

SSEN DISTRIBUTION RIIO-ED2

STRATEGY DELIVERY INCENTIVES

RIIO-ED2 Business Plan Annex 4



Scottish & Southern
Electricity Networks

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1. EXECUTIVE SUMMARY

Introduction

This document sets out the work we have undertaken to develop proposals for the three Strategy Delivery Incentives (SDIs) which Ofgem is proposing to implement in RIIO-ED2. The SDIs are designed to encourage DNOs to focus on delivering and exceeding their commitments in their strategies during ED2 for Consumer Vulnerability, Major Connections and the transition to Distribution System Operation (DSO) by offering the potential for a reward or penalty based on performance. For each of the three strategies we have set out a proposed SDI which we believe can successfully incentivise performance in each area.

We have designed our SDI proposals to reflect the complex nature of incentivising delivery of broad strategies. Our proposals reflect our stakeholders' priorities, good practice on the design of incentives and a practical operational view of how to track and measure performance. These proposals have been tested with our Customer Engagement Group, and we believe that they could be adopted as a common incentive framework for all DNOs.

Best practice principles

This work has been underpinned by a set of principles for best practice in incentive design. Incentives are an important part of the RIIO framework but need careful design to ensure they incentivise the right behaviours, do not create an unfair regulatory settlement for either customers or companies, nor create any unintended consequences.

In this document we have been explicit in setting out the principles which underlie each set of decisions and the process of developing these SDIs, including: the choice of metrics included in the assessment; the target levels set for the metrics; the scoring system; and the overall combination and calibration of the incentive.

Summary of SDI design

Each of the three Strategies set out actions and plans targeting overall objectives and cover a broad range of activities and focusses. In our RIIO-ED2 Business Plan, we propose a wide range of specific, measurable and performance measures, justified with reference to the priorities of our customers. These measures should be reflected in the metrics used to assess performance under the SDI, but as the Strategies are also "living documents" the SDI should also allow scope for flexibility and evolution around what DNOs are incentivised to deliver for their customers. As a result, we propose SDIs which are assessed both through 'mechanistic' assessment against quantitative targets and through an expert panel review.

Where there are appropriate quantitative metrics that can be used to assess the delivery of the strategy outputs these can be subject to a mechanistic assessment to determine how the DNO has performed on these specific and measurable deliverables. All metrics for mechanistic assessment have clear, quantitative targets. Where there are no metrics that meet the conditions to be mechanistically assessed, a panel is used to assess a broader range of performance evidence. We propose that a panel of informed members, who are also familiar with the strategies of all the DNOs, is formed to make an assessment of performance in each area, based on a set of clear terms of reference and decision-making criteria. The panel will be provided with appropriate quantitative and qualitative information relating to strategy delivery by DNOs and have a clear terms of reference and decision-making framework for their assessment.

The mechanistic and panel assessments are then combined, and the resulting final score determines the outcome of the incentive. This gives the possibility for reward in the case of strong outperformance, penalty for stark underperformance, or a neutral (neither penalty or reward) outcome if the DNO performs within a reasonable range of meeting its targets and delivering a good strategy.

Outline of the three SDIs

We have developed a standardised approach to developing SDIs, but where necessary have amended the approach to reflect the specific circumstances of each of three areas - particularly in the case of the DSO Strategy which is a relatively new activity for DNOs, and so associated with greater uncertainty. Each SDI is organised around a small number of key objectives, under which sit several metrics which are assigned either to a mechanistic or panel assessment.

Vulnerability

The DNO’s Vulnerability Strategies are designed to protect and empower consumers in vulnerable situations. We propose four key objectives to be covered by the SDI to incentivise DNO activities in this area. DNOs should (i) improve service provision to customers vulnerable during a loss of supply; (ii) support customers in fuel poverty through provision of advice and support; (iii) support vulnerable customers in vulnerable situations to engage with and benefit from the energy system transition towards Net Zero; and (iv) use data, partnerships and training for vulnerable customers in vulnerable situations, and, across all these objectives make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations. The SDI will incentivise companies to deliver across these outputs for customers.

VULNERABILITY SDI FRAMEWORK				KEY	MECHANISTIC ASSESSMENT	PANEL ASSESSMENT
OBJECTIVE 1	OBJECTIVE 2	OBJECTIVE 3	OBJECTIVE 4			
Improve service provision to customers vulnerable during a loss of supply	Support customers in or at risk of fuel poverty through provision of advice and support	Support vulnerable customers to engage with and benefit from the energy system transition towards Net Zero	Use data, partnerships and training to deliver for vulnerable customers, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations			
% households on PSR as proportion of eligible	Customer satisfaction score for recipients of fuel poverty support	Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support	Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations			
% medically dependent households on PSR as proportion of eligible	Identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support					
Customer satisfaction score for PSR customers experiencing a planned outage			Building effective partnership to support vulnerable customers			
Customer satisfaction score for PSR customers experiencing an unplanned outage			Effective use of data to understand vulnerability and support strategy delivery			
Identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support			Providing quality support to vulnerable customers through company training, a focus on accessibility, and an embedded commitment across the business			
Maintaining an accurate PSR against a defined quality criteria						

The design of this incentive reflects the areas of Vulnerability Strategies which are of central importance to Ofgem and stakeholders. The incentive includes both mechanistic and panel metrics, with a weighting of 80% on mechanistic and 20% on panel metrics to reflect the quality of several key mechanistic metrics included on the SDI - the satisfaction scores of customers in vulnerable situations who have received support and the key PSR reach metric. The panel assessment will incorporate reporting including quantitative outputs to enable a transparent assessment where it is not possible to conduct a mechanistic assessment. The assessment will take place in Years 2 and 5 of the price control, allowing an early assessment with time for companies to adjust and improve over the course of the price control period.

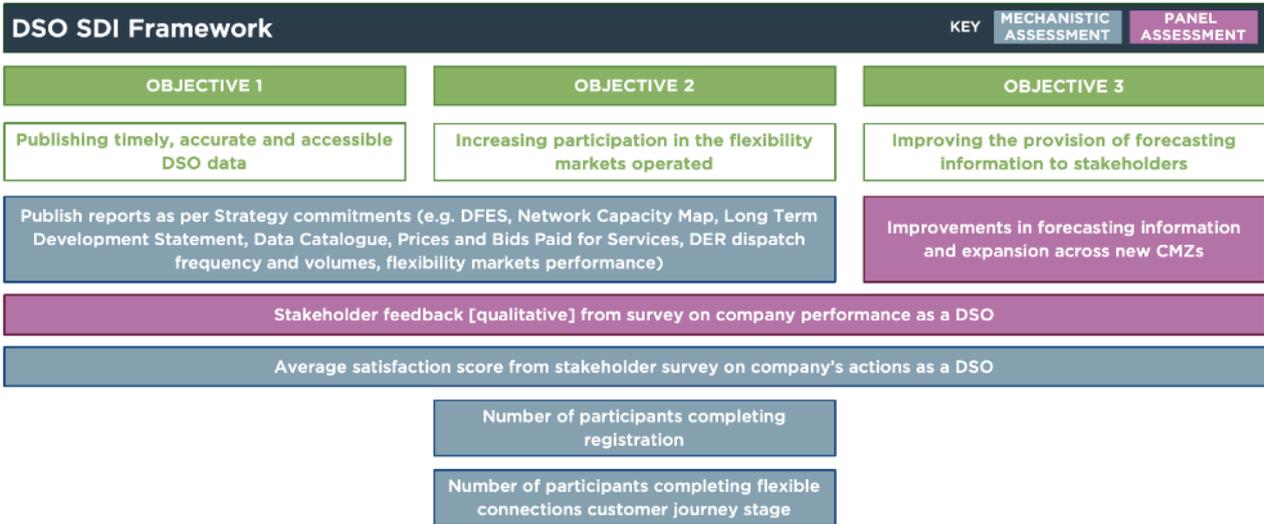
Major Connections

The Major Connections SDI will incentivise the delivery of the company’s Major Connections Strategy, which is designed to ensure DNOs deliver quality services to customers seeking major connections in RIIO-ED2. We propose three key objectives to be covered by the SDI. DNOs should improve provision of information to customers at pre-application stage for major connections; improve simplicity and transparency of the application journey for customers; ensure timely and economical connections are provided in line with customer requirements. These objectives align with the three high-level principles set out in Ofgem’s RIIO-ED2 SSMD. Cutting across all three objectives there is a single measure for the panel assessment, which focuses on the investments and activities made by SSEN in response to issues raised by major connections and stakeholders. This is designed to allow for the evolution of the Major Connections strategy, which is a key principle underpinning our hybrid approach.

MAJOR CONNECTIONS SDI FRAMEWORK			KEY	MECHANISTIC ASSESSMENT	PANEL ASSESSMENT
OBJECTIVE 1	OBJECTIVE 2	OBJECTIVE 3			
<p>Improve provision of information to customers at pre-application stage for major connections</p>	<p>Improve simplicity and transparency of the application journey for customers</p>	<p>Ensure timely and economical connections are provided in line with customer requirements</p>			
<p>Average satisfaction score from pre-application customers</p>	<p>Average satisfaction score from customers regarding their application journey</p>	<p>Average satisfaction score of customers for their connection experience</p>			
<p>Average satisfaction score from customers contacting SSEN about a connection</p>					
<p>Investments and activities made by SSEN to address issues raised by major connection customers</p>					

DSO

SSEN’s DSO Strategy is designed to build the capabilities and market liquidity of local flexibility markets, to realise the benefits of the transition to the net zero economy by enabling an increase in small-scale renewables and low-carbon technologies. Successful implementation of DSO capabilities will enable consumers to realise the benefits of the transition. In order to manage the increasingly complex flows of energy, we will develop our ability to manage and forecast for the system and provide the data and processes which will enable other parties to play their role in meeting greenhouse gas emissions targets and support the achievement of net zero. The SDI will enable us to deliver our DSO Strategy and support us to go above and beyond this to build further capabilities for the benefit of energy consumers, where this is supported by our customers, our stakeholders, and the regulator.



2. CONTEXT

As set out in the Sector Specific Methodology Decision (SSMD), Ofgem is proposing to implement Strategy Delivery Incentives (SDIs) in RII0-ED2. The SDIs are designed to encourage DNOs to focus on delivering and exceeding their commitments in three specific strategies for the benefit of customers and stakeholders in the ED2 period and beyond. The three strategies are: Vulnerability, Major Connections, and the transition to Distribution System Operation (DSO).

Ofgem's guidance for business plans sets out the minimum requirements that networks must deliver in each of these strategies. Ofgem has required DNOs to submit Strategies for Vulnerability, Major Connections and DSO Transition which: assess the issues in the area; articulate a vision for addressing the issues; demonstrate how the company will deliver the standard of service outlined in the principles and baseline expectations; include specific, time bound and relevant deliverables; propose relevant performance measures, including benchmarks for quantitative metrics; and be developed with stakeholder and Customer Engagement Group (CEG) input.¹ In addition to meeting these requirements, we consider the work in this annex is making a strong contribution to Ofgem and industry thinking in setting out a detailed framework for the SDI. The role of the SDI is to incentivise the achievement of these commitments and encourage networks to exceed their commitments to their customers during the ED2 period by offering the potential for a reward in such circumstances, as well as holding companies accountable in the event that they do not meet their commitments through the potential for a penalty.

We have designed our SDI proposals to reflect the complex nature of incentivising delivery of broad strategies which involve relatively low volumes of customers / network users and diversity of what these customers want from distribution network operators (DNOs).

Building on our Strategy proposals

This SDI Annex builds on the work we have done in developing Strategies which are set out in the following BP Annexes:

- ***Vulnerability Strategy (Annex 4.2)***
- ***Connections Strategy (Annex 10.2)***
- ***DSO Strategy (Annex 11.1)***

We have summarised the SDI-related work completed for the Business Plan in each of the Strategies at the beginning of the chapter in this annex.

Purpose of this document

This document sets out the work we have undertaken around detailed development of proposals for the SDIs which we believe should be adopted as a common incentive framework for all DNOs. We have developed these proposals reflecting our stakeholders' priorities, good practice on the design of incentives and a practical operational view of how to track and measure performance. These proposals have been tested with our CEG.

¹ <https://www.ofgem.gov.uk/publications/riio-ed2-business-plan-guidance>, p16-19, p31-32

2.1 PRINCIPLES FOR METRICS AND INCENTIVES

Incentives, whether financial or reputational, are important parts of the RIIO framework to drive behaviours in regulated companies which are aligned to their customers. However, because of their ability to heavily influence company behaviour, they need careful design to ensure they incentivise the right behaviours, do not create an unfair regulatory settlement for either customers or companies, nor create any unintended consequences.

To guide our design of proposed Strategy Delivery Incentives, we have reviewed regulatory good practice, including guidance set by Ofgem², to develop the following set of principles for metric design.

Principles for metric design

As part of our Draft Business Plan **DSO Strategy (Annex 11.1)**, we set out principles for metric design provided by both Ofgem and ourselves. These principles are not applicable to all Strategies but provide a useful basis for establishing good practice around creating metrics. We have built on these as part of this current phase of work and have set these out below.

OFGEM CONSIDERATIONS ON 'GOOD' METRICS	ADDITIONAL PRINCIPLES SSEN HOLDS ITSELF AGAINST
<ul style="list-style-type: none"> • Relevant - the metric should be linked with long term objectives • Outcome focused - the measure should encourage effective delivery of the desired outcome • Robust and transparent - the methodology proposed to set the benchmark should be transparent • Appropriate - the metric should be suited to the area of performance • Verifiable - there should be historical data by which performance can be tracked • Attributable - the measure should be within DSO's control • Proportional - the measure shouldn't put an unreasonable burden on the DNO 	<ul style="list-style-type: none"> • Avoid metrics that could conflict with our desire to be a neutral market facilitator • Exclude things ultimately beyond our control in metrics • Follow a clear development process grounded in stakeholder engagement • Ensure metrics facilitate and enhance the best customer journey • Learn from other jurisdictions and build from work already in place, as appropriate • Pitch metrics at the role or principle level to allow for agility and cover multiple expectations • Frequency of reporting should be based on the time horizon for when benefits can be observed <p>Target levels should be set with regards to:</p> <ul style="list-style-type: none"> • The value created by incentivising a certain level of performance (e.g. using willingness to pay analysis); • Improving on existing performance levels (where possible), with reference to current and forecast performance levels including those of peers; and • Stakeholder preferences. <p>Weighting of metrics as part of a combined ODI should reflect the above principles, including relative importance, predictability (i.e. mechanistic versus qualitative assessments) and data quality</p>

Principles for incentives design

- Incentive outcomes should be predictable, and without ambiguity, based on a known level of performance;

² https://www.ofgem.gov.uk/sites/default/files/docs/2010/10/riio_handbook_0.pdf

- Financial incentives require a higher threshold of data quality and reliability, otherwise reputational incentives should be used;
- Cross-industry incentives should be based on comparable data and targets, and, where required, take account of regional factors;
- Incentive design decisions for financial incentives should be used to tailor the incentive to the specific circumstances and overall objectives:
 - **Strength of incentive** = this should reflect the value ascribed by stakeholders to ensure the incentive represents good value for money and the degree of control from the company.
 - **Symmetry** = where the objective is ensuring minimum standards or where there is significant uncertainty over what is achievable, penalty-only incentives may be more appropriate. Incentive rates can be non-linear to reflect increasing/decreasing value based on distance from target level.
 - **Caps / Collars** = these create limits for how much customers will have to pay more or less for the outputs and should be set based on stakeholder preferences, e.g. willingness to pay, and ensuring an appropriate balance between risk and reward for companies
 - **Deadbands** = can be used where there is uncertainty of what can be achieved to reduce the risk of over or under reward
 - **Mechanistic / Assessment** = where metrics are clearly measurable and controllable an automatic calculation of reward or penalty can be undertaken, otherwise an expert assessment of broader measures of performance could be used
 - **Fixed / marginal** = where incremental improvements are desired, marginal incentives should be considered, whereas fixed incentives are more appropriate where the delivery target is discrete

We refer to these principles in subsequent sections of this document where they influence our incentive design.

2.2 OUR APPROACH TO DESIGNING THE SDIS

In this section, we set out how we have used the principles of good incentive design to develop a common structure for the Strategy Delivery Incentive and describe the standard approach taken to developing the SDI for each of the three areas. The specifics of the work done for each of the Vulnerability, Major Connections and DSO SDIs are covered in more detail in sections 5, 6 and 7 respectively. We describe the following steps in the design of the incentive:

- Focus and structure of the SDI;
- Identification of metrics;
- Setting target levels;
- Combining metrics;
- Choosing the type of incentive;
- Setting the incentive rate;
- Applying and calibrating the overall incentive; and
- Setting the assessment frequency.

We have developed a standardised approach to developing SDIs, but where necessary have amended the approach to reflect the specific circumstances of each of three areas. This is particularly the case with the DSO strategy as a relatively new activity for DNOs with greater associated uncertainty.

The focus of the SDI

Strategies set out actions and plans targeting overall objectives and cover a broad range of activities. In our draft RIIO-ED2 Business Plan, we proposed a wide range of specific performance measures, justified with reference to the priorities of our customers. We consider these measures should be reflected in the metrics used by Ofgem to assess performance under the SDI.

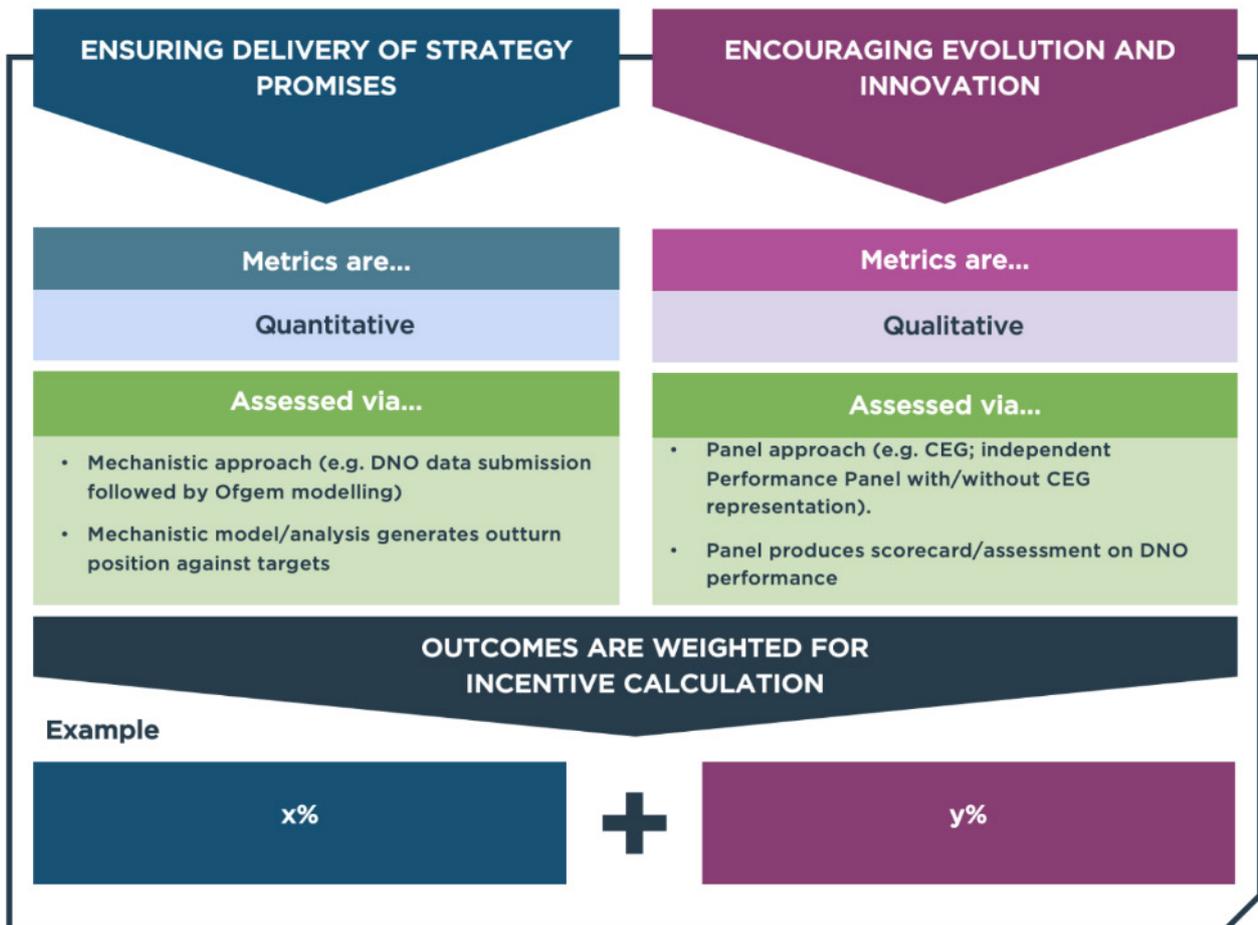
However, Strategies are also “living documents”, evolving over time to take account of changing circumstances that materially impact how and what they are seeking to deliver. It follows that the SDI, as well as focussing on how well the strategy delivers against the promised actions it originally set out, should allow scope for flexibility and evolution around what DNOs are incentivised to deliver for their customers.

Given these twin requirements, we consider the SDI lends itself to a two-part structure, with the following elements and characteristics.

ENSURING DELIVERY OF STRATEGY PROMISES	ENCOURAGING EVOLUTION AND INNOVATION
<ul style="list-style-type: none">• Focuses on the specific metrics that DNOs included as part of their strategy and align to Ofgem and stakeholder requirements• Metrics should be straightforward to measure and assess, as they are designed to track specific achievements against strategy objectives• As targets were agreed with Ofgem and stakeholders at Business Plan phase, targets are fixed over ED2	<ul style="list-style-type: none">• Focuses on broader elements of DNOs' strategies beyond specific metrics• Allows DNOs to dynamically and flexibly address issues around their strategies in response to Ofgem and stakeholder feedback• Metrics may not always be straightforward to measure as they are necessarily more qualitative• No fixed targets, as deals with more holistic and dynamic aspects of the strategies

Overall SDI structure

The two-part structure of the incentive, and the different focus of each element, requires a hybrid approach to the types of metrics used to measure performance. In the following diagram, we set out the types of metrics for each element of the incentive, how they would be assessed, and how the results from those assessments are drawn together for the overall outturn incentive calculation.



For the more dynamic aspects of strategies covered under “encouraging evolution and innovation”, or where there are no readily quantified metrics that can be used, qualitative metrics will be used as these will allow more scope for flexibility around what is being delivered. Given their qualitative nature, they will need to be assessed using a more subjective evaluation. We propose that a panel of informed members, who are also collectively familiar with the strategies of all the DNOs, is formed to assess performance, based on a clear terms of reference and decision-making criteria. Further detail on the approach to panel assessments is set out in section 4.

We consider that more weight should be given to the mechanistic assessment; because it covers those deliverables in companies’ plans that they have promised to deliver in line with stakeholder and customer requirements, and so they should face an overall stronger incentive around meeting these targets. In addition, as discussed above, we consider

that quantitative assessments are more aligned to the accepted principles of good incentive design, so should be more influential in the overall SDI assessment. As part of developing these proposals we have tested this principle with our CEG.

Identifying metrics to include in the SDI

How to choose the appropriate metrics to incentivise

SDIs are broad in nature, covering strategies which are designed to deliver multiple objectives. To be effective at incentivising the delivery of these objectives, metrics are needed that are clearly linked to the achievement of each of the individual objectives. Given the breadth of the strategies, a range of metrics will be necessary for each SDI.

The diagram opposite sets out the general structured approach we have taken to identify the objectives associated with the strategy, the preconditions for success (i.e. how the objectives are achieved) and then a set of metrics which are clearly linked to these achievements and, by design, the overall objectives.

Through this approach, we identified a “longlist” of potential metrics that could be suitable for inclusion in the SDI and mapped these against the objectives and achievements to which they are linked. This approach has also been informed by our conversations with other DNOs.

