the level of competition in our markets.</p>	<p>Explanation provided. Benchmark for the competitive procurement of reserve has been updated. More information, including historical data, will be provided as part of our reporting.</p>

	and market price, in each market, as part of this metric.		
2b: Code administration stakeholder satisfaction	<p>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 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 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 than last year. We expect a competent ESO to have average stakeholder satisfaction (relative to other code administrators) in order to meet expectations.</p>	<p>We welcome Ofgem's feedback and the additional clarity on expectations.</p> <p>While the CACoP survey is a useful measure of individual code administrator performance against previous years, it is recognised that the codes themselves and the code administrators have varying characteristics, size and budget. Therefore, the CACoP survey alone is not a relative measure of performance across code administrators. For this reason, and to provide a wider picture of overall performance, the metric also includes additional measures such as stakeholder feedback and this year we have also added a KPI to show the code related workload of the team for additional context.</p> <p>In response to Ofgem's feedback, we have amended the CACoP survey measure to align with average code administration performance. This will be a forward looking comparison to mitigate against any future market wide trends, therefore the exact benchmark score will not be available until the 2020 survey is completed. For illustration, based on 2019 CACoP survey, average stakeholder satisfaction across the ESO's 3 codes would need to be within the range of 58-65 to be in line with expectations.</p>	Metric updated to reflect amended CACoP survey benchmark.
2c: Charging futures	<p>We agree that this metric should be included for 2020-21 and we appreciate that 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".</p>	<p>We note Ofgem's feedback and have set out more detail within the metric setting out the finalised performance baseline and the corresponding benchmarks for exceeding, in line and below performance. We believe this additional transparency demonstrates that these are challenging benchmarks. Outturn performance below the 2019-20 baseline will represent below expectations performance, whilst a step change will be required to exceed our benchmark this year.</p>	No changes made to the structure of the metric. More information has been provided on the finalised baseline and corresponding benchmarks to provide more transparency.
2d: Year ahead BSUoS forecast and outturn	<p>We will place little weight on these metrics in the ESO's performance evaluation. We have previously expressed (alongside stakeholders) that further detail is required in order understand why these metrics are challenging, especially as 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 spending more resource on this due to ongoing</p>	<p>The largest drivers of Balancing Costs, and therefore BSUoS, tend to be short term, such as weather. These aren't known at the timescales we are forecasting in. We understand that stakeholders find our forecasts useful so we have kept this metric. However, we await further developments in the BSUoS charging methodology.</p>	Explanation provided.
2e: Month ahead BSUoS forecast and outturn			

	<p>policy development around 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 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.</p>		
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Role 3 Formal Opinion feedback on deliverables

Deliverable	Ofgem comments	ESO response to feedback	Address via reporting, explanation, or change to deliverables?
Lead the 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.	The programme is on track to complete four tender rounds by September 2020. The deliverable captured in Role 3 is intended to reflect the decision point regarding how to proceed after September 2020. After this point, the programme could stop, continue or continue with changes (for example, the current backstop for applications is March 2021).	Updates will be provided via the Forward Plan Tracker on how this deliverable will proceed post September.
Address actions raised in E3C report 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 9th 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 9th 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.	Our expectations align on this point and we will make sure this is reflected in future reporting.	Deliverable updated.
Implement approach for efficient reactive power flows between networks	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.	The work required to reach a resolution is an assessment intended to inform a mandated generic approach to reactive power transfers between transmission and distribution. We believe there is a risk this will not yield a conclusion, and given the delay, we are likely to place more emphasis on other reactive power and voltage control initiatives, such as pathfinders and power potential which account for locational requirements. Resources have been allocated to higher priority short term operability, which included additional work due to COVID-19. Once resource can be re-allocated, higher priority medium long term operability work, such as voltage pathfinders, would be progressed ahead of this work. At this point the earliest realistic date for a conclusion is Q4 2020-21. Further updates will be provided in the Forward Plan tracker.	Explanation provided, and updates will be provided via the Forward Plan tracker
Pathfinder projects (Stability,	The ESO has given priority to all the pathfinder projects however most of them have been postponed to later dates. We	The Pennines pathfinder was delayed so that focus could be given to the urgent Mersey pathfinder compliance issue which is explained in more detail below.	Explanation provided