We have followed this approach for each of the three SDIs, with more detail set out in the relevant detailed SDI sections.



Common vs Bespoke metrics

Our strategy is driven by our customers’ and stakeholders’ priorities, and the specific circumstances of our two regions. As the DNO strategies themselves are highly aligned, we have concluded that the SDI should consist of common metrics across all networks, rather than bespoke in each case. Some of the common metrics may also have common targets, where a uniform target is applied across all companies. This is most likely to be appropriate in those cases where there are limited regional factors or specific customer preference (e.g. performing well on a general customer satisfaction score).

Adopting a common approach has several advantages:

- there is a high degree of similarity in the core of the strategies across networks, due to companies aligning their strategies to the principles that Ofgem set out at SSMD, which means a common incentive can incentivise the same level of outcomes for consumers across Great Britain;
- there are efficiency savings for Ofgem - and indeed the panel - in considering a common set of metrics and assessments;
- it reduces the risk of companies seeking to unduly influence their own bespoke approach. For example, with bespoke metrics, companies could put forward metrics on which they know they can outperform and Ofgem would lack other companies to benchmark against. Alternatively, companies may choose to put forward metrics that are less relevant for the objectives but are easier to achieve.

An associated disadvantage of a common approach may be that it may restrict the ability to design incentives to meet specific regions or customer needs.

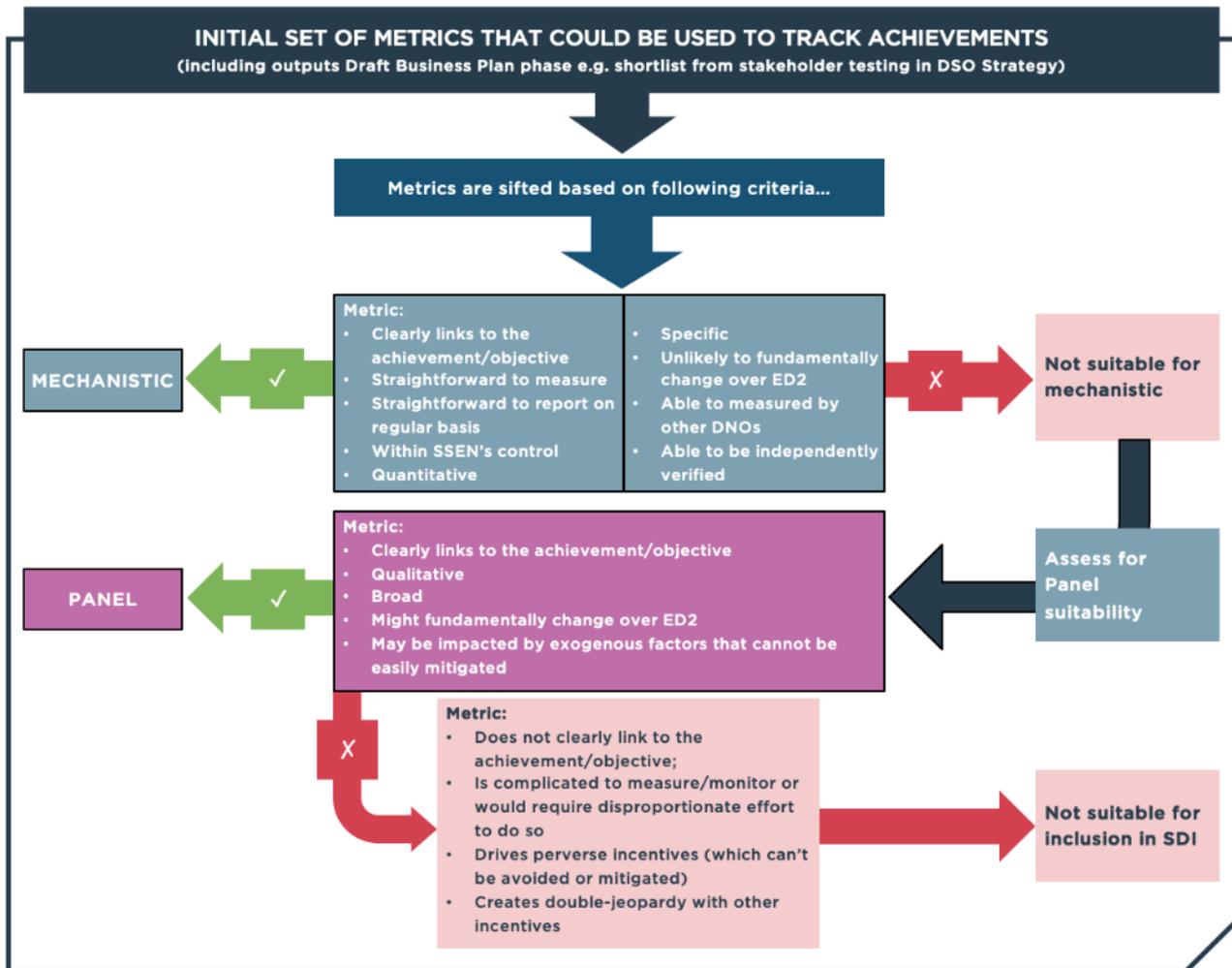
Sifting the metrics

Having identified a long list of metrics - drawing on the commitments in our strategies - we then assessed each metric for its suitability for inclusion in the SDI and whether it should be a mechanistic or a panel assessment. To guide this assessment, we used our principles for good incentive design which we set out in section 2.

Through this process we identified several metrics that had characteristics which made them unsuitable for either a mechanistic or panel assessment and then exclude them from assessment as part of the SDI. The key reasons for exclusion include:

- there is insufficient data available on the metric;
- the metric is not sufficiently well controlled by the company itself;
- the metric is not closely related to the outcome being incentivised;
- incentivising the metric could have unintended consequences or create perverse incentives that could not be mitigated; or
- while stakeholders support the activity to which a specific metric relates, they either do not see it as a priority or support it as a measure on which to specifically incentivise us.

The diagram below sets out our approach to shortlisting metrics for the Final Business Plan submission. Therefore, the initial set of metrics subject to shortlisting includes those identified in the relevant Strategy Annexes to the Draft Business Plan. We note that up to the Draft Business Plan stage the Strategies were at different stages of developing metrics. For example, the DSO Strategy had seen substantial metric development, including shortlisting and stakeholder testing.



In Appendix A we have set out the results of our shortlisting approach, including the rationale for assigning a metric to mechanistic or panel assessment, or excluding it entirely.

Further considerations for the metrics

For each of our shortlisted metrics, we then identified the additional details necessary for their inclusion in the SDIs.

Metrics for mechanistic assessment

For the mechanistic metrics, we set out the following:

- **Linked objective:** The overall objective to which the metric links to;
- **Metric definition:** The description of the metric;
- **Unit:** The unit of measurement for the metric;
- **Target:** The proposed baseline target;
- **Rationale for target:** Why the proposed target levels have been chosen, with reference to stakeholder evidence and historical performance where possible;
- **Data gathering and validation:** How the performance data is gathered and validated by companies, and any additional validation carried out by Ofgem or others that receive the data.

Metrics for panel assessment

For the panel metrics, we set out the following:

- **Linked objective:** The overall objective to which the metric links to;
- **Metric definition:** The description of the metric;
- **What the metric is assessing:** This is the focus of the panel’s assessment and includes an example “pro forma” question;
- **Quantitative evidence required:** This is the quantitative evidence that the company will be expected to provide the panel to help inform its decision;
- **Qualitative / narrative evidence required:** This is the qualitative or narrative evidence (such as commentary on any quantitative data provided) that the company will be expected to provide the panel to help inform its decision;
- **Data gathering and validation:** How the performance data is gathered and validated by companies, and any additional validation carried out by the panel if required;
- **Assessment thresholds and criteria:** These set out the thresholds and associated criteria for the panel to conduct their assessment. We describe these assessment thresholds at the following three points;
 - **Below target:** This sets out the criteria for the panel to deem the company’s submission has fallen below target for the metric.
 - **Meets target:** This sets out the criteria under which the panel would deem the company’s submission to be “at target”.
 - **Exceeds target:** This sets out the criteria for the panel to deem the company’s submission has exceeded the metric target.

Setting target levels

Having identified the metrics to include in the SDI, we have considered how to set a target performance level as part of the incentive.

All metrics for mechanistic assessment have clear, quantitative targets. We have considered whether the targets in the SDI should be fixed or dynamic:

- **Fixed targets** have numerical values set at the start of the price control. They may be set as a glidepath, for example increasing over the price control period (e.g. a target of 85% in Year 2 and a target of 90% in Year 5), however these will also be set at the start of the period. We consider fixed targets are appropriate in situations where we think it appropriate to specify a baseline level of performance (e.g. increasing the % of people on the PSR). Glidepaths may be particularly useful in newer areas of activity where there is less certainty over performance levels or where time is needed for capabilities to be built, for example in relation to DSO, where we have suggested an indicative glidepath for stakeholder service scores over the course of the price control.
- **Dynamic targets** do not have fixed numerical values set over the price control period. Instead, the target level is expressed as a relative measure. The most common form of this is setting a target at industry average or industry upper quartile performance; therefore, as industry performance changes over the period, so does the target. This approach is generally adopted in situations where it is clearer the industry is already achieving a desired baseline level of performance on average, and there is scope for innovation to drive outperformance. Incentivising such outperformance creates positive spill overs around knowledge sharing as well as creating an automatic “ratchet”, where the performance target improves as industry learns from and catches up with the top performers. However, as has been noted by respondents to other price controls, there are risks associated with

dynamic targets such as dampening incentives to collaborate and there are concerns around comparable and consistent data used in measuring these targets.³

We do not consider that any mechanistic metric in the SDIs will be suitable for dynamic targets. We consider that given Ofgem's objective for the SDI is to incentivise the delivery of the strategies, it is more appropriate to use fixed targets to hold companies to account for specific quantitative deliverables in their strategies. Making the targets dynamic would mean that a company could deliver the baseline required by its plan and agreed and fixed by the regulator at the start of ED2, but then end up in penalty if, on average, other companies delivered more than required by their plans. Fixed targets are more appropriate for ensuring that companies are incentivised to deliver what they have promised in their strategy, as well as giving additional regulatory certainty so that companies are able to plan accordingly. They also support Ofgem's secondary objective to incentivise DNOs to exceed their strategies, through allowing a reward to be earned in such circumstances.

In proposing the levels of the fixed targets, we have considered the following sources of information:

- **Stakeholder preferences:** understanding the importance which stakeholders place on the outputs; which comes from our extensive engagement process to develop the Business Plan and includes discussing the proposed SDIs with our CEG;
- **Past performance:** determining what is reasonable to achieve within the price control period requires a consideration of the current level the company has reached;
- **The value of delivering the output:** For instance, willingness-to-pay (WTP) evidence can provide an estimate of the value generated through delivery;
- **Peers / other industries:** Where DNOs are being held to account for company-specific targets, as opposed to industry-wide targets, we have looked at benchmarking against peers to ensure the targets are sufficiently stretching. Assessing the historical performance of peers may be an indicator

The importance of transparency in incentive targets and assessment

Our approach to setting the parameters for the panel assessment is to create consistency in the scoring outcome, and therefore creating more transparency for companies around what a "good" performance looks like.

Transparency around the performance level is vital for an incentive to be effective. In Principal-Agent Theory (the basis for incentive design), any mechanism seeking to incentivise an Agent to align with the needs of the Principal must adhere to the Incentive Compatibility Constraint. This means that the incentive mechanism must align the interests of the Agent (in this case the company) with that of the Principal (in this case the customer or the regulator acting on their behalf). However, if the behaviour that the Principal expects from the Agent is not clear to the latter, then the constraint and by extension the incentive is not effective.

In the case of the SDI, if the panel was not given clear parameters then its judgments and therefore scores could become highly subjective, meaning that the company would not know what sort of performance it should be targeting. This would result in a very ineffective regulatory tool, as some companies may end up targeting performance that is not in customers' interests or abandon trying to meet certain metrics altogether.

³ https://www.ofgem.gov.uk/sites/default/files/docs/2019/05/rrio-2_sector_specific_methodology_decision_-_core_30.5.19.pdf, p25

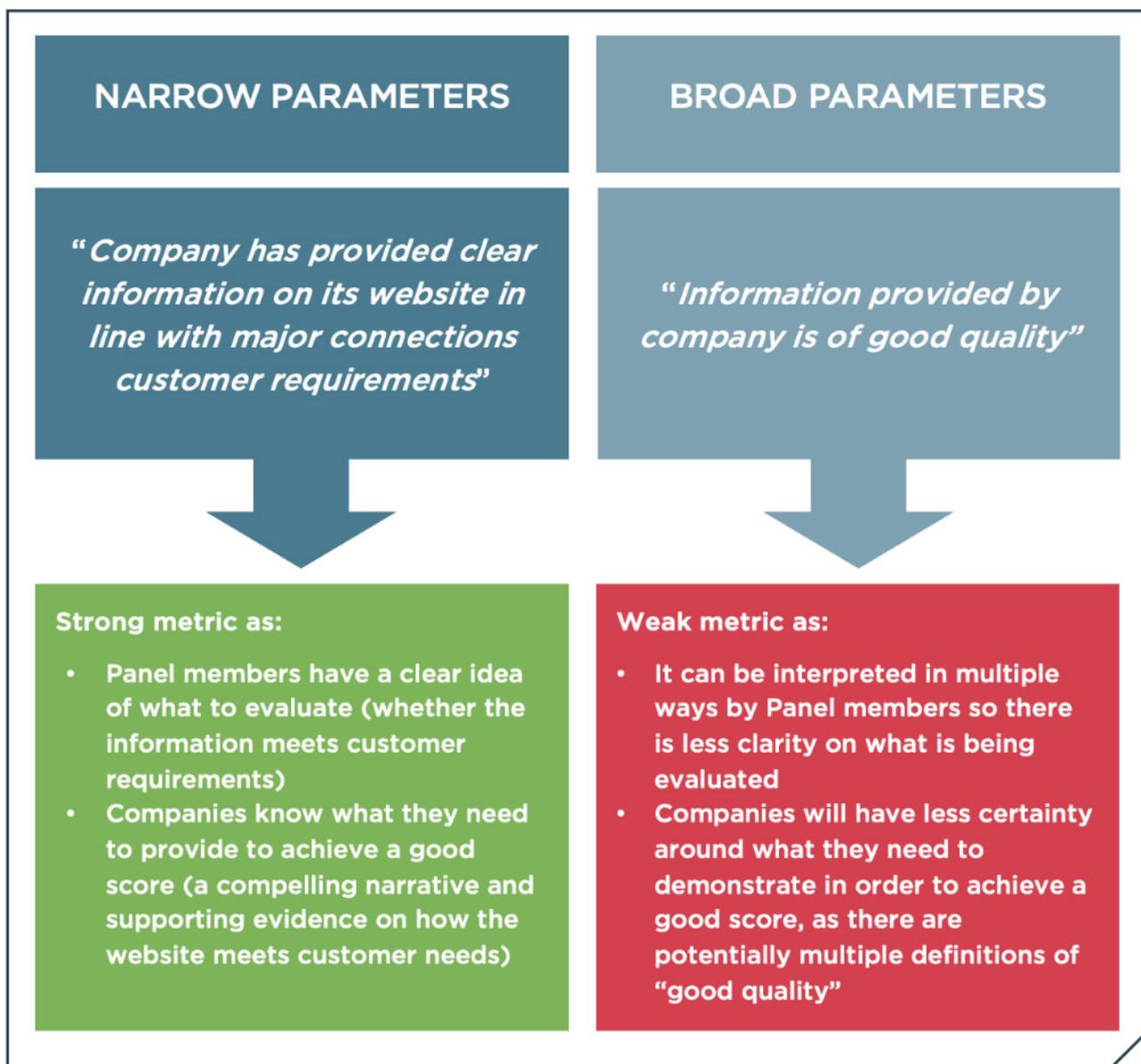
of what is reasonable to achieve and forecast performance levels can be a useful check on whether a company is sufficiently ambitious.

We have adopted a different approach to setting target levels for the panel assessment metrics. Due to their qualitative nature, instead of specific fixed targets, we have proposed several clear parameters to guide the panel in making their assessment.

As part of creating certainty through the design of the panel assessment element of the SDI we have considered what we believe to be best practice in designing these parameters, which we think need to be narrow, limiting the room for judgement by the panel by setting them a clear decision making framework linked to the overall achievement and objective to which the metric is linked.

Example: Narrow vs broad parameters

The companies need to report to the panel on a metric showing that they are providing a good quality of information to Major Connections customers. This can be reported to the panel in two ways.



Combining metrics

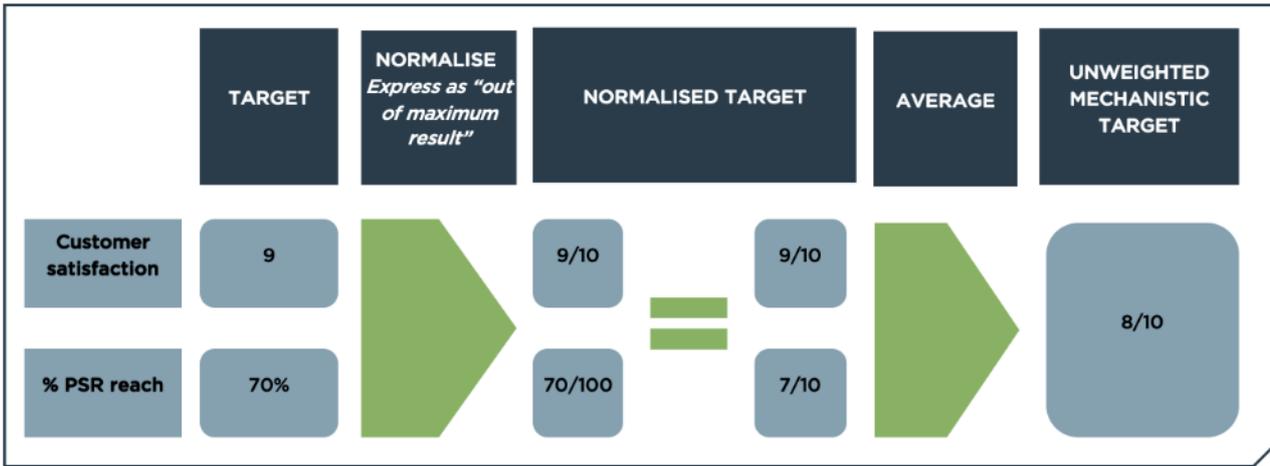
The final step in our process is to bring the mechanistic and panel assessments together into a single incentive. To do this we have developed an approach to combine the assessments into an overall SDI score from which the incentive rate can be calculated.

In combining the metrics, we have designed an approach that avoids complex calculations and measurements. Our objective is to make the operation of the SDI as simple as possible to operate (noting there is a degree of necessary complexity given the broad scope of the incentives). This will make it easier for Ofgem to calculate the outturn position of the companies during the price control, reducing administrative burden, as well as giving clarity to the companies themselves as to areas where they need to improve.

Scoring the mechanistic metrics

The mechanistic metrics have fixed quantitative targets. To combine these into an overall score, we first need to normalise them. A simple average is then taken across the individual metric targets which creates an overall mechanistic target score. We consider a standard position of a simple averaging approach is appropriate as we do not have stakeholder evidence to support weighting particular objectives or areas in our three strategies as more or less important than each other. However, where there are specific justifications in weighting individual strategies differently we deviate from this standard approach.

We set out this approach in the diagram below, with our normalisation approach being to express the targets in terms of the maximum possible outcome, which due to the nature of the metrics we have selected across the SDIs (e.g. customer satisfaction scores; percentages; pass/fail) can easily be converted to a measure out of 10. We note that for the DSO SDI, a slightly different approach has been used to reflect the unique nature of its metrics; this is set out in Section 7 of this Annex.



Scoring the panel metrics

As explained above, the metrics put forward for panel assessment do not have fixed quantitative targets. Instead, they are designed to allow the panel to conduct a qualitative evaluation of companies’ performance against specified criteria (but may include performance data as part of this assessment). However, despite the absence of fixed quantitative targets, for the sake of clarity for both the panel and companies we will set out terms of reference to the panel on how they should score performance in line with a clear set of criteria. As with the mechanistic assessment, each panel metric will be scored out of 10. Our starting assumption for each SDI is that the target score for each panel metric will be set at 7/10; this will represent clear, well-evidenced delivery against the given criteria. We do note that in the case of the DSO SDI, a slightly different target level has been picked which reflects the specific characteristics of that strategy and associated metrics. In line with our overall approach to providing clear guidelines to the panel, for each metric we have given specific details of what levels of performance is required for the bands: “at target”, “above target” and “below target”.

The targets and performance levels for the panel metrics will be averaged in the same way as the mechanistic metrics. Further details on scoring will be set out in the terms of reference for the panel, which we cover in Section 4.

Combining the assessment types

To combine the metrics in the overall score, we then apply a weighting between the panel and mechanistic scores.

As discussed previously, we consider that more weight should be given to the mechanistic assessment; as it covers those targets in companies’ plans that they have promised to deliver, so they should face an overall stronger incentive around meeting these targets, and they are a better fit for the principles of good incentive design (see section 2).

The overall process is shown in the diagram below.



Mathematical notations for incentive scoring approach

As an equation, the overall incentive score is expressed as follows:

$$SDI\ score = x \frac{\sum_{i=1}^n m_i}{n} + (1 - x) \frac{\sum_{i=1}^n p_i}{n}$$

Simplified:

$$SDI\ score = x \bar{m} + (1 - x) \bar{p}$$

Where m = mechanistic metric scores, p = panel metric scores, x = weighting factor.

Using different types of average

We propose to use simple and weighted averages for the metrics, as this avoids excessive complexity in the scoring.

However, we note that Ofgem may be concerned about companies being able to underperform on one metric and outperform on another where this results in an inequitable outcome for different customer groups. For example, in the case of the Vulnerability Strategy, the objectives of supporting customers vulnerable to loss of supply, fuel poverty and being left behind in the low carbon transition represent different customer groups in vulnerable situations, and different priority areas for the regulator. While there is some overlap between the groups, the objectives and therefore the associated metrics do link to performance for different types of customers. It is therefore inappropriate if companies were able to move resources to meet targets in one objective area at the expense of others, as in effect the company is delivering a worse service for one group in order to deliver for another group. Assuming the principle that customer groups in all vulnerable situations are equally important, it is clear that this behaviour should be discouraged by the incentive structure.

We have not seen evidence that companies could easily reallocate resources in this matter. If this was a concern to the regulator however, it may be appropriate to use a geometric mean of (for example) the mechanistic scores for each individual objective area. This means that companies cannot offset performance across objective areas, and so incentivises companies to focus equally on all objectives within the strategy.

This could be calculated as:

$$SDI\ score = x \sqrt[n]{\prod_{i=1}^n m_i} + (1 - x) \frac{\sum_{i=1}^n p_i}{n}$$

Simplified:

$$SDI\ score = x \overline{m_{geom}} + (1 - x) \bar{p}$$

Where

m = mechanistic metric scores, p = panel metric scores, x = weighting factor.

2.2.1 CHOOSING THE TYPE OF INCENTIVE

Having designed the SDI, we then consider what form the incentive should take, i.e. whether under- or outperforming the target level should have financial or reputational consequences or a hybrid of both. There are three core options for the broad type of incentive to be applied:

1. **Financial:** revenue adjustment is made depending on how companies perform relative to target output levels.
2. **Reputational:** non-financial incentives which utilise the fact that companies want to “establish and maintain a good track record for delivery with their stakeholders”⁴

⁴ Ofgem, Handbook for implementing the RIIO model, https://www.ofgem.gov.uk/sites/default/files/docs/2010/10/riio_handbook_0.pdf, p79.

3. **Hybrid:** reputational and financial incentives combined into a single incentive.