<p>Mersey Voltage, Pennines)</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>Stability Pathfinder We said we wanted to understand the milestones involved for phase 2 of the Stability pathfinder due in 2020-21. It is not clear 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</p>	<p>The Mersey short and long term tenders have now been completed, saving money for the consumer. Stability Phase 2 was delayed so that learnings from Stability Phase 1 could be collated. Part of that learning indicated that more time was needed at various stages of the pathfinder, hence the current timeline.</p> <p>When developing these tenders, the timings of the more granular aspects are not known at the outset. As such, we have included high level milestones in the Forward Plan but will continue to update the industry as interim milestones become known.</p> <p>The voltage assessment process is included in the NOA methodology, and was approved last year and remains for this year. This year the high-level stability process has been included in the NOA methodology to be consulted upon. When we have taken all of the learnings from the stability pathfinder, we will update the process with more detail, and it will be part of the NOA process (it is important to note that this does not mean it will follow the annual cycle of the NOA, as that is not practical, but we will use the defined process that the NOA methodology lays out in conducting assessments for future network needs). As we move forward, these assessments will sit under the NOA umbrella with a defined process for assessing needs on the transmission system. We see this as the evolution to a single NOA methodology that is delivered through differing yet appropriate processes.</p> <p>We are working hard to make sure that the tender application process is transparent and runs in line with our tender procurement guidelines.</p> <p>We are still learning from Stability Phase 1, and the post tender issues that have arisen. The timeline of the milestones for Stability Phase 2 has not yet been confirmed. We believe it is crucial to get this timeline right and be guided by our stakeholders. To do this we have asked stakeholders for their input through the request for information (RFI). The stability methodology will be included in this year's NOA for consultation based upon learning from the first stability pathfinder. The delivery date of the Stability Phase 2 has moved back to Q4 2020-21. This is due to the extensive nature of the post tender work for Stability Phase 1 and establishing the learning that will inform and improve the process for Stability Phase 2.</p> <p>This pathfinder was delayed primarily to support a short-term solution being delivered to secure the voltage in the Mersey area. This meant that resources</p>	
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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>were reprioritised to solve this issue, causing delays.</p> <p>Post tender, the ESO will take the learnings from the Mersey pathfinder and look to implement them on the Pennines voltage pathfinder. The ESO will share relevant learning with the industry through subsequent pathfinders to help improve the tender process and methodology for the stability phase 2 and Pennines. This will be completed during Q2 2020-21. The ESO has also engaged Ofgem on a number of level playing field issues that emanated from the Mersey pathfinder to see how best to remove these issues.</p> <p>As the initial evaluation for the Pennines voltage pathfinder was completed some time ago, the project was reviewed to make sure that the need still existed and represented value for consumers. The transmission network is continually changing and changes in generation or demand could led to a change in system needs. This work has now concluded and confirmed that there is likely to be a compliance requirement in the future. The initial delay was caused by the need to reprioritise work, however this did not have a material impact on the timeline of the need (i.e. there is still enough time to deliver the solution before any compliance requirement). The tender process is planned to begin in Q3 2020-21.</p> <p>The funding mechanisms to facilitate DNO solutions will continue to be required and so are not dependent on the continuation of this pathfinder.</p> <p>The Constraints management pathfinder analysis focuses on specific areas for specific timeframes in the future, although there is a possibility it could help to alleviate some of the specific issues which we are currently experiencing.</p> <p>Making sure we have the technical and commercial elements to deliver this complex service in the right way is likely to take slightly longer than we initially anticipated. We would also like to allow time to apply learnings from the Voltage and Stability pathfinders so we can deliver a successful tender for participants and the end consumer.</p>	
<p>Early competition plan</p>	<p>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.</p>	<p>We appreciate Ofgem's support for the milestones we have added to this deliverable.</p> <p>Since we published the Forward Plan in March, the interim milestones for this deliverable have been amended to allow us to provide timely updates to Ofgem. The date for the submission of the final Early Competition Plan has not changed.</p>	<p>Deliverables table changed to show updated interim milestone dates, as agreed with Ofgem.</p>