We considered the following factors to choosing between financial, reputational, or hybrid incentives:

1. **Data quality:** higher quality data is necessary to set financial incentives to have confidence in the performance reported by companies.
2. **Control over metrics and external factors:** the greater the level of control the company has over the level of output achieved, the more likely a financial incentive can be applied. Where there are factors which are outside the control of the company it is less likely to be appropriate to set a financial incentive as any reward or penalty achieved in this circumstance may not be due to the company's actions but the realisation of external factors.
3. **Importance to Ofgem/stakeholders:** outputs which are more important will be more suited to a financial incentive as it is likely to be more powerful in inducing the desired outcome in this area.

Only where all three of the above conditions are met (data quality is high, the company has substantial control over the metric, and it is of high importance to Ofgem and stakeholders) do we consider that financial incentives will be more appropriate.

We consider that the SDI should be a financial incentive. We have selected mechanistic metrics for inclusion based on the available data being of good quality, performance being within companies' control, and linked to key strategy objectives that are important to Ofgem and stakeholders. Metrics that are important to Ofgem and stakeholders but likely to be somewhat impacted by exogenous factors, or difficult to quantify, have been selected for panel assessment; this has a lower weighting than the mechanistic assessment to reflect these challenges, but should still be included for the financial incentive rate. We consider our approach to the panel assessment - being guided by measurable inputs and with clear terms of reference - as well our proposed overall weighting in favour of mechanistic element is sufficient to mitigate the risks of assessments being made which are outside of the control of a DNO.

Setting the incentive rate

In setting the financial incentive rate, we have used the following key principle to guide our incentive design approach:

When a company has received funding to deliver an outcome that is of benefit to customers, failure to deliver this outcome should see a commensurate penalty linked to the value specific opportunity lost to consumers. When a company has delivered to a higher level than it promised, it should receive a reward reflecting the additional benefit customers have received.

This means, we propose applying the incentive rate to a quantum reflecting the percentage of funding associated with the strategy objectives (and metrics) being targeted by the SDI.

Funding streams will be used for multiple purposes and activities, including covering fixed costs. Therefore it would be disproportionate to apply the incentive rate to 100% of the allowed revenue (funding) for any strategy, as this would cover activities outside the scope of the SDI so would not be binding on companies' behaviour, and would introduce significant risks for companies.

For each SDI we have therefore set a rate that applies to a funding stream associated with the strategy but is calibrated to not be disproportionate. In the calibration exercise, we have examined how Ofgem applies ODI rates in other parts of the price control, as well as looking at how other sectors (e.g. water) have calculated incentive rates for similar commitments.

Symmetrical rates

We consider that the penalty and reward rates for the SDIs should be symmetrical; in other words, a unit of outperformance is valued the same as a unit of underperformance.

As an example, this means that if the reward incentive rate is calculated on some proportion of allowed revenue for a given strategy (e.g. 10% of an allowed revenue of £100m, so the reward rate would be calculated on £10m), then the penalty rate will be calculated on that same amount too (in this case -£10m).

We consider that this is appropriate given that the SDIs cover deliverables that provide significant value to customers, so delivering more than promised, or ahead of schedule, will deliver equivalent benefits as the disbenefits associated with under delivery. Additional customer research around how much they value incremental increases in the metrics may provide further insight on this area, however we consider that, at present, this is an appropriate approach.

Incremental rates

A key consideration when setting incentives is whether the rewards and penalties scale with the performance against the target or are simply “pass/fail” lump sum payments.

We consider that the increment by which companies under or outperform the target is important; for example, an underperformance of 20% in delivering the Vulnerability strategy is likely to have a greater effect on customers than a failure of 5%. We therefore consider that the penalties and rewards should be incremental, otherwise a company would be indifferent to failing (or exceeding) a target by 5% or 20%, when its customers would not.

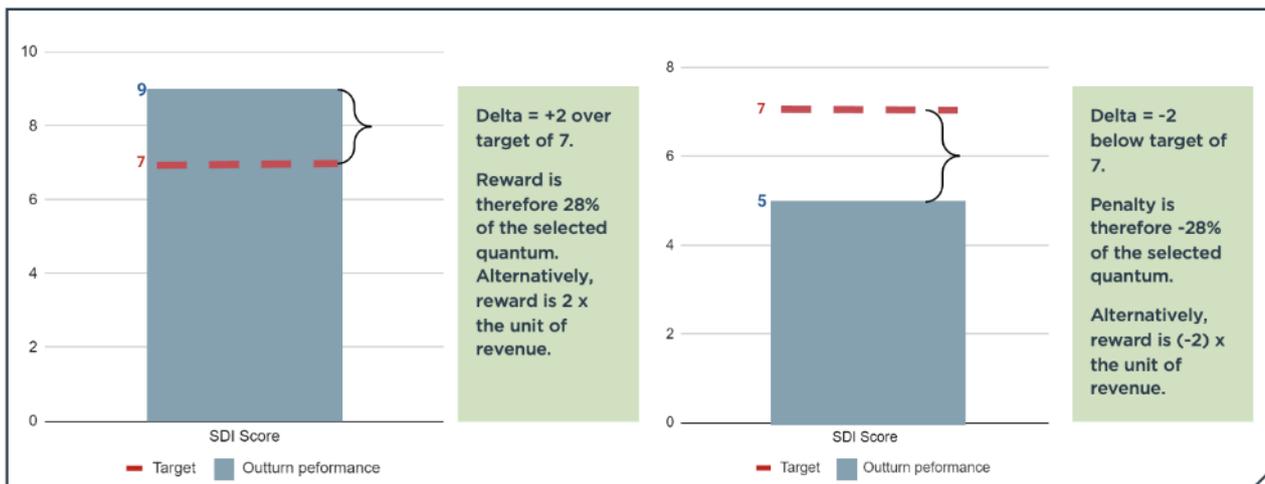
Applying and calibrating the overall incentive

The incentive rate will be calculated on the delta between the target and the outcome performance level at the overall SDI score. This incentive rate can either use the absolute delta or express the delta as a % of the target.

In the former case, the rate is simply based on the unit difference between the target and the performance level. For example, if a company has an SDI score target of 7, but only achieved 5 (out of 10), then the exposure would simply be $5 - 7 = -2$. This approach requires the revenue quantum subject to the incentive to also be expressed in the same units; in this example, the unit would simply be 1/10th of the total revenue quantum.

When using the “% of target” approach, the calculation is slightly different. Taking the same example as before, where a company has an SDI score target of 7, but only achieved 5, then the delta is -2 and the company will be exposed to a penalty of -28% of the associated revenue quantum, as $\frac{(5-7)}{7} = -0.28 = -28\%$.

These examples are shown diagrammatically below.



This is for the *unconstrained* outturn incentive rate. We have also considered whether deadbands, caps and collars should also be applied to the SDIs, and if so, where they should be set.

Deadbands

Deadbands are a range around the target where no reward or penalty is applied. These are used to give companies an additional range of performance levels within which they are not exposed to penalties or rewards. Whilst introducing deadbands can weaken the incentive for companies to improve around a range, they can be necessary to protect consumers and companies by accounting for a degree of uncertainty around the achievability of the target level.

In considering calibration and the use of deadbands, we have developed a key design principle for the SDI: if a company meets the target level for all mechanistic targets they should not receive a penalty as part of the overall incentive. We have adopted this principle because, it aligns to:

- Ofgem’s objective for the SDI, which is to incentivise the delivery and exceeding of the strategies. This is because the mechanistic assessment reflects the commitments in the strategies;
- best practice incentive design, where financial incentives are most appropriate where clear assessments can be made on metrics that are within the company’s control. In recognition that while our approach to panel assessments will support objective assessments there remains an element of subjectivity, which is reflected in the deadband; and
- stakeholder priorities, because of the process undertaken to develop the business plan through customer engagement which has been reflected in the design of the commitments covered by the mechanistic assessment.

The deadband is calibrated so the panel score cannot push a company into penalty if it has met all its mechanistic targets. Likewise, if a company has not met its mechanistic targets, the panel decision cannot push the company into reward. This is important because should companies deliver on their mechanistic targets (which is what they have promised to customers) it is not appropriate for them to receive a penalty, nor is it appropriate for them to receive a reward if they have not delivered these targets.

Furthermore, if the mechanistic score is on target, then no panel score will be able to shift the company into penalty or reward. However, if the mechanistic score is slightly below target, then a very poor panel score would be sufficient to take the company into a penalty position. Likewise, if the mechanistic score is slightly above target, then only an excellent panel score would be able to shift the company into a reward position.

This means that the panel score does have potential financial implications in all situations other than the precise point where the company exactly matches the mechanistic targets.

As set out previously, the overall SDI score is a combination of the weighted scores from the mechanistic and panel assessments. The overall mechanistic target can vary as it is a function of the targets of the individual metrics of which it is composed. However, the overall panel target will always be 7 (out of 10), assuming every metric for the panel assessment has a target level of 7 (out of 10). We have set out an illustrative example below; for our specific proposals, please see sections 5-7 of this Annex.

Illustrative example

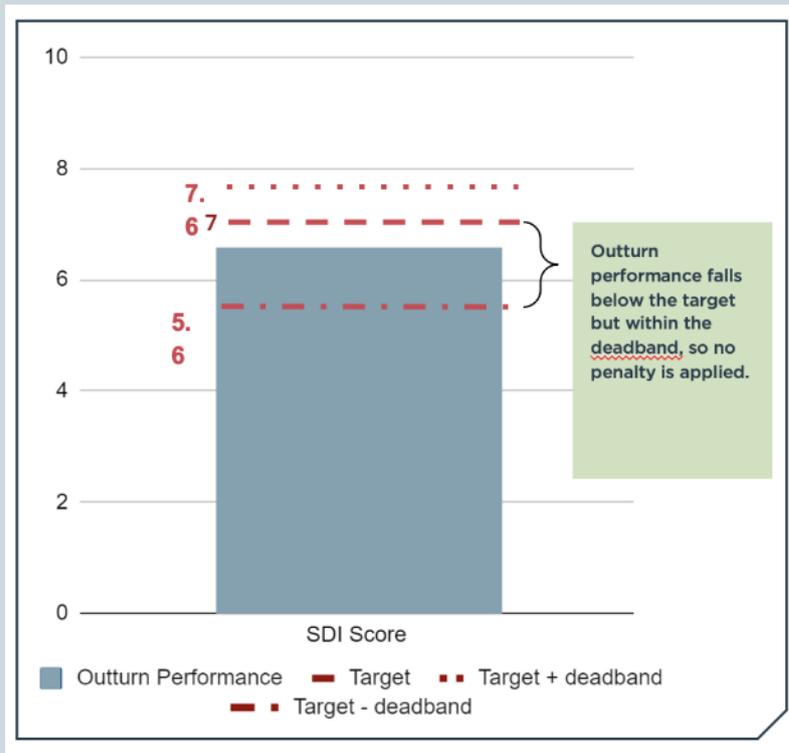
In an example where the overall panel score is assigned a weighting of 20%, the overall SDI target score becomes:

$0.8 \underline{m} + 1.4$, where \underline{m} is the mechanistic target score, and 1.4 is the panel target score (which is the target of 7 multiplied by 20%).

This also means that the maximum performance score under the panel assessment will be 10 (2 with the 20% weighting), and the minimum performance score will be 0.

We set the upper deadband at the maximum delta above the target, which is +0.6 ($10 - 7 = 3$, weighted by 20%), and the lower deadband at the maximum delta below the target, which is -1.4 ($7 - 0 = 7$, weighted by 20%). Given the target already includes the panel target of 1.4, this means that the panel alone cannot push a company into reward or penalty. This is shown in the diagram below.⁵

⁵ We note that as constructed, the deadband is asymmetric. A more symmetrical deadband could however be implemented so that a particularly low panel score could push a company into penalty even if it met its mechanistic targets.



Calculating the incentive rate with the deadband - an illustrative example

Performance within the deadband does not accrue a penalty or a reward. However, performance outside of the deadband does have a financial incentive applied to it.

As the performance inside the deadband is not considered for application of a financial incentive, it follows that the incentive rate should actually be applied to the delta from the deadband to the outturn performance level, instead of the target to the outturn performance level.

Under our previously discussed “% of target” incentive rate, this is calculated as follows:

$$\text{Penalty rate (below deadband)} = \frac{\text{Outturn} - (\text{target} - \text{deadband})}{\text{target}}$$

$$\text{Reward rate (above deadband)} = \frac{\text{Outturn} - (\text{target} + \text{deadband})}{\text{target}}$$

We have also set out an illustrative application of the formula, using our example from above where a company has an SDI score target of 7, but only achieved 5:

$$\text{Penalty rate (without deadband)} = \frac{\text{Outturn} - \text{target}}{\text{target}} = \frac{(5 - 7)}{7} = -0.28 = -28\%$$

$$\begin{aligned} \text{Penalty rate (with deadband)} &= \frac{\text{Outturn} - (\text{target} - \text{deadband})}{\text{target}} = \frac{5 - (7 - 1.4)}{7} = \frac{5 - 5.6}{7} \\ &= -0.085 = -8.5\% \end{aligned}$$

The “per unit” approach is much simpler:

$$\text{Penalty rate (below deadband)} = \text{Outturn} - (\text{target} - \text{deadband})$$

$$\text{Reward rate (above deadband)} = \text{Outturn} - (\text{target} + \text{deadband})$$

A feature of this approach (with a target that is not 5), is that it will result in different potential exposures to upside and downside performance. For example, with a target of 7, the maximum downside performance is the entire proportion of revenue subject to the incentive, whereas a maximum upside will be 43% of the proportion of revenue subject to the incentive.

Caps and collars

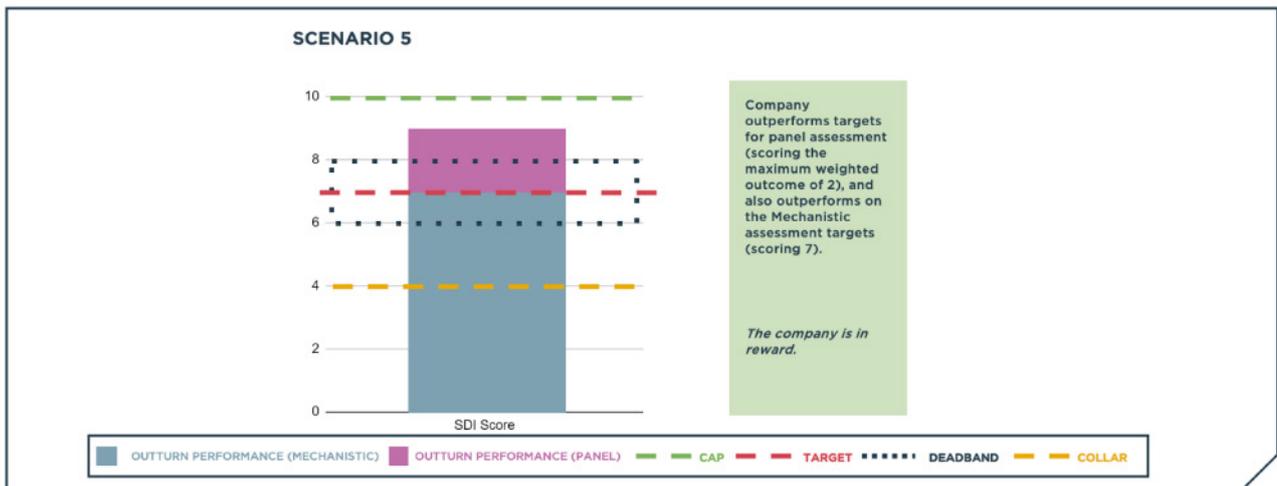
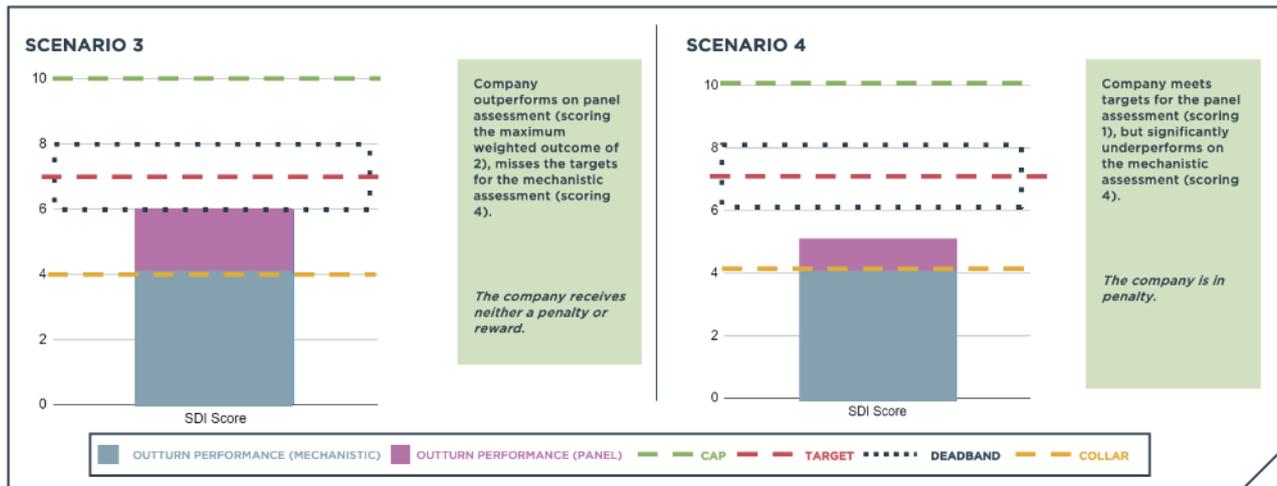
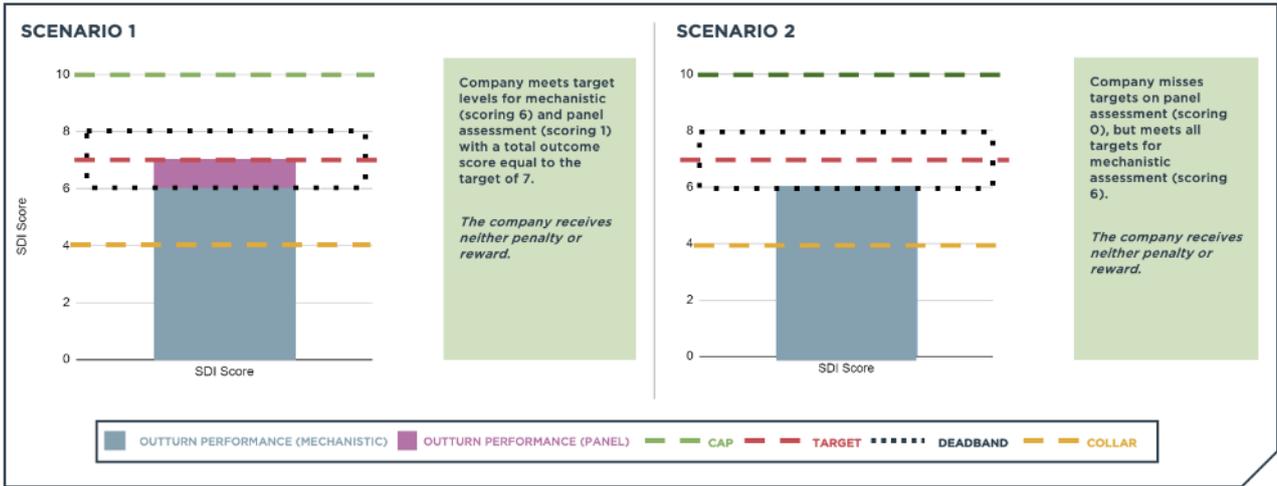
Caps and collars are, respectively, upper and lower limits on the financial incentive exposure. They are generally used to protect customers from risks of excessive payments for outperformance, and investors and companies from risks of excessive losses from underperformance.

Given we have designed the SDIs on the basis that the incremental benefits of outperformance are symmetrical to the disbenefits of underperformance, we consider that any caps and collars should also be symmetrical.

For the SDIs, there is a “natural” cap at 10, as companies cannot achieve more than this number from the (weighted and combined) mechanistic and panel scores. The cap should therefore be replicated with a proportional collar below the lower deadband. In simple terms, if the upper deadband is at 8 and the lower deadband is at 6, then the cap will be 10 and the collar will be 4.

Examples of how the incentives work in practice

The following diagrams provide illustrative examples of how the various aspects of the SDI work in practice (we assume symmetrical deadbands and a weighted panel target of 1 for simplicity of illustration).



Setting the assessment frequency

There are multiple options for the frequency of the assessment of the SDIs. These are:

- Annual
- Periodic (e.g. years 3 and 5 or years 2 and 5)
- End of ED2.

The assessment frequency will be influenced by the time horizon for when the benefits or improvements associated with the commitment are likely to be observable. Other considerations will be regulatory burden (which can increase with the frequency of assessment) and giving companies sufficient time to respond to feedback and make necessary improvements in time for the next assessment point.

As noted previously, the SDI is designed to incentivise companies to deliver on the objectives of their strategy, whilst also allowing flexibility for their strategy to evolve in response to changing circumstances. An annual assessment would not give companies sufficient time to demonstrate how their strategies are evolving, whilst a single assessment at the end of ED2 may not - in the absence of other feedback loops - provide the timely feedback and incentives required to ensure companies are delivering their objectives. Given the involvement of a panel assessment we are also conscious of the administrative burdens associated with the evaluation process, which makes an annual assessment less attractive.

Our working assumption is therefore that a periodic assessment at years 2 and 5 best aligns with the purpose of the SDI, except for DSO as it gives time for companies to show how they are adapting their strategies in the face of changing external circumstances, whilst also providing an in-period confirmation as to whether they are on track to meet their objectives. However, the SDI for DSO proposes an “end of ED2” assessment, based on the particular characteristics of the metrics and data maturity associated with that area. This is explained in more detail in Section 7.

1. HOW ASSESSMENTS WILL BE UNDERTAKEN

In this section we describe our proposals for how the assessment of the mechanistic and panel assessments are undertaken.

Mechanistic Assessments

Reflecting the quantitative nature of these metrics, the assessment process is straightforward. Each DNO will be required to put in place the necessary tools to measure the metric, for example a C-SAT survey for any customer satisfaction metrics. Depending on the specific metric, companies should consider whether an independent verification is needed, either on the design of the measuring technique (such as survey design or sampling approach to ensure it is free from bias) or on the final results. Where there is a need for comparable data across companies, a common methodology for measuring performance would need to be agreed in advance by industry and Ofgem. Companies would be responsible for assuring accuracy of the results and submitting them direct to Ofgem for their consideration and assessment. To avoid additional administrative burden, we would suggest that these submissions are done through the established Regulatory Reporting Pack (RRP) process.

Panel Assessments

The assessment process for panel metrics is more complex, because the membership of the panel and their terms of reference for how they make their decisions needs to be considered and defined in advance to ensure that it reflects the principles for good incentive design.

Panel Memberships

We have considered three alternative models for panel assessment: each DNO uses their CEG to make the assessment, a new independent expert panel is constituted by Ofgem, and a hybrid model where CEG representatives are nominated from each group are joined by Ofgem nominated independent experts. The diagram below sets out our assessment of the advantages and disadvantages of each model.

PREFERRED APPROACH			
	COMPANY LEVEL PANEL	INDEPENDENT SINGLE CENTRAL PANEL - CEG REPRESENTATIVES	OFGEM APPOINTED INDEPENDENT SINGLE GB-WIDE PANEL
	CEGs carry out assessment of individual DNO submissions (and/or appropriate working group of CEGs review).	CEGs nominate independent experts from membership to attend a single central Panel. Membership is supplemented with additional relevant independents e.g. CitA, NEA	Single central Panel formed of independent expert members nominated by Ofgem and/or key stakeholders e.g. like SECV
STRENGTHS	<ul style="list-style-type: none"> • CEG members have in-depth knowledge of DNO which can inform assessment • Supports improvements over time as CEGs can also make links with wider strategies / company vision and Purpose • Low resource to setup and run as CEGs already in operation with governance structures and funding in place 	<ul style="list-style-type: none"> • Ensures relevant expertise including regional insight and understanding • Allows comparison across DNOs' submissions • Consistent approach to assessment • Experts have understanding of historical DNO performance and provide DNO-level insight • Ensures best practice is shared across DNOs via CEG members, as well as feedback, enabling in-period improvements 	<ul style="list-style-type: none"> • Comparative view across different DNO plans • External legitimacy as seen as maximally independent of DNO • Fair as consistent approach for all DNOs • Under Ofgem control, giving Ofgem greater confidence in process and more certainty around Panel's decision being approved
WEAKNESSES	<ul style="list-style-type: none"> • Unless additional information provided, results in limited comparative view across DNOs; makes it hard to assess value/ progress in changing context • Lack of consistency of assessment as different CEGs may approach task differently. • Approach may lack legitimacy if CEGs are viewed to be "marking their own homework" (as they may have been involved in shaping the strategy) 	<ul style="list-style-type: none"> • Need to ensure a balance of CEG-appointed and independent members to mitigate the risks of the Panel being influenced by prior CEG member involvement in the development of the strategies 	<ul style="list-style-type: none"> • Assessment can be overly influenced by DNO "sales pitch" and on-the-day performance • Experts may lack trust / legitimacy of key stakeholders, undermining process • Lack of transparency around how decisions have been made • Can result in limited feedback to companies - missing opportunities to deliver in-period

Our proposal is to adopt a hybrid model with a combination of CEG-nominated and Ofgem-nominated members. Our initial proposal is for each DNO's CEG to nominate one representative with demonstrable relevant expertise (to be approved by Ofgem) and for an equal number of independent experts to be appointed by Ofgem. This will enable Ofgem to ensure collectively members have an appropriate spread of knowledge and expertise to perform the assessment task. We expect separate SDI panels for each strategy (Vulnerability, Major connections, and DSO). We consider this will ensure consistency of assessment across the country and ensure that the panel has sufficient context and information about each DNO's strategy to make informed judgements whilst having the independence needed from the expert panel members to make fair assessment decisions.

Panel Terms of Reference

As well as designing the make-up of the panel, we also consider it is important to set out clear Terms of Reference for how they make their decisions. This is to ensure that design of the SDI reflects best practice for incentives, so their assessments are as transparent as possible and without ambiguity based on a known level of performance. In other words, companies should be clear on the likely outcome of the assessment based on their understanding of their performance and the inputs provided to the panel.

We have looked at recent experience, in particular the RII0-ED1 Stakeholder Engagement and Consumer Vulnerability (SECV) incentive in designing our approach. Our assessment is that the SECV incentive is based predominantly on

broad parameters which are subjective and open to interpretation. For example, one of the assessment criteria is: “A strategic understanding of and commitment to the role that network companies can play in tackling social issues relevant to vulnerable consumers”, but this is without any specification and is open to a wide range of interpretations⁶. As such, we do not consider it provides a good model for creating a panel assessment under the SDI.

Instead, we propose terms of reference are developed based on the following principles, to ensure a fair assessment process for consumers and companies and therefore making the incentive more effective:

- Defined inputs to form the basis of panel assessments: companies should submit information to the panel to form the basis of their assessment and where possible this should be quantitative. For example, on fuel poverty information on the number of customers helped with their fuel bills (including relative to their strategy commitments) would inform the panel’s decision on company performance on lifting households out of fuel poverty (noting that metric cannot be a mechanistic assessment due to exogenous factors).
- Clear quality criteria: rather than an assessment scale of “weak” to “excellent” which is subjective for each metric the panel is asked to assess a clear set of quality criteria would be developed against which they would make their judgements. Panel assessments would be to judge performance against these criteria and would have a prescriptive list of factors they are to take into account in making their assessments. An example of quality criteria for the “Improvements in forecasting information and expansion across time horizons and new CMZs” metric could relate to evidencing how the DNO has incorporated stakeholder feedback in improving or expanding coverage of their forecasting.
- Individual metric assessments: the panel would make individual assessments for each of the metrics under their consideration. Any weighting for the SDI is set in advance and is a mechanistic assessment without any subjectivity.
- Evidence-based approach: we do not propose presentation-style assessments as is the case with the SECV incentive. Companies would prepare an information pack in advance, with the evidence base of performance against the quality criteria and the panel could ask for supplementary information or clarification questions to ensure a robust evidence base, as opposed to a subjective response to an on-the-day representation of performance.

⁶ https://www.ofgem.gov.uk/sites/default/files/docs/2018/12/secv_incentive_guidance.pdf

2. VULNERABILITY STRATEGY - DETAILED SDI DESIGN

This section covers the following areas:

- Our Vulnerability Strategy
- Introduction to the Vulnerability SDI
- Vulnerability Metrics
- Assessment and overall scoring approach
- Applying the incentive

Our Vulnerability Strategy

At the Draft Business Plan stage, SSEN presented a Consumer Vulnerability Strategy. In addition to developing this strategy for the Final Business Plan, we have also developed the proposal set out here for a Vulnerability Strategy Delivery Incentive to accompany the Strategy itself. This document focuses on the SDI, but we set out below some of the key information and work conducted in developing the Vulnerability Strategy which is relevant for this SDI proposal. For full details of the Vulnerability Strategy please see **Vulnerability Annex (4.2)**.

Stakeholder engagement

Stakeholders have had a far stronger voice in shaping our ED2 Business Plan than ever before. Our programme of inclusive, insightful, impactful and iterative enhanced engagement has enabled our stakeholders, customers and consumers to co-create the Business Plan with us. This transformed approach to stakeholder engagement is described in detail in **Enhanced Engagement Strategy (Annex 3.1)**.

The Enhanced Engagement Appendices (see pages 38-74) demonstrate the golden thread that connects stakeholder opinion to the outputs we will deliver during ED2. Each begins with a synthesised list of the actionable insights we gained about customer vulnerability, fuel poverty and customer service, and how these have been implemented in the Business Plan. The sources of this evidence are scored for robustness, and the insights 'triangulated' against each other, which allowed output owners to trade off dissenting views and ensured that the most robust feedback had the greatest impact on the content of the Business Plan.

Evidence Summary



ED2 ENGAGEMENT EVENTS

24



INSIGHTS

572



STAKEHOLDERS ENGAGED

9,943

Strategic Outcomes

In ED1 between 2017-18 we engaged with stakeholders to develop our strategic outcomes and obtained views to ascertain if they were still broad enough against Ofgem’s Consumer Vulnerability Strategy 2025.



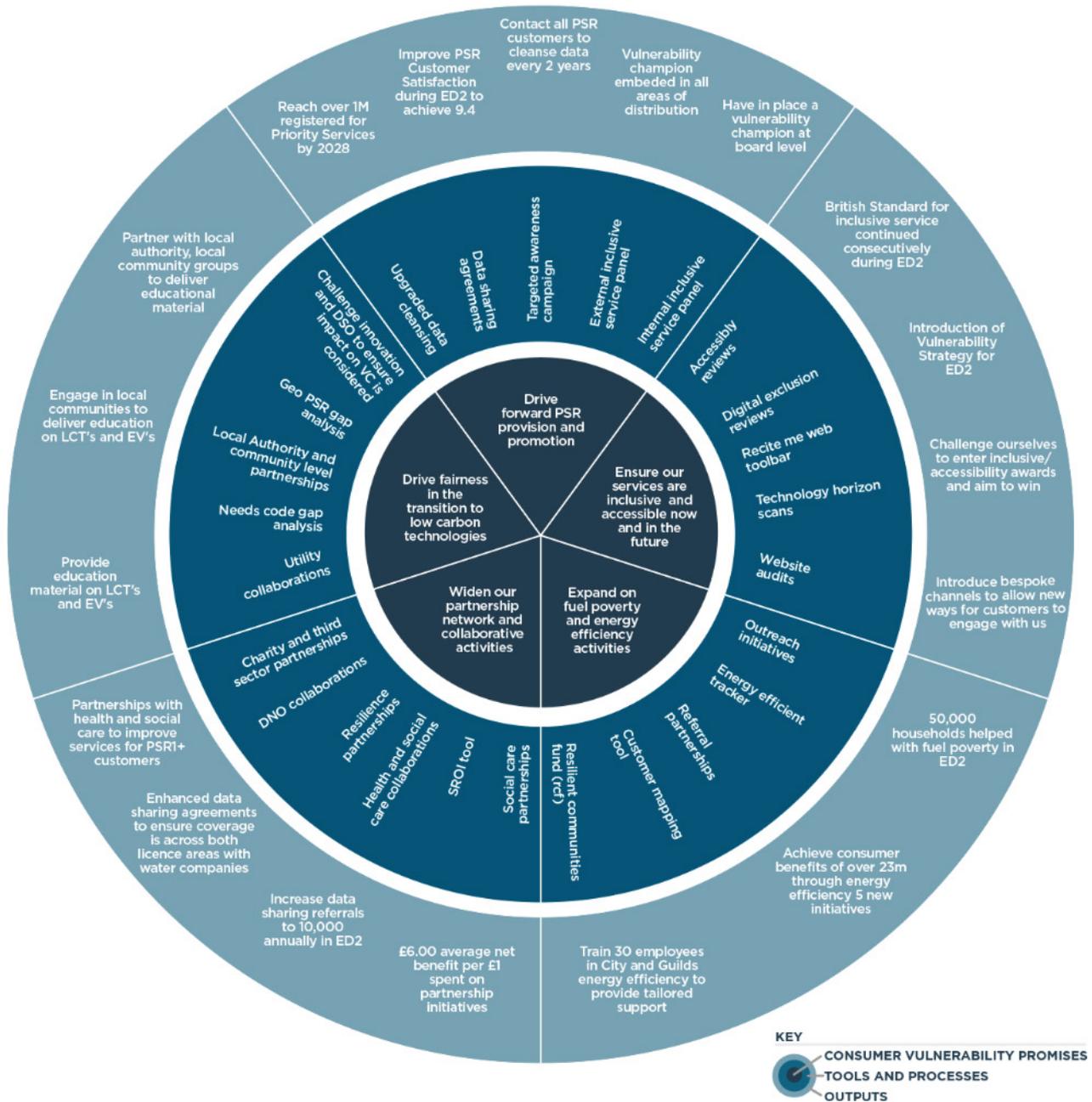
These five Consumer Vulnerability Strategic Outcomes sit at the heart of our Consumer Vulnerability Strategy and at the centre of our Vulnerability Strategy Wheel. In the Vulnerability Strategy we set out how each of Ofgem’s Principles and baseline standards work alongside our Consumer Vulnerability Strategic Outcomes.

Targets and metrics

‘The Wheel’, as it is known, incorporates:

- our five strategic outcomes for consumer vulnerability.
- the main stakeholder engagement methods we use for consumer vulnerability.
- tools and processes we have for measurement, data collection and service delivery.
- our targets and Key Performance Indicators (KPI’s) or outcomes and achievements, depending on the time of year.

The Wheel is a clear view of the KPIs, targets and outcomes that we want to achieve in not only meeting Ofgem’s Principles/baseline standards but all the above and beyond work that we will be doing to meet our own Consumer Vulnerability Strategic Outcomes, to go that bit further in safeguarding our customers. This can be used to track our progress in meeting the Ofgem performance metrics throughout ED2.



Our stakeholder feedback has informed our initiatives and the targets we have set ourselves. We have proposed a wide range of specific, measurable and performance measures, justified with reference to the priorities of our customers. These measures should be reflected in the metrics used to assess performance under the SDI, but as the Strategies are also “living documents” the SDI should also allow scope for flexibility and evolution around what DNOs are incentivised to deliver for their customers.

Introduction to the Vulnerability SDI

In this section we present an SDI which will incentivise the delivery of all DNOs’ Vulnerability Strategies. These strategies are designed to protect and empower consumers in vulnerable situations, ensure access to company services and the benefits of the energy system transition, assist affordability, and deliver support associated with the activities of a DNO and in line with their wider public purpose.

Having followed the approach outlined in Section 3, we propose four key objectives to be covered by the SDI. The first three of these objectives align with the three primary areas of focus outlined in the SSMD and Business Plan Guidance.⁷ The fourth objective incentivises delivery in the activities which are necessary to provide excellent support to customers in vulnerable situations, and continually improve the Vulnerability Strategy.

- **Objective 1:** Improve service provision to customers vulnerable during a loss of supply
- **Objective 2:** Support customers in or at risk of fuel poverty through provision of advice and support
- **Objective 3:** Support customers in vulnerable situations to engage with and benefit from the energy system transition towards Net Zero
- **Objective 4:** Use data, partnerships, and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations

The diagram below shows these objectives and associated metrics we are proposing for this SDI.

VULNERABILITY SDI FRAMEWORK			
		KEY	
OBJECTIVE 1	OBJECTIVE 2	MECHANISTIC ASSESSMENT	PANEL ASSESSMENT
Improve service provision to customers vulnerable during a loss of supply	Support customers in or at risk of fuel poverty through provision of advice and support	Support vulnerable customers to engage with and benefit from the energy system transition towards Net Zero	Use data, partnerships and training to deliver for vulnerable customers, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations
% households on PSR as proportion of eligible	Customer satisfaction score for recipients of fuel poverty support	Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support	Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations
% medically dependent households on PSR as proportion of eligible	Identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support		
Customer satisfaction score for PSR customers experiencing a planned outage			Building effective partnership to support vulnerable customers
Customer satisfaction score for PSR customers experiencing an unplanned outage			Effective use of data to understand vulnerability and support strategy delivery
Identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support			Providing quality support to vulnerable customers through company training, a focus on accessibility, and an embedded commitment across the business
Maintaining an accurate PSR against a defined quality criteria			

Vulnerability Metrics

This section details the mechanistic and panel metrics included in the SDI under each of the four objectives.

Objective 1: Improve service provision to customers vulnerable during a loss of supply

Objective 1 focuses on a key stakeholder priority and Ofgem principle within vulnerability: supporting those customers who are vulnerable during a loss of supply. The overall approach acknowledges that all customers can potentially be vulnerable during both planned and unplanned supply interruptions, but that in line with Ofgem’s definition of vulnerability, some consumers will due to their physical characteristics or personal situation be more likely to suffer

⁷ <https://www.ofgem.gov.uk/publications/riio-ed2-business-plan-guidance>, p16

harm, and when detriment occurs that harm is for that to be more likely to be severe. Customers can be more at risk due to a range of transient or permanent factors. For example, those dependent on electricity to run life-saving equipment; those who are elderly and with ill-health who may rely on electricity for heating their homes; and customers may have communication, mental health or mobility related disabilities that impact their ability to access information and support during supply interruptions. DNOs must take a range of actions to ensure 'at risk' customers are protected during a loss of supply.

Within this objective, we consider there are three areas of focus on which DNOs will need to make progress if they are to meet the overall objective:

- Increasing the number of eligible customers on the PSR;
- Improving accuracy of PSR data; and
- PSR customers are delivered high-quality support pre, during and post loss of supply which they are satisfied with.

Our justification for why these are the areas which DNOs must focus on to deliver the objective is the following:

Increasing the number of eligible customers on the PSR: Identifying and increasing the overall number of eligible customers on the PSR so as to ensure all customers that need tailored or additional safety, access or communication support receive it. In particular, identifying and increasing the number of eligible customers on the PSR who are medically dependent and at greatest risk of harm during supply interruptions

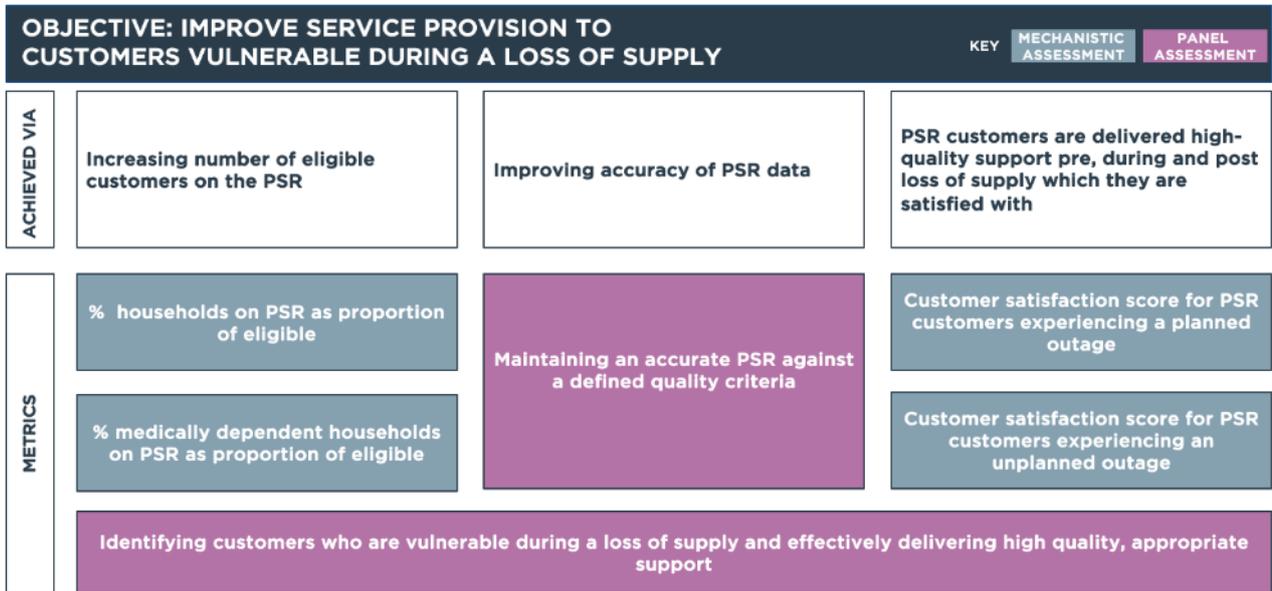
Identifying customers at risk during a supply loss and adding them to the PSR is a critical first step in being able to provide support to customers in the most vulnerable situations. Adding customers to the PSR on the basis of their vulnerability is essential, and requires an understanding of vulnerability in the area and developing strategies to identify and add customers to the PSR.

We consider that DNOs should focus on protecting consumers that are most at risk of harm during loss of supply incidents - those customers who are medically dependent on their supply. All DNOs have a 'PSR gap' in this area and medically at-risk customers have been relatively 'harder to reach' so a particular focus and incentive if warranted here.

Improving accuracy of PSR data: A company having high numbers of consumers on the PSR is of limited use if the data held about customers is poor quality and cannot easily be used when it might benefit customers. While in theory all consumers who need help would get it immediately, in practice with increasing numbers of people projected to be eligible for the PSR between now and 2028 it will also be of growing importance for DNOs to be able to effectively prioritise which PSR customers get help first during unplanned supply interruptions. In addition to increasing the number of customers on the PSR, DNOs therefore also need to ensure that their PSR data is accurate and up to date. This includes contacting customers and verifying their data, cleansing their database, and adding and removing customers from the PSR when their needs change.

PSR customers are delivered high-quality support pre, during and post loss of supply which they are satisfied with: Being on the PSR alone, does not guarantee high-quality timely service provision. Importantly therefore we propose that the support provided and customer satisfaction with this support must be assessed, both in terms of the quality of support provided, and the volume of support (number of people supported). We also propose that the types of customers who receive support and the speed of provision is monitored. This is to ensure that all different types of consumers in vulnerable situations on the PSR who need help are receiving it in practice in a timely way and to minimise the risk of bias towards easier to reach groups. This visibility and feedback around delivery will support companies in improving their service provision – the type of support provided, how it is delivered, and related

employee training. DNOs need to provide appropriate and timely support that meets the varied needs of their customers in vulnerable situations and evidence its delivery. Ofgem already requires energy suppliers to report the number of PSR services provided as part of its social monitoring so there is a precedent and acknowledged value to this.



Objective 1 - Mechanistic metrics

V-M1: % households on PSR as proportion of eligible

Linked objective	Improve service provision to customers vulnerable during a loss of supply
Linked achievement	Increasing number of eligible customers on the PSR
Metric definition	<p>The % households registered on a DNO's PSR* as a percentage of those eligible in the DNO's area.</p> <p>Calculation = # households on PSR / # eligible households in DNO area</p> <p>(*excluding the number registered only as medically dependent to avoid double counting with Metric V-M2)</p>
Unit	%
Target	Year 2: 68%, Year 5: 70%
Rationale for target	This target represents a high value within the range of DNOs' own targets for ED2; of the 5 DNOs with a target for PSR reach publicly available in the draft business plan submission the mean is 68.4%
Data gathering and validation	DNOs report data on the number of households on the PSR on an annual basis. Data goes through standard audit/compliance processes to ensure accuracy. Data is then expressed as % of total eligible customers in the area (using consistent data across DNOs). Ofgem validates data as part of assessing performance against target.
Necessary conditions to use this metric	<p>Consistent methodology to calculate the number of households eligible in each area.</p> <p>Consistent reporting of PSR household registration.</p>

V-M2: % medically dependent households on PSR as proportion of eligible

Linked objective	Improve service provision to customers vulnerable during a loss of supply
Linked achievement	Increasing number of eligible customers on the PSR
Metric definition	<p>The % medically dependent households registered on a DNO's PSR as a percentage of those eligible in the DNO's area.</p> <p>Calculation = # medically dependent households on PSR / # eligible households in DNO area</p>
Unit	%
Target	Year 2: 75%, Year 5: 80%
Rationale for target	Customers who are medically dependent are at acute risk of harm during supply interruptions, and so it is necessary that the target for medically dependent households results in a higher proportion of eligible households on the PSR. In addition, research indicates that the population of customers who will be medically dependent is likely to increase over the period, making it particularly challenging for DNOs to close the gap further due to the increase in absolute numbers who will need to be identified and added to the PSR in this category.

V-M2: % medically dependent households on PSR as proportion of eligible

Data gathering and validation	DNOs report data on the number of medically dependent households on the PSR on an annual basis. Data goes through standard audit/compliance processes to ensure accuracy. Data is then expressed as % of total eligible customers in the area (using consistent data across DNOs). Ofgem validates data as part of assessing performance against target.
Necessary conditions to use this metric	Consistent methodology to calculate the number of households in each area. Consistent reporting of PSR household registration. Consistent needs code for medically dependent customers

V-M3: Customer satisfaction score for PSR customers experiencing an unplanned outage

Linked objective	Improve service provision to customers vulnerable during a loss of supply
Linked achievement	PSR customers are delivered high-quality support pre, during and post loss of supply which they are satisfied with
Metric definition	This is the average survey score recorded by PSR customers that have experienced an <i>unplanned</i> outage and have then been randomly selected for a survey on their experience
Unit	Score out of 10, with 10 being “very satisfied”
Target	Year 2: 9.2 / 10, Year 5: 9.3 / 10
Rationale for target	DNOs have proposed targets for the BMCS of a comparable level which assesses a similar question; of the 5 DNOs with a target for BMCS performance publicly available in the draft business plan submission the mean is 9.2.
Data gathering and validation	DNOs agree on common questions and sampling approaches for the survey. This may include appointing an independent survey company to conduct the survey. A random sample of each DNO’s PSR customers impacted by an unplanned outage are contacted for the survey and questioned on their satisfaction.

V-M4: Customer satisfaction score for PSR customers experiencing a planned outage

Linked objective	Improve service provision to customers vulnerable during a loss of supply
Linked achievement	PSR customers are delivered high-quality support pre, during and post loss of supply which they are satisfied with
Metric definition	This is the average survey score recorded by PSR customers that have experienced a <i>planned</i> outage and have then been randomly selected for a survey on their experience
Unit	Score out of 10, with 10 being “very satisfied”
Target	Year 2: 9.2 / 10, Year 5: 9.3 / 10
Rationale for target	DNOs have proposed targets for the BMCS of a comparable level which assesses a similar question; of the 5 DNOs with a target for BMCS performance publicly available in the draft business plan submission the mean is 9.2.
Data gathering and validation	DNOs agree on common questions and sampling approach for the survey. This may include appointing an independent survey company to conduct the survey. A random sample of each DNO’s PSR customers impacted by a planned outage are contacted for the survey and questioned on their satisfaction.