<p>NOA: Enhanced Communication</p>	<p>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.</p> <p>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, previous Forward Plans and the original Network development roadmap. 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 would like to see more transparency in the process of developing ‘ESO-led commercial solutions’.</p> <p>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.</p> <p>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</p>	<p>This year we have refined this particular deliverable as an ongoing commitment. We are continuously seeking to improve our documents and processes and we see this as an evolutionary step, rather than a one-time deliverable. Our intention is to build upon the work we delivered last year as part of our ongoing commitment.</p> <p>Our Pathfinder projects capture a number of benefits that the annual NOA process does not evaluate. They may also target network compliance issues that need to be resolved in a time critical manner which does not lend itself naturally to an annual NOA assessment process. The NOA Pathfinder projects are the first step in enabling non network solutions across transmission and distribution to compete with traditional asset-based solutions. All of our Pathfinder projects sit under the NOA umbrella, are captured within the NOA methodology and are subject to NOA style assessments. Our commercial solutions in the NOA are envisaged to signal a need for additional non-network solutions on the transmission system. Recommendations on these options form the basis of new pathfinder projects, such as those currently captured through our Constraint Management pathfinder.</p> <p>The development of the Pathfinders has been such that that we start with a “learning by doing” approach. As that evolves, we take the learnings and incorporate them formally into the NOA methodology. We followed a similar process last year with the Voltage methodology and this year for the Stability methodology, both having run successful tenders. This presents a clear linkage between the NOA and Pathfinders. By doing this, we have a process which is transparent as the NOA methodology is consulted upon annually. As and when new network issues materialise, we then have a clear process for running tenders under the NOA umbrella. We strongly believe that the NOA and Pathfinders are developing into one coherent process, as determined by the licence condition C27, alongside which we will run tenders (comparable to Pathfinders) for future network needs (comparing network and non-network solutions), all under a single methodology statement.</p> <p>Our Constraint Management Pathfinder is being developed with the intention of taking the need for ESO led commercial options signalled from the NOA and delivering them via a tender process. We are also actively engaging with Ofgem at present to resolve a number of level playing field issues which we have</p>	<p>Explanation provided</p>
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	the NOA process and these solutions are considered on a level playing field with traditional network build solutions.	identified through past and current Pathfinder projects.	
Regional Development Programmes (RDPs)	<p>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.</p> <p>Commercial contracts for balancing services from Distributed Energy Resources (DER)</p> <p>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.</p> <p>Development of commercial arrangements for transmission constraint management service from DER</p> <p>In the original Forward Plan for 2019-21, this deliverable was expected to be implemented by Q4 2020-21. 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</p>	<p>As Ofgem notes, we have realigned these objectives to more clearly articulate our ongoing RDP activities. To that end we have amalgamated some elements of deliverables from the 2019-21 Forward Plan. This includes the 'Commercial contracts for balancing services from DER' activity. Others, such as N-3 intertripping, have been brought out for clarity.</p> <p>We have reviewed the 'scoping commercial arrangements' deliverables' and have altered the language to be more transparent.</p> <p>Through RDPs we are building on the existing frameworks that already exist for many providers of balancing services (recognising our licence obligations in this area) while ensuring alignment with our DNO partners. We believe this to be entirely consistent with the work of Open Networks, and have recently made internal organisational changes to more closely link RDPs with Open Networks.</p> <p>While we are making good progress in the development of visibility and control communications with WPD, SSE-N and UKPN, there have been delays in the development of commercial arrangements. It is these delays that are slowing the delivery of the projects. We note Ofgem's concerns and hope to provide positive updates in the coming months. We have recently reassessed the timeline for operational need of both WPD and UKPN RDPs and, based on the current rate of connection applications, remain confident of delivery ahead of need.</p> <p>Delivery of DER intertripping functionality (N-3) requires co-ordinated work with DNOs and TOs. These will affect the project's deliverability in 2020-21. NGET will require system outages to install and test equipment. DNOs will require access to operational sites to install telephony equipment. We are aware that current COVID-19 restrictions may affect the deliverability of some of this work and are working with network organisations to mitigate any risks as much as possible.</p> <p>We are keen to ensure learnings from the recent ODFM service introduction are fed into the development of RDPs and other ways of working with DNOs. This will inform our strategy around co-ordinated procurement of DER services at times of low demand.</p> <p>The GEMS solution is required to facilitate a first customer connection in Q1 2022-23. We are still on track to meet</p>	<p>Explanation provided.</p> <p>Commercial contracts for balancing services from Distributed Energy Resources (DER); language altered to improve transparency of deliverable.</p> <p>Identifying future RDPs; in consultation with Ofgem, this deliverable has been removed from the Forward Plan.</p>

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 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 SSEN. 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 identify future RDPs. The ESO should focus on delivering existing RDPs, without further delays, instead of publishing more roadmaps.

this delivery date. The date quoted in the 2019-21 Forward Plan (Q1 2021-22) is the start date of the GEMS implementation phase. We apologise for any confusion this may have caused.

We welcome Ofgem's recognition of the importance of RDPs in the development of co-ordinated markets for flexibility services. We are keen to more closely align the RDP process within Open Networks and have recently presented to the project Steering Group on that subject. This discussion included the best way to progress a process for identification of new RDPs, with general consensus to embed this work within the Open Networks project. Hence our primary focus will be on the delivery of new RDPs, as suggested, rather than developing a process to identify new RDPs. As a result, and in consultation with Ofgem, this deliverable has been removed from the Forward Plan.

<p>Active engagement with DSO and coordinated flexibility</p>	<p>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).</p> <p>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.</p>	<p>We welcome Ofgem’s recognition of National Grid ESO’s key role in the development of co-ordinated flexibility markets.</p> <p>We note the feedback on our engagement within Open Networks and have already made organisational changes to refocus on areas of need. We recognise that our unique position within the industry means that our presence is welcomed.</p> <p>DSO will be a focus area for the ESO in 2020-21, both within Open Networks and with the broader stakeholder base. However, we note stakeholder feedback that our activities should be complementary to Open Networks, rather than seeking to duplicate its activities. We will look to engage with network and non-network stakeholders to understand how best this can be achieved.</p>	<p>Explanation provided</p>
<p>Voltage needs identification tools/processes</p>	<p>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.</p>	<p>The voltage assessment process is included in the NOA methodology. It was approved last year, and remains the same for this year. This year the high-level stability process will be included in the NOA methodology to be consulted upon. When we have taken all of the learnings from the stability pathfinder we will update it with more detail and it will be part of the NOA process. This means that we will use the defined process that the NOA methodology lays out in conducting assessments for future network needs. As we move forward, these assessments will sit under the NOA umbrella, with a defined process for assessing needs on the transmission system. We see this as the evolution to a single NOA methodology that is delivered through differing yet appropriate processes.</p> <p>The NIA project is a proof of concept project running in parallel to enhance our</p>	<p>Explanation provided</p>

		analysis capability. Once delivered, and if the proof of concept is successful, this will need to be embedded into our business as usual; this is outlined in our RIIO-2 business plans. If the NIA project is successful it could represent a step change in how we assess voltage needs.	
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.	<p>The 2019-20 deliverable was re-phased to better align with other ESO deliverables, including the RIIO-2 business plan submission. Its timing also worked well with the ENA Open Networks project, allowing its outputs to be used in the development of the project's DSO Implementation Plan. The DSO Implementation Plan, published on 1 July contains updates to the National Grid ESO activities. It was therefore considered to be duplication for National Grid ESO to undertake a parallel piece of work. A further update to the DSO implementation plan will be published in Q4 2020-21.</p> <p>We will continue to listen to stakeholders and look to publish thought leadership as required through 2020-21, noting Ofgem's feedback in other areas to focus on delivering activities that support DSO.</p>	Explanation provided