Objective 1 - Panel metrics

V-P1: Maintaining an accurate PSR against a defined quality criteria

Linked objective	Improve service provision to customers vulnerable during a loss of supply
Linked achievement	Improving accuracy of PSR data
What the metric is assessing - example pro-forma question	Has the company shown it is maintaining an accurate PSR against a defined quality criteria?
Quantitative evidence required	<ul style="list-style-type: none"> • The # and % of households attempted contact with in 24 months • The # and % of households made contact with in 24 months i.e. households verified and deemed accurate in 24 months • # households removed from the PSR following data checks
Qualitative / narrative evidence required	Details of processes in place related to maintaining an accurate PSR for domestic and NHH consumers e.g. frequency of PSR updates and type of communication and approaches used, consideration of data cleansing by other parties.
Assessment thresholds and criteria	
Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it is maintaining an accurate PSR database in line with industry good practice.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it is maintaining an accurate PSR database in line with industry good practice.
Exceeds target > 7 / 10	Company has provided convincing evidence that the company is providing industry leading innovation in order to maintain an accurate PSR database in line with industry good practice.

V-P2: Identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support

Linked objective	Improve service provision to customers vulnerable during a loss of supply
Linked achievement	Increasing number of eligible customers on the PSR Improving accuracy of PSR data PSR customers are delivered high-quality support pre, during and post loss of supply which they are satisfied with
What the metric is assessing - example pro-forma question	Has the company shown it is successfully identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support?
Quantitative evidence required	<ul style="list-style-type: none"> • # customers receiving support, broken down by PSR needs code and type of support delivered • Speed of contact and delivery of support following supply interruption
Qualitative / narrative evidence required	<ul style="list-style-type: none"> • Details of support provided to those on the PSR pre, during and post loss and supply (a wide range of support will need to be available which reflects different customer needs) • Evidence of dedicated lines or prioritisation available for PSR customers • Evidence that information is provided for PSR customers in formats suited to a range of communication needs, where accessibility services should include accessibility AA and top 10 DNO language translations as a minimum • Evidence of approach and support provided to non-household consumers
Necessary conditions to use this metric	Consistent reporting of PSR household registration. Consistent needs code for medically dependent customers

Assessment thresholds and criteria

Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it is identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it is identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support.
Exceeds target > 7 / 10	Company has provided convincing evidence that the company is providing industry leading innovation in order to identify customers who are vulnerable during a loss of supply and effectively deliver high quality, appropriate support.

Objective 2: Support customers in or at risk of fuel poverty through provision of advice and support

Objective 2 focuses on another of Ofgem’s priority areas within vulnerability: supporting customers in or at risk of fuel poverty. Within this objective, there are three areas of focus on which DNOs will need to make progress if they are to meet the overall objective:

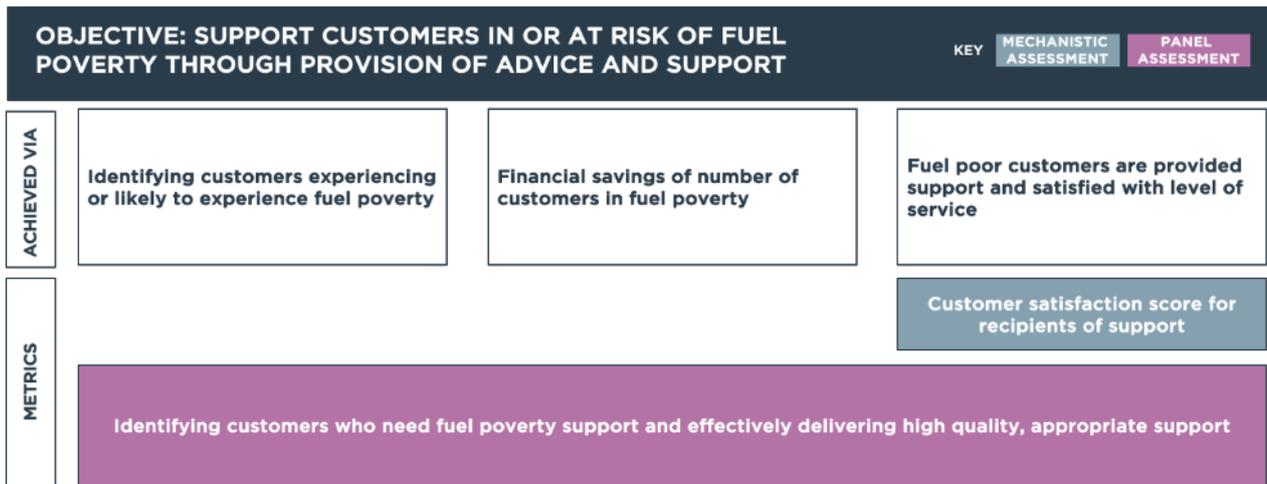
- Identifying customers experiencing or likely to experience fuel poverty;
- Financial savings of number of customers in fuel poverty; and
- Fuel poor customers are provided high-quality support and satisfied with level of service.

Our justification for why these are the areas which DNOs must focus on to deliver the objective is set out below:

Identifying and supporting customers experiencing or likely to experience fuel poverty: DNOs must identify their customers who are in or at risk of fuel poverty as a first step in being able to provide support to this group of customers in vulnerable situations.

Financial savings of number of customers in fuel poverty: Due to the nature of the vulnerability, the effectiveness of support for customers in fuel poverty needs to include an assessment of the financial savings made by customers in or at risk of fuel poverty to ideally bring them out of fuel poverty, and if not then alleviate the degree of fuel poverty.

Fuel poor customers are provided support and satisfied with the level of service: DNOs need to provide appropriate, high quality support to their fuel poor customers. This needs to be done in a strategic, well targeted and cost-effective way.



Objective 2 - Mechanistic metrics

<i>V-M5: Customer satisfaction score for recipients of fuel poverty support</i>	
Linked objective	Support customers in fuel poverty through provision of advice and support
Linked achievement	Fuel poor customers are provided support and satisfied with level of service
Metric definition	The average survey score recorded by customers who have received support for fuel poverty and have been randomly selected for a survey about their experience.
Unit	Score out of 10, with to being “very satisfied”
Target	9 / 10
Rationale for target	All DNOs should be aiming for a high level of performance.
Data gathering and validation	DNOs agree on common questions and sampling approach for the survey. This may include appointing an independent survey company to conduct the survey. A random sample of each DNO’s customers who have been provided advice or support related to fuel poverty are contacted for the survey and questioned on their satisfaction.
Necessary conditions to use this metric	Consistent definitions and methodology to identify the numbers in each DNO, and individuals who are in fuel poverty.

Objective 2 - Panel metrics

V-P3: Identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support

Linked objective	Support customers in fuel poverty through provision of advice and support
Linked achievement	Identifying and supporting customers experiencing or likely to experience fuel poverty Financial savings of number of customers in fuel poverty Fuel poor customers are provided support and satisfied with level of service
What the metric is assessing - example pro-forma question	Has the company shown it is successfully identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support?
Quantitative evidence required	<ul style="list-style-type: none"> ● # households supported by type of support and type of customer ● % households supported / total in fuel poverty ● % referrals resulting in support being provided ● SROI per £ spent (direct and social value) ● Estimated average financial saving per household / # households in fuel poverty
Qualitative / narrative evidence required	<ul style="list-style-type: none"> ● Strategy for targeting fuel poverty support ● Narrative justifying spending, reporting on the services provided
Necessary conditions to use this metric	Consistent definitions and methodology to identify the numbers in each DNO, and individuals who are in fuel poverty. Consistent SROI for different types of fuel poverty assistance. Consistent methodology for financial savings per household
Assessment thresholds and criteria	
Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it is identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it is identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support.
Exceeds target > 7 / 10	Company has provided convincing evidence that it is providing industry leading innovation in order to identify customers who need fuel poverty support and effectively deliver high quality, appropriate support.

Objective 3: Support customers in vulnerable situations to engage with and benefit from the energy system transition towards Net Zero

Within this objective, there are three areas of focus on which DNOs will need to make progress if they are to meet the overall objective:

- Identify customers at risk of being left behind by the energy system transition towards Net Zero;
- Customer savings and social benefit through advice, support and investment provided related to the Net Zero energy system transition; and
- Customers in vulnerable situations at risk of being left behind by the energy system transition towards Net Zero receive support and are satisfied with the support.

Our justification for why these are the areas which DNOs must focus on to deliver the objective is the following:

Identify customers at risk of being left behind by the energy system transition towards Net Zero: DNOs need to understand new forms of vulnerability (new vulnerability risk factors), and in particular identify blockers to participating in a smart flexible energy system. They must identify which of their customers (whether households, non-households, or broader communities) are at risk of being left behind by the Net Zero energy system transition. This is a necessary first condition to supporting these customers and understanding the role the DNO can best play in supporting them.

Customer savings and social benefit through advice, support and investment provided related to the energy system transition towards Net Zero: DNOs need to understand and demonstrate how their actions are supporting those at risk of being left behind by the energy system transition towards Net Zero. This may be through a range of activities, from generating household financial savings, removing barriers to access, or to broader benefits for a community at risk.

Customers in vulnerable situations at risk of being left behind by the energy system transition towards Net Zero receive support and are satisfied with the support: We believe that the customers themselves need to be satisfied with the support they have received related to the Net Zero energy system transition. Monitoring satisfaction helps to better understand the quality and effectiveness of service provision and how and where improvements should be made. It also helps to ensure companies are responding to changing context and consumer expectations. This will be especially important as this is a new area of support, where service needs are still being understood and where support will need to evolve.

OBJECTIVE: SUPPORT VULNERABLE CUSTOMERS TO ENGAGE WITH AND BENEFIT FROM THE ENERGY SYSTEM TRANSITION TOWARDS NET ZERO		
ACHIEVED VIA	Identify customers at risk of being left behind by the energy system transition towards Net Zero	Customer savings and social benefit through advice, support and investment provided related to the energy system transition towards Net Zero
		Vulnerable customers at risk of being left behind by the energy system transition towards Net Zero receive support and are satisfied with the support.
METRICS	Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support	

Objective 3 - Panel metrics

<i>V-P4: Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support</i>	
Linked objective	Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support
Linked achievement	Identify customers at risk of being left behind by the energy system transition towards Net Zero Customer savings and social benefit through low carbon technologies supporting the energy system transition towards Net Zero Customers in vulnerable situations at risk of being left behind by the Net Zero energy system transition receive support and are satisfied with the support

What the metric is assessing - example pro-forma question	Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support
Quantitative evidence required	<ul style="list-style-type: none"> • Estimated number consumers/communities facing barriers to accessing benefits of energy market transition • # Vulnerable households and NHH customers supported and type of support provided • SROI per £ spent
Qualitative / narrative evidence required	<ul style="list-style-type: none"> • Narrative around identification of need and targeting of support • Narrative and evidence on how this is being spent on customers at risk of being left behind by the energy transition • Community support strategic approach and delivery
Necessary conditions to use this metric	Agreed methodology for calculating number of customers at risk of being left behind by energy systems transition Consistent SROI methodology.

Assessment thresholds and criteria

Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it is identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it is identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support.
Exceeds target > 7 / 10	Company has provided convincing evidence that it is providing industry leading innovation in order to identify customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively deliver high quality, appropriate support.

Objective 4: Use data, partnerships and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations

Within this objective, there are four areas of focus on which DNOs will need to make progress if they are to meet the overall objective:

- Data collection and use: Effective use of data to understand vulnerability and support strategy delivery;
- Partnership working and leadership: Building effective partnerships to support customers in vulnerable situations and demonstrating leadership where well placed to do so;
- Training and culture: Providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business; and
- Strategic, continual, and adaptive investments to improve the experience of customers and communities in vulnerable situations.

The first three areas include activities which are ‘cross-cutting’ across DNO’s vulnerability strategies and necessary to provide excellent support to customers in vulnerable situations across the vulnerabilities identified. The fourth area assesses the extent to which DNOs are continually improving their Vulnerability Strategy in light of changing needs and information so as to best support their customers throughout the price control period. Our justification for why these are the areas which DNOs must focus on to deliver the objective is the following:

Data collection and use: Effective use of data to understand vulnerability and support strategy delivery. As per Ofgem’s principles for the vulnerability strategy, DNOs need to “maximise opportunities to identify, and deliver support to, consumers in vulnerable situations through smart use of data”.⁸ The aim of this area is to ensure that in line with good practice the DNO uses business as usual insights, third party learning and bespoke research and engagement to better understand vulnerability and updates its strategy accordingly in period. It also requires that DNOs to horizon scan to better understand and prepare for future vulnerability challenges and to demonstrate how they have communicated progress on the strategy with interested and impacted stakeholders.

Partnership working and leadership: Building effective partnerships to support customers in vulnerable situations. DNOs should map potential partners in their areas and make good use of strategic partnerships to fulfil a range of activities including identifying and recording consumers in vulnerable situations, understanding current and future vulnerabilities and customer needs, identifying customers in vulnerable situations, and providing support to customers with additional needs. This should include working with others to resolve cross-sector issues as well as working collaboratively with other DNOs within sector in the interest of customers.

Training and culture: Providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business. As per Ofgem’s principles for the vulnerability strategy, DNOs should “embed the approach to protecting the interests of consumers in vulnerable situations throughout a company’s operations to maximise the opportunities to deliver support”.⁹

Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations. Over the period of the price control the vulnerability strategy should be a living strategy which adapts to the evolving needs of customers.

OBJECTIVE: USE DATA, PARTNERSHIPS AND TRAINING TO DELIVER FOR VULNERABLE CUSTOMERS, AND MAKE STRATEGIC, CONTINUAL AND ADAPTIVE INVESTMENTS TO IMPROVE THE EXPERIENCE OF CUSTOMERS AND COMMUNITIES IN VULNERABLE SITUATIONS				
KEY				
MECHANISTIC ASSESSMENT				
PANEL ASSESSMENT				
ACHIEVED VIA	Data collection and use	Partnership working and leadership	Training and culture	Strategy development and continuous improvement
METRICS	Effective use of data to understand vulnerability and support strategy delivery	Building effective partnership to support vulnerable customers and demonstrating leadership where well placed to do so	Providing quality support to vulnerable customers through company training, a focus on accessibility, and an embedded commitment across the business	Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations

Objective 4 - Panel metrics

<i>V-P5: Effective use of data to understand vulnerability and support strategy delivery</i>	
Linked objective	Use data, partnerships and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience

⁸ <https://www.ofgem.gov.uk/publications/riio-ed2-business-plan-guidance>

⁹ <https://www.ofgem.gov.uk/publications/riio-ed2-business-plan-guidance>

of customers and communities in vulnerable situations

Linked achievement	Effective use of data to understand vulnerability and support strategy delivery
What the metric is assessing - example pro-forma question	Has the company made effective use of data, engagement and insight to understand current and future vulnerability to design and support delivery of its Vulnerability Strategy?
Quantitative evidence required	N/A
Qualitative / narrative evidence required	<ul style="list-style-type: none"> ● Evidence of engagement activity undertaken and insight derived and how acted on that insight – i.e. ‘golden thread’ ● Evidence of the utilisation of social indicator or vulnerability mapping to inform their service development and partnership strategy ● Evidence of a good understanding of the social issues associated with the scope of the DNOs role, the prevalence of these within their consumer base and how they are evolving
Assessment thresholds and criteria	
Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it has made effective use of data to understand vulnerability and support delivery of its Vulnerability Strategy.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it made effective use of data to understand vulnerability and support delivery of its Vulnerability Strategy.
Exceeds target > 7 / 10	Company has provided convincing evidence that it is providing industry leading innovation in order to make effective use of data to understand vulnerability and support delivery of its Vulnerability Strategy

V-P6: Building effective partnership to support vulnerable customers and demonstrating leadership where well placed to do so

Linked objective	Use data, partnerships and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations
Linked achievement	Building effective partnership to support vulnerable customers and demonstrating leadership where well placed to do so
What the metric is assessing - example pro-forma question	Has the company built effective partnerships (with third sector organisations, industry and cross sector) to support customers in vulnerable situations?
Quantitative evidence required	N/A
Qualitative / narrative evidence required	<ul style="list-style-type: none"> ● Evidence of an extensive network of partnerships with a range of organisation types, including from beyond the energy sector ● Evidence of two-way flow partnerships supporting customers in vulnerable situations ● Evidence of where appropriate the DNO having direct involvement in the end to end process of delivering support, providing expertise and co-creating schemes, and where appropriate taking a leading role ● Process for identifying partnerships likely to be the most effective at delivering benefits through co-operative working, linked to addressing fuel poverty and supporting those at risk of being left by the energy system transition
Assessment thresholds and criteria	
Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it has built effective partnerships to support customers in vulnerable situations.

Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it has built effective partnerships to support customers in vulnerable situations.
Exceeds target > 7 / 10	Company has provided convincing evidence that it is providing industry leading innovation in order to build effective partnerships to support customers in vulnerable situations.

V-P7: Providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business

Linked objective	Use data, partnerships and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations
Linked achievement	Providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business
What the metric is assessing - example pro-forma question	Is the company providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business?
Quantitative evidence required	<ul style="list-style-type: none"> • % of staff receiving vulnerability training • Frequency of training
Qualitative / narrative evidence required	<ul style="list-style-type: none"> • Details of processes in place for embedding a commitment to protecting the interests of customers in vulnerable situations • Details of staff training • Details of governance arrangements including external advice and support used to set strategic direction around vulnerability • Name and role of Vulnerability Champion at senior management or board level

Assessment thresholds and criteria

Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it is providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it is providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business.
Exceeds target > 7 / 10	Company has provided convincing evidence that it is providing industry leading innovation in order to provide quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business.

V-P8: Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations

Linked objective	Use data, partnerships and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations
Linked achievement	Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations
What the metric is assessing - example pro-forma question	Has the company made strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations?
Quantitative evidence required	N/A
Qualitative / narrative evidence required	<ul style="list-style-type: none"> ● Evidence the DNO seeks opportunities to protect customers in vulnerable situations throughout their capabilities ● Evidence of strategic, continual and adaptive investment to support customers in vulnerable situations
Assessment thresholds and criteria	
Below target < 7 / 10	Company has provided insufficient evidence/narrative to show it has made strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations.
Meets target 7 / 10	Company has provided sufficient evidence/narrative to show it has made strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations.
Exceeds target > 7 / 10	Company has provided convincing evidence that it is providing industry leading innovation in order to make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations.

Assessment and overall scoring approach

We propose to use a weighted average of the simple averages across the panel and mechanistic metrics to calculate the overall target score for Vulnerability SDI. This is set out below. The weightings of 80% to the mechanistic metrics and 20% to the panel metrics reflects the rationale that there is sufficient certainty on the mechanistic metrics that DNOs are in control and can be accountable for their delivery. The panel has a role in assessing the elements which are not appropriate for mechanistic assessment but are still essential for understanding the quality of the DNO's performance in supporting customers in vulnerable situations.

Mechanistic metrics				Panel metrics		
Code	Title	Unit	Target	Code	Title	Target
V-M1	% households on PSR as proportion of the customer base	% score out of 100, * 100 to give a score / 10	Y2: 6.8 Y5: 7.0	V-P1	Maintaining an accurate PSR against a defined quality criteria	7
V-M2	% medically dependent households on PSR as proportion of the customer base	% score out of 100, * 100 to give a score / 10	Y2: 7.5 Y5: 8.0	V-P2	Identifying customers who are vulnerable during a loss of supply and effectively delivering high quality, appropriate support	7
V-M3	Customer satisfaction score for PSR customers experiencing an unplanned outage	The survey outputs a number between 0 and 10.	Y2: 9.2 Y5: 9.3	V-P3	Identifying customers who need fuel poverty support and effectively delivering high quality, appropriate support	7
V-M4	Customer satisfaction score for PSR customers experiencing a planned outage	The survey outputs a number between 0 and 10.	Y2: 9.2 Y5: 9.3	V-P4	Identifying customers who are at risk of being left behind through the energy system transition towards Net Zero and effectively delivering high quality, appropriate support	7
V-M5	Customer satisfaction score for recipients of fuel poverty support	The survey outputs a number between 0 and 10.	9	V-P5	Effective use of data to understand vulnerability and support strategy delivery	7
				V-P6	Building effective partnerships to support customers in vulnerable situations	7
				V-P7	Providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business	7
				V-P8	Strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations	7
Unweighted average			Y2: 8.3 Y5: 8.5	Unweighted average		7
Weighted average (x 80%)			Y2: 6.7 Y5: 6.7	Weighted average (x 20%)		1.4
Overall target score - Year 2	8.1					
Overall target score - Year 5	8.2					

Assessment timeline

We propose that the assessment and application of the incentive should take place in Year 2 and Year 5. The initial assessment at Year 2 allows an early check on progress and gives companies sufficient time during the price control to reassess their strategies before the final assessment. The final assessment at Year 5 assesses the DNO's performance at the end of the price control. The assessment in Year 2 would result in a financial incentive being applied to Years 1 - 2 revenue (i.e. 40% of the ED2 value), and the assessment in Year 5 would result in a financial incentive being applied to Years 3 - 5 revenue (i.e. the remaining 60% of the ED2 value).

Applying the incentive

In the following section, we set out the steps required to establish:

- The revenue stream subject to the incentive;
- The proportion of this subject to the incentive;
- How the penalty and reward rate can be calculated;
- The potential maximum reward and penalties under the incentive;
- Options for calibration.

Note: this section and the numbers included are indicative at this stage, based on SSEN's current information in order to indicate available options and the range of outcomes possible. All figures will need to be recalculated at the Draft and Final Determination stage between companies and Ofgem.

Establishing the revenue stream subject to the incentive

As part of calculating the incentive, we need to look at the revenue stream which will be subject to the incentive. This could be overall base revenue, or just the allowed revenue associated with the incentivised activity.

In considering the appropriate revenue stream for the Vulnerability incentive, we have taken as our starting position the approach that Ofgem has set out as part of its SSMD and in the SDI Working Group meetings, which is that base revenue is the appropriate revenue stream for the incentive.

Base revenue is: *"The core amount of money that a network company can earn on its regulated business in order to recover the efficient costs of carrying out its activities."*¹⁰ As the ED2 price control remains in development, we do not yet have a base revenue figure for the price control. Our equivalent base revenue for ED1, adjusted for the length of the price control and for inflation, is £4,105m.

Establishing the proportion of revenue subject to the incentive

The proportion of revenue subject to the incentive is the proportion of the identified revenue stream against which the incentive rate will be applied. This, in effect, means that if a company fails its incentive targets all of this proportion of revenue subject to the incentive could be clawed back.

Ofgem has proposed in the SSMD and in SDI Working Group meetings that the incentive could be applied to 0.5% of DNO base revenue. For SSEN 0.5% of base revenue will be **approximately £21 million**. This is the proportion of revenue subject to the incentive.

¹⁰ <https://www.ofgem.gov.uk/sites/default/files/docs/2013/11/glossary.pdf>, p.1

Calculating the Penalty and Reward Rate

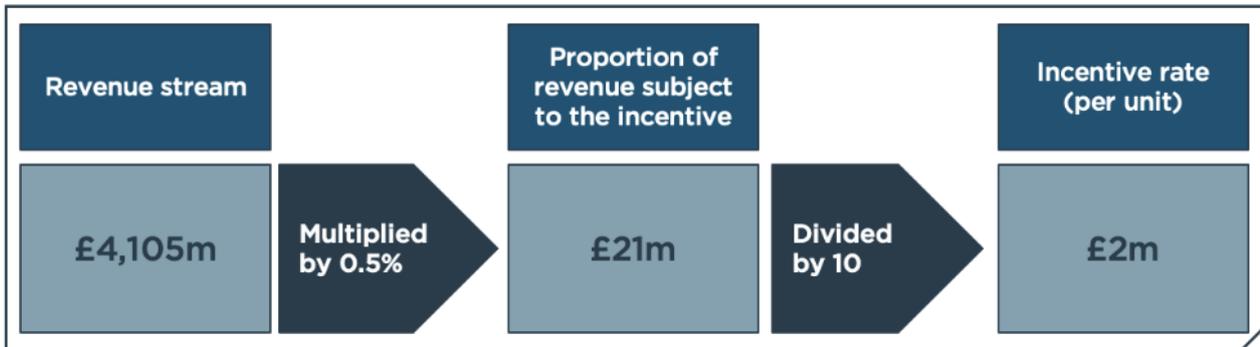
The incentive (penalty and reward) rate is a function of both the target and the proportion of revenue subject to the incentive. As discussed in Section 3, there are two ways that the incentive rate can be calculated:

1. **% of Target basis:** *Outturn incentive rate expressed as % of target, multiplied by revenue quantum.*
2. **Per unit basis:** *Outturn incentive rate expressed as a point above or below target; given target is out of 10, this is worth 1/10th of the relevant revenue quantum.*

Under the % of target basis, the penalty and reward rate will be expressed as percentage points (essentially taking the proportion of revenue subject to the incentive and dividing by 100). Using the per unit basis, the penalty and reward rate will be expressed as points of the score out of ten (taking the proportion of revenue subject to the incentive and dividing by 10). We also assume that in Year 2, two years (or 40%) of the revenue will be subject to the incentive, and in Year 5, three years (or 60%) of the revenue will be subject to the incentive. These approaches are shown below.

	SSEN	Year 2	Year 5
Rate as 1 percentage point (£m)	0.2	0.1	0.1
Rate as 1 unit of score (£m)	2.1	0.3	1.2

We set out the steps to get here below (using the “per unit” approach as an example).



Calculating revenue impacts

To calculate the revenue impacts, we first need to establish some outturn performance levels.

For this analysis, we want to look at the maximum revenue impacts from rewards and penalties under the SDI. To do this, we therefore need to set the maximum out and underperformance levels that would be subject to the incentive. These are a function of both the target as well as any mitigating mechanisms such as caps, collars and deadbands.

Taking the target levels set out previously, we can construct a deadband and cap and collar as set out in Section 3 of this Annex. As per that approach, we set the deadband at ± 1 around the target. We then set the cap and collar equidistant from the target. These are shown below:

	Year 2	Year 5
Target (see above section)	8.1	8.2
Deadband	6.7 - 8.7	6.8 - 8.8
Cap	10	10
Collar	5.4	5.6

The maximum out and underperformance levels are then calculated as follows:

- **Maximum underperformance** - Performance level is equivalent to the collar (as any performance beyond the collar is no longer subject to the penalty).
- **Maximum outperformance** - Performance level is equivalent to the cap (as any performance beyond the cap is no longer subject to the reward).

We use these to generate the outturn performance levels. We have provided an example of the calculations below.

% of Target basis

$$\begin{aligned} \text{Maximum underperformance level (Year 2)} &= \frac{\text{Collar} - (\text{target} - \text{deadband})}{\text{target}} = \frac{5.4 - (8.1 - 1.4)}{8.1} = \frac{-1.3}{8.1} \\ &= -0.16 = -16\% \end{aligned}$$

Per unit basis

$$\text{Maximum underperformance level (Year 2)} = \text{Collar} - (\text{target} - \text{deadband}) = 5.4 - (8.1 - 1.4) = -1.3$$

We then apply the previously calculated incentive rates to these performance levels to get the maximum revenue impacts. We present the revenue impacts as totals for ED2 and therefore assume the same level of performance for each assessment period in ED2 (e.g. Caps and Collars are breached). This is done as a simplifying assumption to provide an illustrative maximum upside and downside impact.

We use the following formula to calculate the maximum penalty (or reward) over ED2:

$$\text{Maximum penalty (ED2)} = y_i r_i + y_k r_k \quad \text{where } y_i \text{ is the performance in year } i, \text{ and } r_i \text{ is the rate in year } i.$$

An example application using our previous figures and the % performance rate:

$$(-16 \cdot 0.1) + (-15 \cdot 0.1) = -3.1$$

The graphs below shows the potential impact of hitting the cap/collar for SSEN in the low and high assumptions under the Ofgem method.



The % of target approach yields higher maximum penalty and reward outcomes than the per unit approach. These outcome ranges may not be appropriate however and should be calibrated to ensure the rewards and penalties are suitable for the overall incentive.

Calibrating the incentive

In assessing whether an incentive rate and associated outturn financial impact is appropriate, we consider the following:

1. *Whether the revenue associated with the activity being incentivised is also appropriately covered by the incentive rate.* For example, if only £10m of base revenue is associated with delivering an improvement in service for customers in vulnerable situations, it could be disproportionate to apply the incentive rate to £100m of revenue, as a penalty could return *more* than was originally funded by customers.
2. *Whether Willingness to Pay (WTP) data suggests that customers value the incremental cost of any reward for performance.* For example, if customers show through WTP payments that they would be willing to pay up to £1 on their bill over ED2 for an improvement in services to customers in vulnerable situations, then any incremental reward that is higher than that amount will need to be given careful consideration to ensure that customers are not over-paying companies.

Our calibration under these criteria is set out below.

As noted previously, using the 0.5% of base revenue may give a value to apply the incentive to which is larger than the cost of delivering the strategy. As an alternative approach, we consider applying the incentive rate to the revenue stream directly associated with the Vulnerability Strategy.

SSEN's Vulnerability Strategy has an associated allowed revenue of £14.8 million.

However, there is shareholder funding as part of the strategy of £2.5m. We believe that the incentive should only be applied to the customer funded portion of the strategy as this is the funding which customers should be able to receive a portion of back in the case of under delivery. Therefore, we propose that the Vulnerability Strategy SDI incentive rate should be applied to the allowed revenues associated with delivering each DNO's Vulnerability Strategy, *minus* any shareholder funding. This would give a revenue stream of £12.3 million (over the course of the ED2 price control), with 100% of this at risk under the incentive.

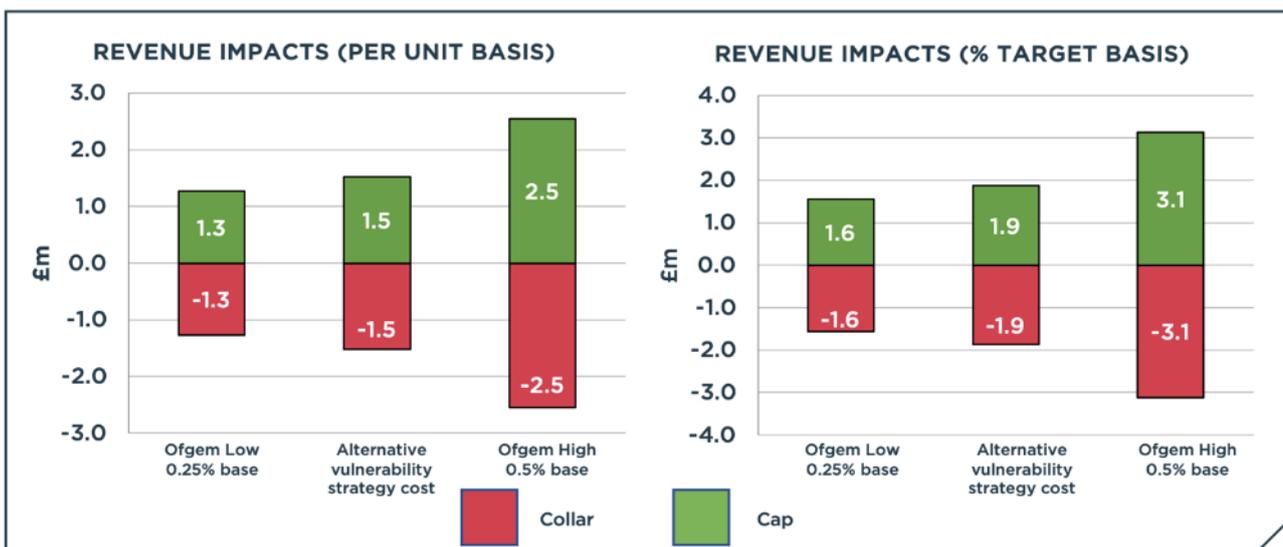
This compares to the approximately £21 million we calculated as at risk (using 0.5% of base revenue). Therefore, applying the incentive to 0.25% of base revenue could be more appropriate in bringing the value closer to the cost of the strategy. For example, 0.25% of SSEN’s base would be approximately £10 million, which is close to the delivery costs.

	0.25% base revenue	100% Vulnerability Strategy revenues	0.5% base revenue
Proportion of revenue subject to the incentive (£m)	10	12.3	21

We then calculate the penalty and reward rates under these approaches.

	SSEN	Year 2	Year 5
Rate as 1 percentage point (0.25% base revenue) (£m)	0.10	0.04	0.1
Rate as 1 unit of score (0.25% base revenue) (£m)	1.0	0.4	0.6
Rate as 1 percentage point (100% Vulnerability Strategy revenues) (£m)	0.1	0.05	0.1
Rate as 1 unit of score (100% Vulnerability Strategy revenues) (£m)	1.2	0.5	0.7

We then apply the previously calculated maximum incentive rates to these numbers, to give an overall revenue impact.



From the analysis, we can see that (as expected) using the 0.5% base revenue quantum results in a larger revenue impact than under the alternative approaches. We would however suggest that our alternative approaches align better with the principle that the revenue exposed to the incentive rate should be closely aligned to the funding associated with the performance being incentivised.

As an additional calibration, we also check to see whether the potential revenue outcomes associated with the incentive are within the bounds of customers' willingness to pay for service improvements.

Customer Willingness to Pay

Whilst no direct WTP research has been conducted around all the Vulnerability metrics proposed for the SDI, research has been conducted on elements covered by the Vulnerability strategy. These are:

- Fuel-poor households helped 2023-28
- Customers signing up to PSR
- Satisfaction score amongst PSR customers

The mean WTP for these elements provides an indicative range for how much customers would be willing to spend for an improvement in the outcomes captured under the Vulnerability strategy. These are shown in the table below.¹¹

	Fuel-poor households helped 2023-28	Customers signing up to PSR	Satisfaction score amongst PSR customers
Mean WTP, Southern region (£ average annual electricity bill)	3.87	1.39	1.12
Mean WTP, Northern region (£ average annual electricity bill)	4.73	1.46	1.15

The research shows that customers' would be willing to pay around £1 and £5 for different elements of the Vulnerability strategy. In order to undertake a comparison, we convert the maximum revenue impacts we have modelled into some indicative outcomes for customers' bills.¹² These are set out below.

% target approach

	Ofgem Low 0.25% Base	Alternative - Vulnerability Strategy funding	Ofgem High 0.5% Base
Total for ED2 (£)	0.38	0.46	0.76
5 year average	0.08	0.09	0.15

¹¹ Accent & PJM Economics, "Scottish and Southern Electricity Networks RII0-ED2 WTP: Final Report", May 2021, p.5-6.

¹² Total values are averaged across 4.1m metered connections, to give an average "per customer bill" number. The 4.1 metered connection number is taken from our website here: <https://www.ssen.co.uk/Whoweare/>

Per unit approach

	Ofgem Low 0.25% Base	Alternative - Vulnerability Strategy funding	Ofgem High 0.5% Base
Total for ED2 (±£)	0.31	0.37	0.62
5 year average	0.06	0.07	0.12

Our analysis suggested that under the % target approach customers could pay 38p over ED2 (8p p.a.) under the “Ofgem Low 0.25% Base” assumption or 76p (15p p.a.) under the “Ofgem High 0.5% Base” assumption. On the per unit approach, customers could pay 31p over ED2 (6p p.a.) under the Ofgem Low 0.25% Base” assumption or 62p (12p p.a.) under the “Ofgem High 0.5% Base” assumption. We would caveat these results by saying that these numbers are very much illustrative and rely on several simplifying assumptions.

Our alternative approaches sit well within the low end of this mean WTP range, so we consider that the risk of customers overpaying for a service improvement is unlikely. However, we would suggest that further research is conducted to establish the specific WTP for the totality of metrics under the Vulnerability strategy.

Overall, our initial assessment of approaches to calculating the SDI rate suggests pros and cons with each approach, set out below. We again note that the figures underpinning this assessment figures have been provided on an illustrative basis and will need to be recalculated at Draft and Final determination stage between companies and Ofgem.

	Using proportion of base revenue	Using proportion of allowed revenue associated with the strategy
Pros	<ul style="list-style-type: none"> • Avoids incentives for companies to reallocate inappropriately between activities • Simple to apply • In line with Ofgem’s approaches to ODIs 	<ul style="list-style-type: none"> • Ensures penalties and rewards are proportionate to the investment associated with the strategy
Cons	<ul style="list-style-type: none"> • Likely to be disproportionate to actual investment associated with Vulnerability activities 	<ul style="list-style-type: none"> • Possible risk of companies being incentives to reallocating costs inappropriately out of the revenue segment subject to the incentive, although this would need to be investigated further to see how plausible it is.

3. MAJOR CONNECTIONS STRATEGY - DETAILED SDI DESIGN

This section covers the following areas:

- Our Major Connections Strategy
- Introduction to the Major Connections SDI
- Major Connections Metrics
- Assessment and overall scoring approach
- Applying the incentive

Our Major Connections Strategy

At the Draft Business Plan stage, SSEN presented a Connections Strategy. In addition to developing this strategy for the Final Business Plan, we have also developed the proposal set out here for a Major Connections Strategy Delivery Incentive to accompany the Strategy itself. This document focuses on the SDI, but we set out below some of the key information and work conducted in developing the Major Connections Strategy which is relevant for this SDI proposal. For full details of the Connections Strategy please see the **Connections Strategy (Annex 10.2)**.

Stakeholder engagement

Stakeholders have had a far stronger voice in shaping our ED2 Business Plan than ever before. Our programme of inclusive, insightful, impactful, and iterative enhanced engagement has enabled our stakeholders, customers and consumers to co-create the Business Plan with us. This transformed approach to stakeholder engagement is described in detail in **Enhanced Engagement Strategy (Annex 3.1)**.

Our stakeholders have been central to the creation of our proposals. We have carried several expert panels and wider focus group sessions with these customers to find out what is important to them and what we can do to improve our service to them. Where our stakeholders were unable to attend our sessions, they were given an opportunity to submit their views through our online survey.

We set out the results of our stakeholder engagement in our Connections strategy. A key output of our engagement was a ranking of the issues affecting our stakeholders, in which a review of website information, an expansion of flexible connections offerings and improved communication were identified as the most impactful areas of focus for ED2 Major Connections.

Our strategy is designed to focus on these areas identified by our stakeholders, in addition to meeting Ofgem's principles and baseline expectations.

Aligning the SDI metrics with the Connections Strategy

Our Connections strategy also sets out clearly in Appendix A (Appendix B of this document) how our strategy aligns to Ofgem's baseline expectations, and how in each case we intend to measure our performance. We have developed the survey metrics identified into the specific mechanistic metrics and resultant incentives discussed in this document. Additionally, we have included a panel metric as part of the SDI, in order to assess more qualitative aspects of our wider performance against our strategic commitments.

Introduction to the Major Connections SDI

The Major Connections SDI will incentivise the delivery of the company's Connections Strategy. The Connections Strategy is designed to ensure DNOs deliver quality services to customers seeking major connections in RIIO-ED2.

We propose three key objectives to be covered by the SDI.

- **Objective 1:** Improve provision of information to customers at pre-application stage for major connections
- **Objective 2:** Improve simplicity and transparency of the application journey for customers
- **Objective 3:** Ensure timely and economical connections are provided in line with customer requirements

These objectives align with the three high-level principles set out in Ofgem's RIIO-ED2 SSMD.¹³ These principles have been informed by consultation with DNOs and connections stakeholders which have identified the areas covered as being particularly important for targeting service improvement.¹⁴ As such, we believe they are a sensible focus for the SDI, as they cover the whole of a customer's connections journey, going from the pre-application stage through to delivering the required connection.

Cutting across all three objectives there is an additional measure for the panel assessment, which focuses on the metrics directly associated with investments and activities made by SSEN in response to issues raised by major connections customers and stakeholders. This is designed to allow for the evolution of the Major Connections strategy, which is a key principle underpinning our hybrid approach. It also shares some characteristics with the RIIO-ED1 Incentive on Connections Engagement (ICE) incentive, as it focuses companies' attention on being responsive to stakeholders and customers, and setting out a clear set of activities as to how they will address issues and improve services. We note that Ofgem is removing ICE in RIIO-ED2 as, although it considered it did deliver benefits for customers, it considered it did not go far enough.¹⁵ Our proposal to combine this panel measure with the mechanistic metrics under the three objectives for the SDI answers these concerns by enabling the benefits of ICE to be retained.

The diagram below shows the metrics we are proposing for this SDI, linked to the three objectives above.

¹³

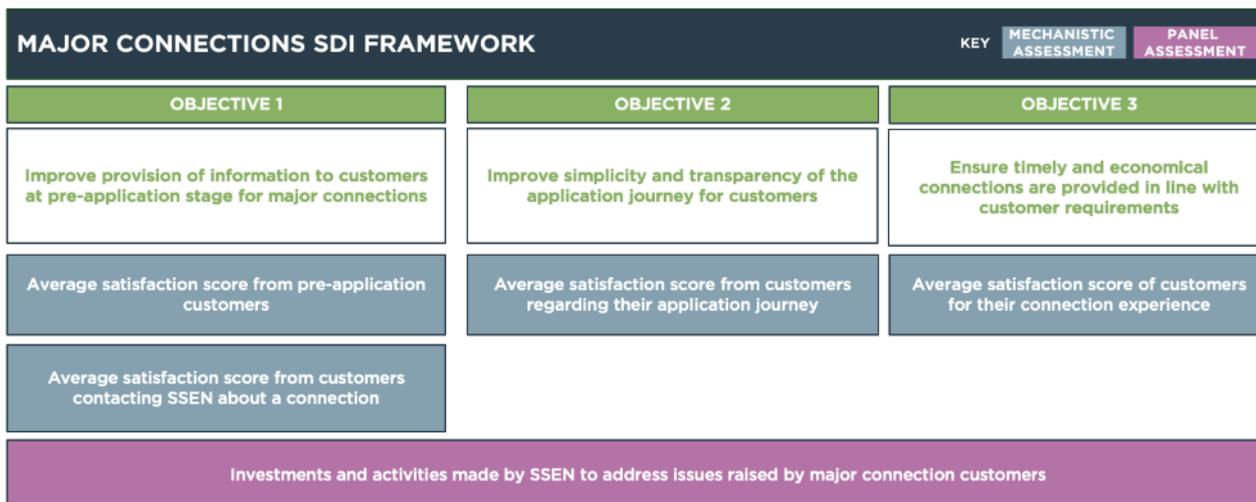
https://www.ofgem.gov.uk/system/files/docs/2020/12/riio_ed2_ssmc_annex_1_delivering_value_for_money_services_for_customers.pdf, p.47.

¹⁴

https://www.ofgem.gov.uk/sites/default/files/docs/2020/07/ed2_ssmc_annex_1_delivering_value_for_money_services_for_customers.pdf, p.49

¹⁵

https://www.ofgem.gov.uk/sites/default/files/docs/2020/07/ed2_ssmc_annex_1_delivering_value_for_money_services_for_customers.pdf, p.48.



Major Connections metrics

In the following section, we set out the achievements and associated metrics that companies will need to focus on if they are to deliver on each of the objectives.

Objective 1: Improve provision of information to customers at pre-application stage for major connections

Within this objective, there are two areas of focus on which DNOs will need to make progress if they are to meet the overall objective:

- Providing all necessary information for stakeholders interested in a new major connection
- Major connections customers are delivered a high-quality pre-application service with which they are satisfied

Providing better information to customers interested in making an application links directly to the overarching principle. As information provision improves, customers will be able to make more informed decisions about when and where they should plan to make a connection. This will avoid customers submitting applications which expect connection on a given date, but are then subject to connection delays due to the time required to resolve local network constraints (which could have been revealed at pre-application stage).

Achieving a high level of satisfaction from customers at the pre-application stage will demonstrate how effective the company has been at delivering a positive pre-application experience, including the delivery of timely and relevant information and details to inform application decisions.

OBJECTIVE: IMPROVE PROVISION OF INFORMATION TO CUSTOMERS AT PRE-APPLICATION STAGE FOR MAJOR CONNECTIONS

ACHIEVED VIA	Provide all necessary information for stakeholders interested in a new major connection (This will make it easier for stakeholders to understand what is required for their application)	Major connections customers are delivered a high-quality pre-application service with which they are satisfied (The effectiveness of the service provision will be determined by customers' experience)
METRICS	Average satisfaction score from customers who attended engagement events	Average satisfaction score from pre-application customers

Objective 1 - Mechanistic metrics

<i>MC-M1: Average satisfaction score of stakeholders who attended engagement events</i>	
Linked objective	Improve provision of information to applicants for Major Connections.
Linked achievement	Provide all necessary information for stakeholders interested in a new major connection
Metric definition	The average score in a CSAT survey with the question: "Overall, taking all aspects into account, on a scale of one to ten, how satisfied were you with the engagement event with SSEN?". The survey will be sent to a random selection of stakeholders who attended an engagement event.
Unit	The survey outputs a number between 0 and 10, with 0 being "very dissatisfied" and 10 being "very satisfied".
Target	Year 2 - 8.5/10; Year 5 - 9/10
Rationale for target	Other DNOs with similar proposed metrics in their Major Connections Strategy had targets ranging from 8.5/10 to 9/10. Both our early and late period ED2 targets fall in this range. The base target is also an increase of 0.9 from our current performance on informal satisfaction scores and aligns with average performance of other DNOs. A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of all Distribution, Transmission, Gas and Water. Using a glidepath during ED2 encourages continuous improvement in performance, and ensures DNOs have time to implement their Major Connections Strategies before they are assessed at the more stretching level.
Data gathering and validation	Company appoints an independent survey company to conduct a survey of stakeholders contacted. The findings are then subject to independent verification, before being sent to Ofgem.

<i>MC-M2: Average satisfaction score of pre-application customers</i>	
Linked objective	Improve provision of information to applicants for Major Connections.
Linked achievement	Major connections customers are delivered a high-quality pre-application service with which they are satisfied
Metric definition	The average score in a CSAT survey with the question: “Overall, on a scale of one to ten, how satisfied were you with the information and support provided to you by SSEN when considering and drafting your application?”. The survey will be sent to a random selection of pre-application customers, defined as customers who either proceeded to an application, or made an inquiry but did not proceed to the application stage.
Unit	The survey outputs a number between 0 and 10, with 0 being “very dissatisfied” and 10 being “very satisfied”.
Target	Year 2 - 8.5/10; Year 5 - 9/10
Rationale for target	Other DNOs with similar proposed metrics in their Major Connections Strategy had targets ranging from 8.5/10 to 9/10. Both our early and late ED2 targets fall in this range. The base target is also an increase of 0.9 from our current performance on informal satisfaction scores and aligns with average performance of other DNOs. A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of all Distribution, Transmission, Gas and Water. Using a glidepath during ED2 encourages continuous performance improvement, and ensures DNOs have time to implement their Major Connections Strategies before they are assessed at the more stretching level.
Data gathering and validation	Company appoints an independent survey company to conduct a survey of pre-application customers. The findings are then subject to independent verification, before being sent to Ofgem.

Objective 2: Improve simplicity and transparency of the application journey for customers

Within this objective, there is one key area of focus on which DNOs will need to make progress if they are to meet the overall objective:

- Major connections customers are delivered a high-quality post-application service with which they are satisfied

Providing better information to customers that have made an application will help improve the simplicity and transparency of the application journey. Information provided can include elements such as application status, specific information needed from the customer to progress the application, and any updates on any delays in the process.