Role 3 Formal Opinion feedback on metrics

Metric	Ofgem comments	ESO response to feedback	Address via reporting, explanation, or change to metrics?
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 welcome this feedback on our amendments to this metric. We agree that connection offers right first time should be a baseline requirement from a competent and effective ESO. However, the connection offer is a product of the output of work from both the ESO and the relevant TO. We believe the incentive needs to reflect the performance of all parties involved in the process.	No changes made to metric
3b: NOA consumer value	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 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.	<p>We have reflected on the benchmark for this deliverable and believe the performance measures should remain the same. We believe the metric in its current form serves to highlight the benefit the NOA process delivers.</p> <p>The consumer value metric is primarily driven by the outcome of the NOA, which is a process that runs on an annual cycle. There may be instances throughout the year where further consumer value can be demonstrated but these are through Connection Infrastructure Option Notes, Strategic Wider Works, or Small Scale cost benefit analysis processes, the number and timing of which are not in the control of the ESO.</p> <p>The inputs into the NOA process change annually, and we have limited control over many of them. Examples of inputs include new Future Energy Scenarios (FES), new network models reflecting any investment that has taken place, new options for future needs and updated modelling assumptions to reflect market changes. As well as changing each year, some of these inputs, such as the FES, have a huge weighting on consumer value outcomes. This means they are likely to dwarf benefits generated by ESO actions. We believe it would be inappropriate to report year on year performance as these factors make it difficult to assess if our actions directly result in better or worse outcomes in consumer value.</p>	No changes made to metric as explained.
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	This metric was intended to recognise that in RIIO-2, the Transmission Owners (TOs) are developing their own approach to measuring customer satisfaction during the connection offer process. The ESO is the contractual counterparty with the customer for all transmission connection. This means we own the relationship with the customer and the customer expects us to hold the TOs to account when dealing with their contractual obligations. Customer	Explanation provided

	place relatively little weight on this metric through the evaluation.	<p>satisfaction surveys that identify the ESO's performance are key to making sure we have the insight we need to continue delivering good customer service.</p> <p>We further developed this metric to look at including the levels of customer service we provide in dealing with connections to the distribution networks. While our connection contract is with the DNO, we have a growing number of interactions with the DNO connecting customer and we provide a key link across the TO/DNO interface. Expanding the survey scope to include our efforts in this area will provide important feedback to help us develop the quality of the connections customer journey for the whole electricity network.</p>	
3d: Whole system, Unlocking Cross Boundary solutions (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. 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.	<p>We agree that it is difficult to determine whether the Appendix G process is the sole reason for achieving the volume of Distributed Energy Resources (DER) that has connected. However, it is very clear that the Appendix G process has made the route to market for DER much quicker and easier than through the Statement of Works Process. It has given DNOs more visibility of the capacity available at their Grid Supply Points and has given greater control for release of that capacity to DER customers.</p> <p>The outcome of the Appendix G process is a clear example of the ESO working closely with DNOs to change an existing process that improves the customer connection journey for DER.</p>	Explanation provided.
3e: Future balancing costs saved by operability solutions (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. 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.	We agree that is important that the methodology used is clear and includes an explanation how a counterfactual or baseline position was derived. We will look to develop this further in our reporting during 2020-21.	To be addressed via reporting

<p>3f: Capacity saved through operability solutions (performance indicator)</p>	<p>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.</p>	<p>We have noted this feedback, and will look to develop and share our underlying analysis in our reporting during 2020-21.</p>	<p>To be addressed via reporting</p>
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