Achieving a high level of satisfaction from post-application customers will demonstrate how effective the company has been at delivering a positive post-application experience, including the overall simplicity and transparency of the process.

OBJECTIVE: IMPROVE SIMPLICITY AND TRANSPARENCY OF THE APPLICATION JOURNEY FOR CUSTOMERS

ACHIEVED VIA	Major connections customers are delivered a high-quality post-application service with which they are satisfied (The effectiveness of the service provision will be determined by customers' experience)
METRICS	Average satisfaction score from customers regarding their application journey

Objective 2 - Mechanistic metrics

<i>MC-M3: Average satisfaction score of customers for their application journey</i>	
Linked objective	Improve simplicity and transparency of the application journey for customers
Linked achievement	Major connections customers are delivered a high-quality post-application service with which they are satisfied
Metric definition	The average score in a CSAT survey with the question: "Overall, on a scale of one to ten, how satisfied were you with the delivery of your connection by SSEN?". The survey will be sent to a random selection of customers who completed a Major Connections application.
Unit	The survey outputs a number between 0 and 10, with 0 being "very dissatisfied" to 10 being "very satisfied".
Target	Year 2 - 8.5/10; Year 5 - 9/10
Rationale for target	Other DNOs with similar proposed metrics in their Major Connections Strategy had targets ranging from 8.5/10 to 9/10. Both our early and late ED2 targets fall in this range. The base target is also an increase of 0.9 from our current performance on informal satisfaction scores and aligns with average performance of other DNOs. A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of all Distribution, Transmission, Gas and Water. Using a glidepath during ED2 encourages continuous performance improvement, and ensures DNOs have time to implement their Major Connections Strategies before they are assessed at the more stretching level.
Data gathering and validation	Company appoints an independent survey company to conduct a survey of customers who completed a Major Connections application. The findings are then subject to independent verification, before being sent to Ofgem.

Objective 3: Ensure timely and economical connections are provided in line with customer requirements

Within this objective, there is one key area of focus on which DNOs will need to make progress if they are to meet the overall objective:

- Major connections customers are delivered a connection with which they are satisfied

Achieving a high level of satisfaction with customers will demonstrate how effective the company has been at delivering a connection in line with requirements, including whether this has been timely and economical.

OBJECTIVE: ENSURE TIMELY AND ECONOMICAL CONNECTIONS ARE PROVIDED IN LINE WITH CUSTOMER REQUIREMENTS	
ACHIEVED VIA	Major connections customers are delivered a connection with which they are satisfied (The effectiveness of the service provision will be determined by customers' experience)
METRICS	Average satisfaction score of customers for their connection experience

Objective 3 - Mechanistic metrics

MC-M4: Average satisfaction score of customers for their connection experience	
Linked objective	Facilitate the delivery of timely and economical connections that meet customers' needs
Linked achievement	Major connections customers are delivered a connection with which they are satisfied
Metric definition	The average score in a CSAT survey with the question: "Overall, on a scale of one to ten, how satisfied were you with the delivery of your connection by SSEN?". The survey will be sent to a random selection of customers whose Major Connections delivery has been completed by SSEN.
Unit	The survey outputs a number between 0 and 10, with 0 being "very dissatisfied" to 10 being "very satisfied".
Target	Year 2 - 8.5/10; Year 5 - 9/10
Rationale for target	Other DNOs with similar proposed metrics in their Major Connections Strategy had targets ranging from 8.5/10 to 9/10. Both our early and late ED2 targets fall in this range. The base target is also an increase of 0.9 from our current performance on informal satisfaction scores and aligns with average performance of other DNOs. A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of all Distribution, Transmission, Gas and Water. Using a glidepath during ED2 encourages continuous performance improvement, and ensures DNOs have time to implement their Major Connections Strategies before they are assessed at the more stretching level.
Data gathering and validation	Company appoints an independent survey company to conduct a survey of customers whose Major Connection has been completed by SSEN. The findings are then subject to independent verification, before being sent to Ofgem.

Panel measure

Across all objectives, the panel assessment encompasses making continual and adaptive investments in the process to improve customer experience. This contains multiple quantitative and qualitative elements pertaining to such things as ensuring customers are provided with the information they require for their application, evidencing the investments made to address customer issues, and getting positive feedback from customers to show that the investments have resulted in improvements.

MC-P: Investments and activities made by SSEN to address issues raised by Major Connections customers	
Linked objective	Make continual and adaptive investments in the major connections process to improve customer experience.
Linked achievement	Make targeted investments and activities to improve customer experience
What the metric is assessing - example pro-forma question	Has the company made demonstrable attempts to improve customer experience through targeted investments and activities in line with its Major Connections strategy, with clear adaptations for issues raised by Major Connections customers?
Quantitative evidence required	<p>Panel assessment will require evidence in the following key areas:</p> <ul style="list-style-type: none"> • Companies will need to conduct research into the key informational requirements identified by customers at each stage of the application process, and then rank and score these by relative importance (with the most important requirements being those that are prioritised for inclusion) • Average time taken to conduct cost reconciliation and return funds to customers after an issue is identified. • Companies will need to conduct research into the key reconciliation issues identified by customers, and then rank and score these by relative importance (with the most important requirements being those that are prioritised to be addressed) • Where possible, satisfaction scores for Major Connections customers prior to and subsequent to the service improvement, to provide evidence that activities are delivering improved outcomes for customers. • Amount of targeted investment and activity by the company in addressing issues, with clear examples of how this is efficient (e.g. through Cost-Benefit Analysis).
Qualitative / narrative evidence required	<p>Panel assessment will require evidence/commentary in the following key areas:</p> <ul style="list-style-type: none"> • List of information provided to customers at each stage of the applications process with clear narrative around how this links to prioritised customer requirements. • Demonstrative case studies of positive or negative experiences customers had with cost reconciliation, to illustrate necessary improvements required and delivered. • Commentary around average time taken to conduct cost reconciliation, and whether this performance is in-line with customer expectations and if not, how it can be improved. • Recorded comments from stakeholders on their Major Connections experience, such as from stakeholder events. • Demonstration that customers with previous issues are satisfied with how these have been dealt with, such as from follow-up research and feedback surveys.
Assessment thresholds and criteria	

Below target < 7 / 10	Company has failed to present clear evidence that it understands and/or is addressing the key issues identified by major connections customers and stakeholders.
Meets target 7 / 10	Company has presented clear evidence that it understands and is addressing the key issues identified by major connections customers and stakeholders.
Exceeds target > 7 / 10	Company has presented clear evidence that it understands customer requirements and is performing at a level that is industry-leading and innovative in addressing their needs.

Assessment and overall scoring approach

Scoring approach

We propose to use a weighted average of the simple averages across the panel and mechanistic metrics to calculate the overall target score for Major Connections SDI. This is set out below.

Mechanistic metrics					Panel metrics		
Code	Title	Unit	Target (Year 2)	Target (Year 5)	Code	Title	Target (Years 2 & 5)
MC-M1	Average satisfaction score of stakeholders contacted about a connection	The survey outputs a number between 0 and 10.	8.5	9	MC-P	Investments and activities made by SSEN to address issues raised by Major Connections customers	7
MC-M2	Average satisfaction score of pre-application customers	The survey outputs a number between 0 and 10.	8.5	9			
MC-M3	Average satisfaction score of customers for their application journey	The survey outputs a number between 0 and 10.	8.5	9			
MC-M4	Average satisfaction score of customers for their connection experience	The survey outputs a number between 0 and 10.	8.5	9			
Unweighted average			8.5	9	Unweighted average		7
Weighted average (x 80%)			6.8	7.2	Weighted average (x 20%)		1.4
Overall target score - Year 2	8.2						
Overall target score - Year 5	8.6						

The score for the mechanistic metrics is weighted by 80%, as these metrics relate directly to customer satisfaction scores which are clear, quantifiable outcomes that relate directly to the effectiveness of the overall strategy, and so should be strongly incentivised. The score for the panel is weighted by 20%, as the metrics are more subjective than the mechanistic components so should not have as much weight. However, they are still financially incentivised as they relate to the evolving aspects of the strategy in line with customer requirements.

Assessment Frequency

We consider that the SDI should be subject to periodic assessment in Years 2 and 5 of RIIO-ED2. This will give DNOs sufficient time to implement their strategy in the first two years of the price control, and then improve processes and activities as needed in time for a closing assessment in Year 5.

Although the periodic assessment will occur at Years 2 and 5 of RIIO-ED2, DNOs will report annually on the investments and activities made to address issues raised by Major Connections customers. This will not be unduly burdensome, as DNOs already report annually on many of the associated metrics.

Applying the incentive

In the following section, we set out the steps required to establish:

- The revenue stream subject to the incentive;
- The proportion of this revenue subject to the incentive;
- How the penalty and reward rate can be calculated;
- The potential maximum reward and penalties under the incentive;
- Options for calibration.

Note: this section and the numbers included are indicative at this stage, based on SSEN's current information in order to indicate available options and the range of outcomes possible. All figures will need to be recalculated at the Draft and Final Determination stage between companies and Ofgem.

Importance of establishing an appropriate revenue basis for the incentive

Under an incentive regime, penalties and rewards should be closely aligned to the value placed on the service by the customers. The general principle is that in the event of under delivery, customers should be able to have returned the value associated with the performance that was not delivered.

However, if the penalties and rewards are not aligned to the value of the investment, then customers may over reward companies for increased performance, and companies risk being disproportionately penalised for underperformance (for example, through over recovery of funding through the clawback).

This is a clear risk under the Major Connections SDI. Ofgem is currently proposing that each non-contestable market segment will represent 10bps of base revenue subject to the incentive. However, market segments vary significantly in terms of revenue. For example, the Low Voltage Distributed Generation market segment, should it be found to be non-contestable in both SSEN's license areas, would lead to potentially £4 million of base revenue exposed to the incentive under Ofgem's proposals. This is 50 times higher than the revenue stream for this market segment of around £70k.

As such, Ofgem needs to carefully calibrate any incentive with regards to the actual non-contestable market revenues to prevent disproportionate rewards or penalties.

Establishing the revenue stream subject to the incentive

As part of calculating the incentive, we need to look at the revenue stream which will be subject to the incentive. This could be overall base revenue, or just the allowed revenue associated with the incentivised activity.

In considering the appropriate revenue stream for the Major Connections incentive, we have taken as our starting position the approach that Ofgem has set out as part of its SSMD. In its SSMD¹⁶ Ofgem decided to use base revenue as the appropriate revenue stream for the incentive.

Base revenue is: *“The core amount of money that a network company can earn on its regulated business in order to recover the efficient costs of carrying out its activities.”*¹⁷ As the ED2 price control remains in development, we do not yet have a base revenue figure for the price control. Our equivalent base revenue for ED1, adjusted for the length of the price control and for inflation, is £4,105m.¹⁸

Establishing the proportion of revenue subject to the incentive

The proportion of revenue subject to the incentive is the proportion of the identified revenue stream against which the incentive rate will be applied. This, in effect, means that if a company fails its incentive targets all of this proportion of revenue subject to the incentive could be clawed back.

In its SSMD, Ofgem decided to apply an incentive range of 0.1% of base revenue for each Major Connection market segment within the scope of the incentive (that is, non-contestable). The rationale is to enable the incentive rate to flex depending on the number of market segments each DNO has in scope, whilst making it comparable to other incentives which utilise a percentage of base revenue as an incentive rate.

Therefore, to calculate the (base) revenue subject to the incentive, we look at different possible competition test results for the market segments, the results of which will determine the number of non-contestable market segments in each license area.

Based on our internal conversation, we consider that the non-contestable market segment assumptions are as follows:

	SEPD	SHEPD
Non-contestable segments (Low assumption)	1	2
Non-contestable segments (High assumption)	2	4

¹⁶ [Ofgem RIIO-ED2 SSMD - Annex 1](#), p.48

¹⁷ <https://www.ofgem.gov.uk/sites/default/files/docs/2013/11/glossary.pdf>, p.1

¹⁸ Calculation takes total ED1 forecast base revenue data, expresses in 2020/21 price base, and then multiplied by 5/8 to represent the fact that ED1 base revenue was for 8 years as opposed to ED2's 5-year period

Bps of base revenue (Low assumption)	10	20
Bps of base revenue (High assumption)	20	40

We then apply these to our base revenue assumptions to calculate the ranges.

	SEPD	SHEPD	SSEN
Amount of revenue subject to the incentive (Low assumption) (£m)	2.7	2.9	5.5
Amount of revenue subject to the incentive (High assumption)	5.3	5.7	11.1

Calculating the Penalty and Reward Rate

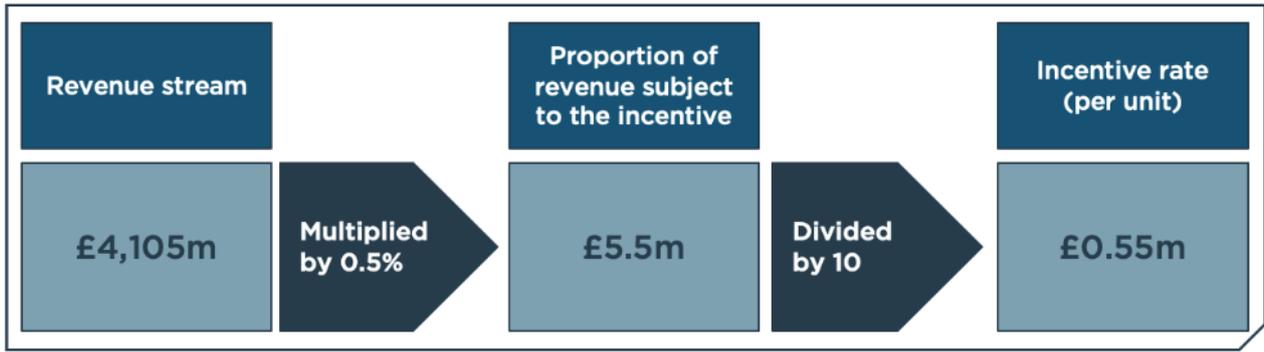
The incentive (penalty and reward) rate is a function of both the target and the proportion of revenue subject to the incentive. As discussed in Section 3, there are two ways that the incentive rate can be calculated:

1. **% of Target basis:** *Outturn incentive rate expressed as % of target, multiplied by revenue quantum.*
2. **Per unit basis:** *Outturn incentive rate expressed as a point above or below target; given target is out of 10, this is worth 1/10th of the relevant revenue quantum.*

Under the % of target basis, the penalty and reward rate will be expressed as percentage points (essentially taking the proportion of revenue subject to the incentive and dividing by 100). Using the per unit basis, the penalty and reward rate will be expressed as points of the score out of ten (taking the revenue and dividing by 10). We also assume that in Year 2, two years (or 40%) of the revenue will be subject to the incentive, and in Year 5, three years (or 60%) of the revenue will be subject to the incentive. These approaches are shown below.

	Total ED2	Year 2	Year 5
Rate as 1 percentage point (Low assumption) (£m)	0.06	0.02	0.03
Rate as 1 percentage point (High assumption) (£m)	0.11	0.04	0.07
Rate as 1 unit of score (Low assumption) (£m)	0.55	0.22	0.33
Rate as 1 unit of score (High assumption) (£m)	1.11	0.44	0.67

We set out the steps to get here below (using the “per unit, Low” approach as an example).



Calculating revenue impacts

In order to calculate the revenue impacts, we first need to establish some outturn performance levels.

For this analysis, we want to look at the maximum revenue impacts from rewards and penalties under the SDI. To do this, we therefore need to set the maximum out and underperformance levels that would be subject to the incentive. These are a function of both the target as well as any mitigating mechanisms such as caps, collars and deadbands.

Taking the target levels set out previously, we can construct a deadband and cap and collar as set out in Section 3 of this Annex. As per that approach, we set the deadband at 1.4 units below the target, and 0.6 units above the target. We then set the cap at 10, and the collar the same distance from the lower deadband as the cap is from the upper deadband. These are shown below:

	Year 2	Year 5
Target (see above section)	8.2	8.6
Deadband	6.8 - 8.8	7.2 - 9.2
Cap	10	10
Collar	5.6	6.4

The maximum out and underperformance levels are then calculated as follows:

- **Maximum underperformance** - Performance level is equivalent to the collar (as any performance beyond the collar is no longer subject to the penalty).
- **Maximum outperformance** - Performance level is equivalent to the cap (as any performance beyond the cap is no longer subject to the reward).

We use these to generate the outturn performance levels as set out in these examples below.

% of Target basis (example)

$$\begin{aligned}
 \text{Maximum underperformance level (Year 2)} &= \frac{\text{Collar} - (\text{target} - \text{deadband})}{\text{target}} = \frac{5.6 - (8.2 - 1.4)}{8.2} = \frac{-1.2}{8.2} \\
 &= -0.15 = -15\%
 \end{aligned}$$

Per unit basis (example)

$$\text{Maximum underperformance level (Year 2)} = \text{Collar} - (\text{target} - \text{deadband}) = 5.6 - (8.2 - 1.4) = -1.2$$

We then apply the previously calculated incentive rates to these performance levels to get the maximum revenue impacts. We present the revenue impacts as totals for ED2 and therefore assume the same level of performance for each assessment period in ED2 (e.g. Caps and Collars are breached). This is done as a simplifying assumption to provide an illustrative maximum upside and downside impact.

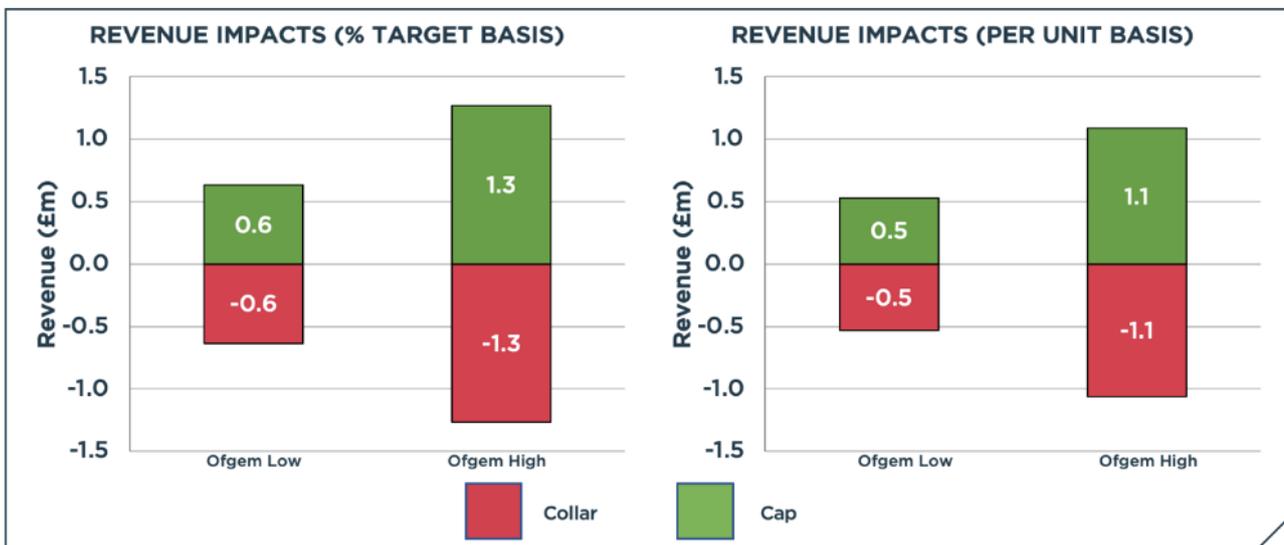
We use the following formula to calculate the maximum penalty (or reward) over ED2:

$$\text{Maximum penalty (ED2)} = y_i r_i + y_k r_k \quad \text{where } y_i \text{ is the performance in year } i, \text{ and } r_i \text{ is the rate in year } i.$$

An example application using our previous figures and the % performance rate (high assumption):

$$(-15 \cdot 0.04) + (-9 \cdot 0.07) = -1.3$$

The graphs below shows the potential impact of hitting the cap/collar for SEN in the low and high assumptions under the Ofgem SSMD method.



The per unit approach yields higher maximum penalty and reward outcomes than the % of target approach. These outcome ranges may not be appropriate however and should be calibrated to ensure the rewards and penalties are suitable for the overall incentive.

Calibrating the incentive

In assessing whether an incentive rate and associated outturn financial impact is appropriate, we consider the following:

1. *Whether the revenue associated with the activity being incentivised is also appropriately covered by the incentive rate.* For example, if only £10m of base revenue is associated with delivering an improvement in service for Major Connections, it could be disproportionate to apply the incentive rate to £100m of revenue, as a penalty could return more than was originally funded by customers.
2. *Whether Willingness to Pay (WTP) data suggests that customers value the incremental cost of any reward for performance.* For example, if customers show through WTP payments that they would be willing to pay up to £1 on their bill over ED2 for an improvement in services to around Major Connections, then any incremental reward that is higher than that amount will need to be given careful consideration to ensure that customers are not over-paying companies.

Our calibration under these criteria is set out below.

Alternative approaches to establishing the appropriate proportion of revenue subject to the incentive

A key issue with Ofgem’s SSMD approach is the possibility that the average non-contestable market segments revenue will be lower than 0.1% of base revenue. This would contradict the notion that revenue should be clawed back for customers where there is poor or underperformance, since the amount of revenue available for clawback would be beyond that related to the activity being incentivised.

Instead of using base revenue as in the Ofgem approach, we instead use Major Connections revenue for non-contestable market segments as the appropriate revenue stream subject to the incentive. This ensures that the revenue subject to the incentive is proportionate to the scope of activity.

We construct this revenue stream using non-contestable market segments as a percentage of total Major Connections market segments, shown below.

	SEPD	SHEPD
Non-contestable segments (Low assumption)	1	2
Non-contestable segments (High assumption)	2	4
Total market segments	9	9
Proportion of non-contestable market segments (Low)	11%	22%
Proportion of non-contestable market segments (High)	22%	44%

We then apply these proportions to the total Major Connections revenue over ED2 (£450m for SEPD and £200m for SHEPD). These give us the revenue ranges subject to the incentive.

	SEPD	SHEPD	SSEN
Revenue (£m) (Low)	50	44.4	94.4

Revenue (£m) (High)	100	88.9	188.9
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We then need to identify some proportion of this revenue subject to the incentive, as it would not be appropriate to apply the incentive to the entire amount of revenue as not all of it will be used for performance under the SDI. One approach would be to identify the proportion of this revenue associated with the Major Connections SDI activities; however we do not have this figure, so instead we can calibrate the quantum with reference to similar incentives in electricity distribution and other sectors.

The table below sets out comparable incentives and their associated values. We consider that the Developer Measure of Experience most closely compares to the Major Connections incentive, as both relate to the experience of customers looking to connect large and complex projects to a network.

Industry	Incentive	Value	Relevance
Electricity distribution	Customer satisfaction with general enquiries, based on survey	±0.20% of base revenue	An incentive reflecting a requirement to meet a service standard and innovate within period to improve
Electricity distribution	Customer satisfaction with interruptions, based on survey	±0.30% of base revenue	An incentive reflecting a requirement to meet a service standard and innovate within period to improve
Electricity transmission	Environmental Discretionary Reward scheme	Up to £4m/year split across eligible TOs (up to 3)	Incentivises electricity transmission owners and system operator to encourage environmental and strategic planning, improve low carbon generator connections and innovate in smart networks. Marked through a scorecard approach with scores >70% required to drive a reward
Gas transmission	Customer satisfaction survey	-0.546% to +0.154% of base revenue	Customer service award, based on providing consistent and improving service over price control driving innovation
Water	Customer Measure of Experience survey outturn results	-12% to +6% of household retail revenues (potential +6% available for highest performers)	Based on customer feedback on successful delivery of services and innovations to improve services. Scoring high to receive a reward requires innovation and new service provision
Water	Developer Measure of Experience survey outturn results	-12% to +6% of developer service revenues	Based on a combination of mechanistic elements and stakeholder feedback on successful delivery of services and innovations. Scoring high to receive a reward requires innovation and new service provision

Unlike Developer Measure of Experience, we are proposing a symmetrical incentive. We therefore look at potential quantum at 6% and 12% of the “Revenue (£m) (High)” assumption for SSEN set out above (which we consider to be a conservative assumption). The results are shown below.

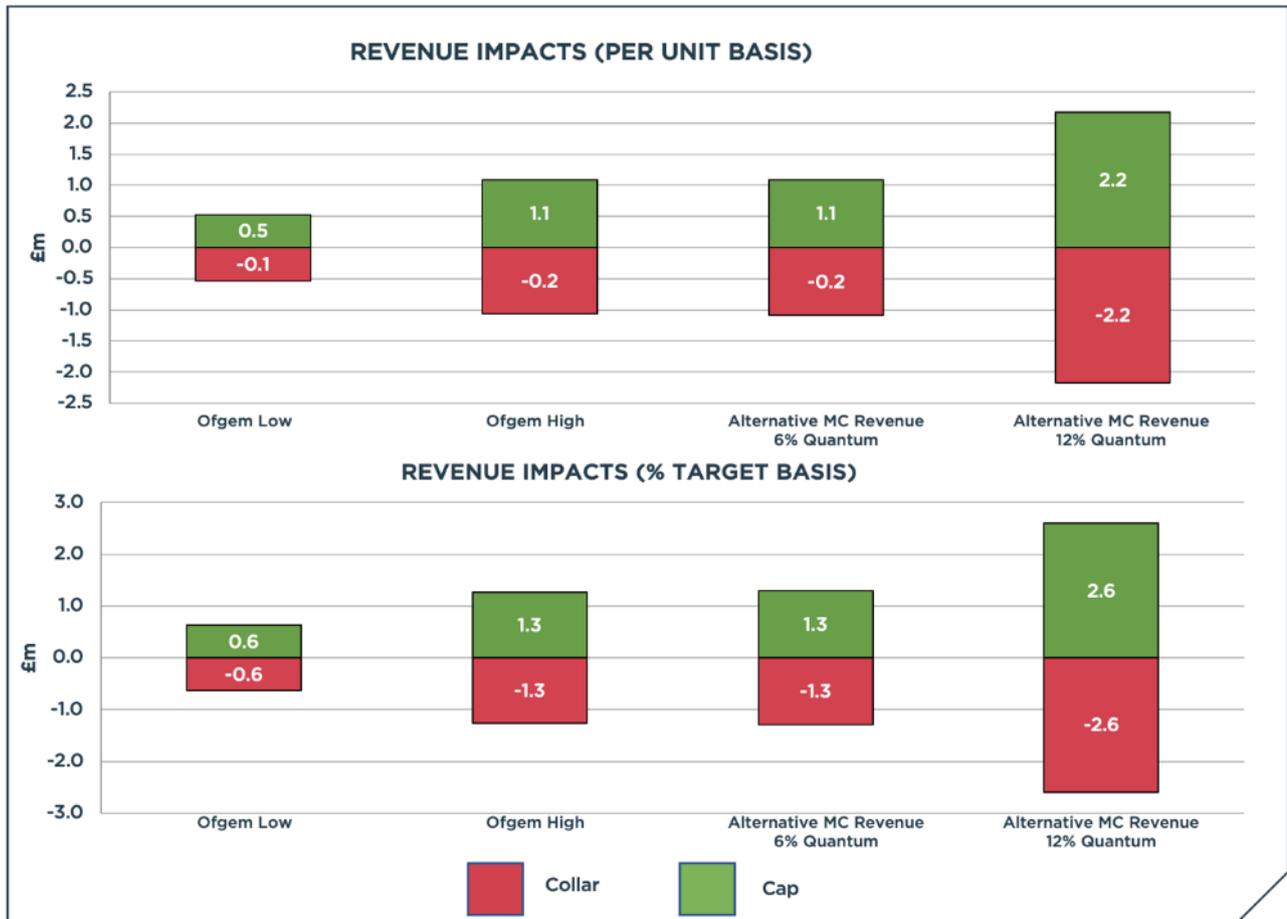
	SSEN Total (100%)	12%	6%
Revenue (£m)	188.9	22.7	11.3

We then calculate the penalty and reward rates under these approaches.

	Total ED2	Year 2	Year 5
Rate as 1 percentage point (6% revenue) (£m)	0.01	0.004	0.01
Rate as 1 percentage point (12% revenue) (£m)	0.02	0.01	0.01
Rate as 1 unit of score (6% revenue) (£m)	0.08	0.03	0.05
Rate as 1 unit of score (12% revenue) (£m)	0.15	0.06	0.09

We then apply these incentive rates to the previously calculated maximum performance outcome, to give an overall revenue impact. These are compared against the equivalent revenue impacts under the Ofgem SSMD approach in the

below graphs.



From the analysis, we can see that using 6% of non-contestable market revenue falls within the Ofgem SSMD approach range. The 12% of non-contestable market revenue is higher than the Ofgem SSMD approach, although this may still be appropriate depending on how much customers value the improvement in service.

Customer Willingness to Pay

We have not conducted specific WTP research related to the Major Connections SDI. We can however show some indicative outcomes for customers’ bills, using the maximum revenue impacts we have modelled.¹⁹

For example, under the % target approach customers could pay 15p over ED2 (3p p.a.) under the “Ofgem Low” assumption or 63p (13p p.a.) on our indicative “12% non-contestable market revenue” assumption. On the per unit approach, customers could pay 13p over ED2 (3p p.a.) under the “Ofgem Low” assumption or 53p (11p p.a.) on our indicative “12% non-contestable market revenue” assumption. We would caveat these results by saying that these numbers are very much illustrative and rely on several simplifying assumptions.

¹⁹ Total values are averaged across 4.1m metered connections, to give an average “per customer bill” number. The 4.1 metered connection number is taken from our website here: <https://www.ssen.co.uk/Whoweare/>

% target approach

	Ofgem Low	Ofgem High	6% non-contestable market revenue	12% non-contestable market revenue
Total for ED2 (\pm £)	0.15	0.31	0.32	0.63
5 year average	0.03	0.06	0.06	0.13

Per unit approach

	Ofgem Low	Ofgem High	6% non-contestable market revenue	12% non-contestable market revenue
Total for ED2 (\pm £)	0.13	0.26	0.27	0.53
5 year average	0.03	0.05	0.05	0.11

Whilst no direct WTP research has been conducted around service improvements for major connections, we do have research around improvements to small and minor connections services (e.g. connecting smaller-scale or single EV charge points). This research showed that the mean WTP of household customers was £1.60 p.a. in SSEN's Southern region and £1.63 in SSEN's Northern region.²⁰ Minor connections are different to major connections in both scale and complexity, however the benefits of a few successful major connections projects (such as facilitating larger scale EV connection points) may exceed a larger number of minor connections projects. We would therefore consider that the WTP for minor connections acts as a suitable low-end benchmark for major connections.

Using the research on minor connections, we would consider that our results sit well within the mean WTP, including those under our highest revenue impact scenario, the "12% non-contestable market revenue" assumption. However, we suggest that further research is conducted to establish the specific WTP for service improvements for major connections.

Overall, our initial assessment of approaches to calculating the SDI rate suggests pros and cons with each approach, set out below. We again note that the figures underpinning this assessment figures have been provided on an illustrative basis and will need to be recalculated at Draft and Final determination stage between companies and Ofgem.

²⁰ Accent & PJM Economics, "Scottish and Southern Electricity Networks RIIO-ED2 WTP: Final Report", May 2021, p.5-6.

	Using proportion of base revenue	Using proportion of allowed revenue associated with the strategy
Pros	<ul style="list-style-type: none"> • Avoids incentives for companies to reallocate inappropriately between activities • Simple to apply • In line with Ofgem's approaches to ODIs 	<ul style="list-style-type: none"> • Ensures penalties and rewards are proportionate to the investment associated with the strategy
Cons	<ul style="list-style-type: none"> • Likely to be disproportionate to actual investment associated with Major Connections activities 	<ul style="list-style-type: none"> • Possible risk of companies being incentivised to reallocate costs inappropriately out of the revenue segment subject to the incentive, although this would need to be investigated further to see how plausible it is.

4. DSO TRANSITION STRATEGY - DETAILED SDI DESIGN

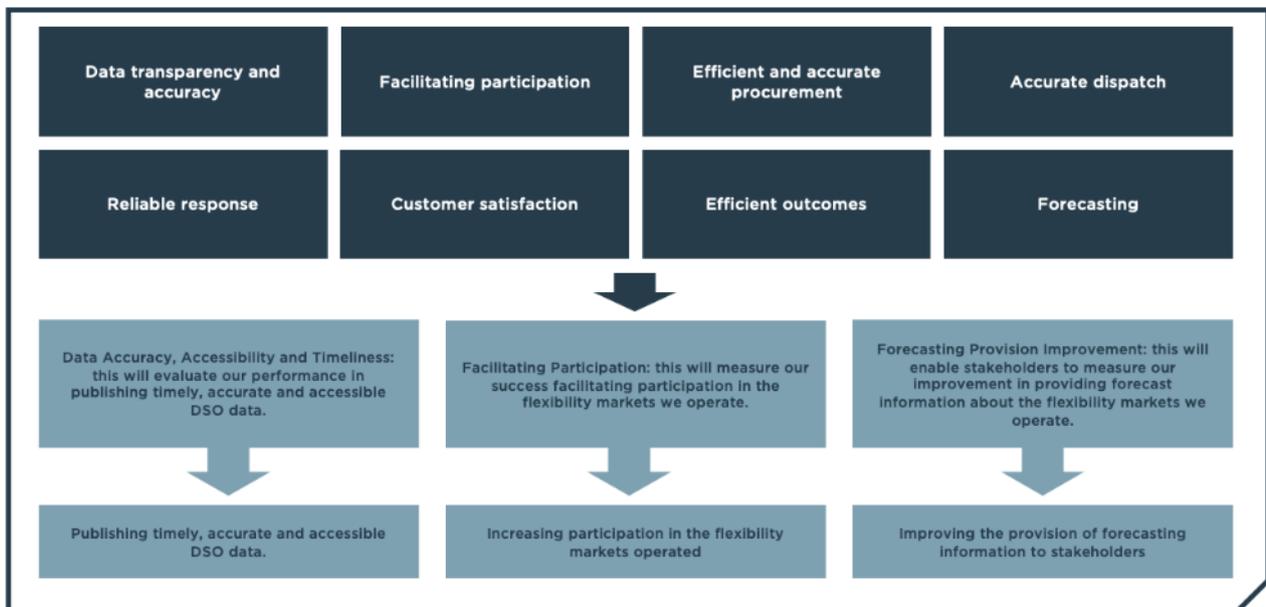
This section covers the following areas:

- DSO Strategy Draft Business Plan summary
- Introduction to the DSO SDI
- DSO Metrics
- Assessment and overall scoring approach
- Applying the incentive

DSO Strategy Draft Business Plan Summary

During the development of our draft business plan, we developed a set of objectives for DSO. To create these, we identified a long list of potential targets before engaging with stakeholders for testing. Our DSO Customer Journey is a key element we considered in our internal target development as well as in our work with stakeholders. Delivering a high level of service to our customers is important and we set out to design our DSO performance targets around this. Appendix B sets out in more detail the work we carried out and the conclusions we came to, which we have summarised below, and which have fed into the development of our metrics in this final business plan.

Using our Principles Framework for target development, relevant precedents from other jurisdictions and our DSO Customer Journey, we developed an initial list of eight potential DSO performance target areas. The eight target areas were the product of our work internally and our collaboration with Ofgem and the other DNOs through the ENA, while keeping in mind how these could be mapped onto the customer journey. The three most valuable target areas were selected, based on feedback from stakeholders and from those, three objectives were formed.



Stakeholder engagement

Throughout the development of our DSO Strategy, we have been engaging with stakeholders on their views, priorities and needs. We have held over 14 events specific to DSO and have seen attendance spanning from community energy groups and local council authorities to connections and development representatives, supply chain partners, utility

companies and regulators. Initially, the eight target areas were presented to 48 of our stakeholders at an engagement event in March 2020 to get feedback as part of the review process.

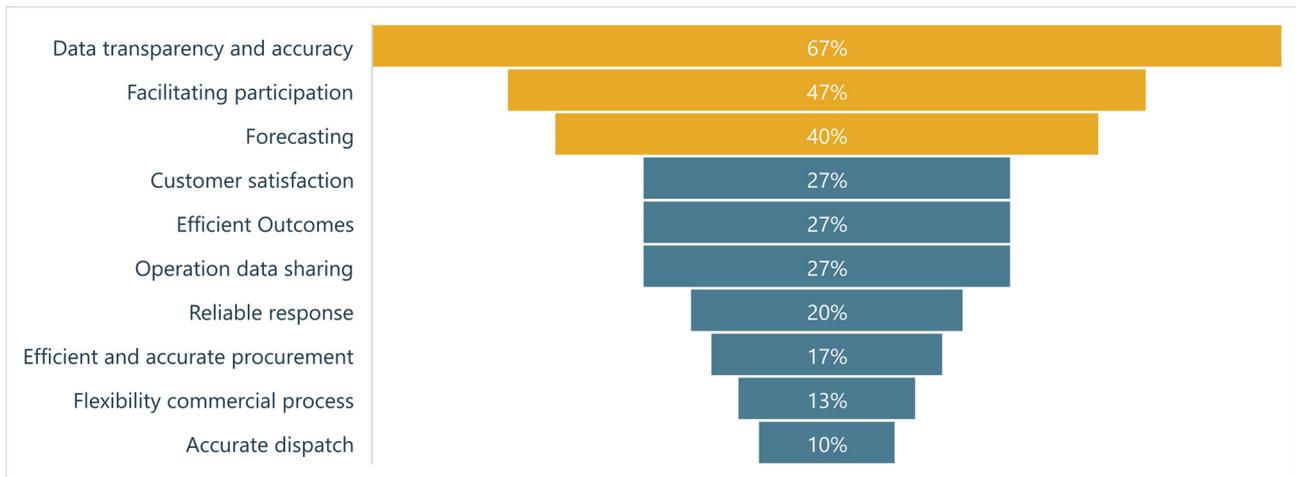
Theme area	Customer Journey	Initial ideas of what could be measured within DNOs
Data transparency and accuracy	Discovery	Providing the market with what it needs to find opportunities and make informed operational decisions. For example, a measure of the quality and timeliness of communications.
Facilitating participation	Connection	Enabling and encouraging participation in local flexibility markets to resolve network issues. For example, an annual market engagement score or qualitative measure of efforts made by DNOs.
Efficient and accurate procurement	Enrolment	Ensuring that the commercial process is efficient and robust for all parties. For example, time-to-contract metrics and qualitative stakeholder feedback.
Accurate dispatch	Auction/Market	The DSO needs to dispatch participating DER according to the commercial or connection agreements. For example, comms availability and failure rate metrics.
Reliable response	Auction/Market	Encouraging participants to provide reliable services. For example, reporting of market fulfilment percentage against agreed metrics.
Customer satisfaction	Overall	Engaging with DSO customer groups more broadly across the range of DSO activities. For example, broad Customer Satisfaction type metric or qualitative engagement and satisfaction metric.
Efficient Outcomes	Overall	Steering balancing of outcomes across customers, flex participants and policy agenda. For example, metrics on carbon intensity of the DNO network or qualitative measures of policy adherence.
Forecasting	Auction/Market	Encouraging improvement of forecasting across specified voltage levels for defined time periods. For example, reporting on the difference between actual and forecast demand.

We asked our stakeholders to select the three target areas they considered to be most valuable and to provide feedback on any target areas they thought we had missed and should consider. The three areas that were voted for as the most valuable were:

- 1. Data transparency and accuracy**
- 2. Facilitating participation**
- 3. Forecasting**

The learning we take from this result is that stakeholders are appreciative of the current nascent state of DSO markets, and that the current overriding concern is for markets to be made more transparent and accessible in the immediate future, with driving growth, efficiency and accuracy in functioning not an immediate concern. Qualitative feedback showed concern from stakeholders that DSO development evolve on an annual basis, that it should support

low carbon and net zero ambitions, and that it should link up with the national system operator. These elements have also been factored into our strategy to improve DSO services over ED2.



Ofgem baseline expectations

As well as feedback from stakeholders, our three targets have been created to align with the following baseline role expectations from Ofgem:

- **Role 1: Planning and Network Development**
 - 1 Plan efficiently in the context of uncertainty, taking account of whole system outcomes, and promote planning data availability
- **Role 2: Network Operations**
 - 2.1 Promote operational network visibility and data availability
 - 2.2 Facilitate efficient dispatch of distribution flexibility services
- **Role 3: Market Development**
 - 3.1 Provide accurate, user-friendly, and comprehensive market information
 - 3.2 Embed simple, fair, and transparent rules and processes for procuring distribution flexibility services

Each of the objectives have been designed with the stakeholder responses and the Ofgem baseline expectations in mind. The below table shows which of the objectives fulfil each of the expectations. The following section outlines how each objective is designed to meet these.

SSEN objectives		
Publishing timely, accurate and accessible DSO data	Increasing participation in the flexibility markets operated	Improving the provision of forecasting information to stakeholders

Ofgem baseline expectations	Planning and network development	✓		✓
	Network operation	✓		
	Market development	✓	✓	✓

Publishing timely, accurate and accessible DSO data

During ED2, DNOs will need to provide timely and accurate DSO information to build transparent markets of sufficient liquidity to deliver the flexibility which will be required to enable customers to transition to the net zero future. Our objective to publish data runs across covers all three baseline expectation roles:

- **Planning and network development** - publication of planning documents such as the DFES and LTDS, as well as tools like the Generation Availability Map and Network Capacity map will assist customers in understanding how the networks are evolving and where they can integrate further equipment, as well as indicating to flexibility providers where they can find revenue opportunities
- **Network operation** - data includes information on the current state of the networks, including operability constraints and other information to enable customers to make the best use of networks and share information with partners like the ESO and other DNOs, to assist in the joined-up operation of the wider system
- **Market development** - the provision of information on future need for flexibility services will help to grow the liquidity of markets. Information on the DNOs’ success in encouraging participation, in terms of numbers, complaints, and operational success, will also be signs to potential participants that markets are becoming real and viable

The objective will also require stakeholder interaction to indicate where improvements to the data we publish can best be made, improving customers’ experience of network planning, network operation, connecting and participating in flexibility services markets.

Increasing participation in the flexibility markets operated

The use of flexibility services and flexible connections will play a major role in our DSO Strategy, delivering exceptional customer service and a continued growth in benefits. In RIIO-ED2 we plan to secure flexibility services across all our voltages including the Low Voltage (LV) network. We intend to secure flexibility for every constrained LV substation. In addition, we plan to substantially grow our flexible connections. To achieve this ambition, stakeholders must be able to discover, connect and enrol their assets and participate in the flexibility markets we operate. We adopted ‘Flexibility First’, a commitment to assess smart flexibility service markets when reviewing requirements for building significant new electricity network infrastructure, in RIIO-ED1. In RIIO-ED2 we will continue to operate to this approach that forms a core principle of the DSO Operating Plan.

This objective is designed to evaluate our performance facilitating participation in flexibility services and flexible connections through various stages and touchpoints we have with market participants throughout the DSO customer journey. The objective primarily targets Ofgem’s DSO Role 3.

The objective will support clear processes for developing and amending distribution flexibility services products, contracts, and qualification criteria, that are, wherever possible, standardised. Under this objective we will also be able to coordinate and engage with third party platform providers, who can offer system value by providing new

routes to market and driving whole system outcomes. Through an annual survey we will seek stakeholder's views on their experience through the stages of our DSO customer journey. The aim of the objective is to demonstrate the number of participants enrolling and participating in the flexibility markets we operate.

Improving the provision of forecasting information to stakeholders

Improvements in forecasting is essential to the deliverability of DSO's role in network planning. Our ambition is to improve the frequency (over different time horizons, both longer- and short-term) and scale (in terms of geographical reach and of granularity) of the forecasting information we provide. Forecasting is important as DSOs seek to support customers with flexible connection choices and accessing the provision of flexibility services, which can help us operate and manage our network more efficiently. Objective three will increase data transparency for assessing options to resolve network needs and will enable greater utilisation of flexibility services enabling a more efficient network and outcomes for consumers, increasing participation in and liquidity of flexibility markets.

This forecasting information will also support the spread of flexibility service markets to more areas, supporting transparent and robust processes for the assessment of options to resolve network issues, and supporting a consistent approach to valuing flexibility.

More details can be found in Appendix A of this document.

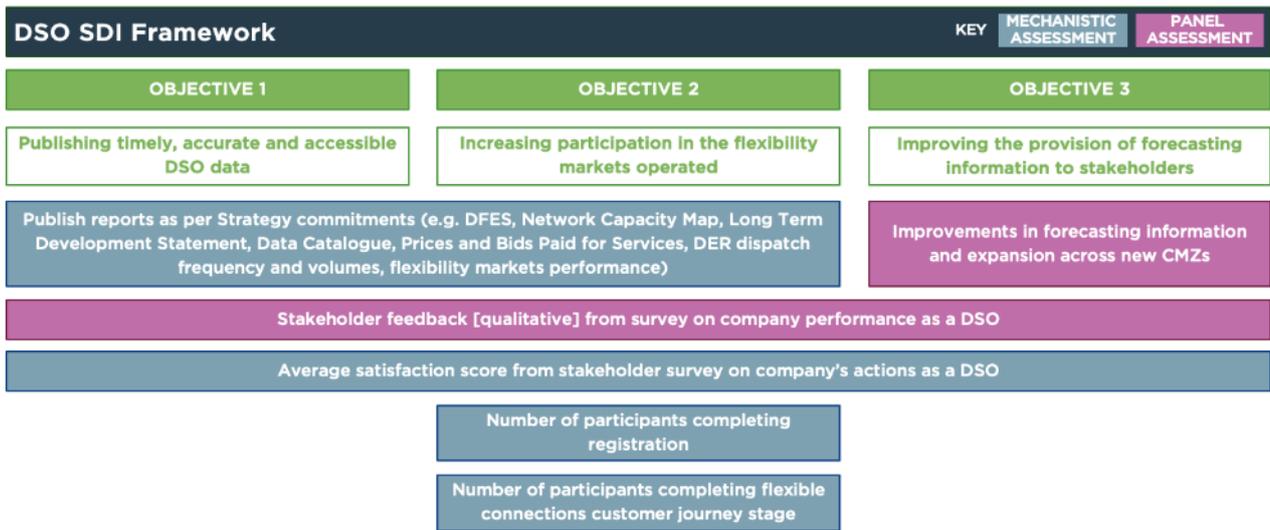
Introduction to the DSO SDI

The DSO SDI will incentivise the delivery of companies' DSO Strategies. Our Strategy is designed to protect consumers in vulnerable situations and deliver support associated with the activities of a DSO.

We propose three objectives to be covered by the SDI, which we have based on Ofgem's three roles and five sub-roles for DSO minimum standards. Given the status of DSO as a nascent and emerging role, the SDI is structured to enforce minimum standards, with penalties for failing to do so, while companies are encouraged to improve their performance, in line with their stakeholders' needs and requirements, by the panel.

- **Objective 1:** Publishing timely, accurate and accessible DSO data
- **Objective 2:** Increasing participating in the flexibility markets operated
- **Objective 3:** Improving the provision of forecasting information to stakeholders

The diagram below shows the metrics we are proposing for this SDI, linked to the three objectives above. Appendix B contains more information on how we developed and tested metrics during the writing of our draft business plan.



DSO Metrics

In the following section, we set out the achievements and associated metrics that companies will need to focus on for DSO services to deliver on each of the objectives.

We initially identified, in our draft business plan, a range of 28 measurement points, which we believe would comprehensively track our performance in delivering our DSO strategy during the ED2 period. The process of establishing these metrics and measurement points is explained in detail in Appendix B. During this second phase of work for this final business plan submission, we have simplified these measurement points into three overarching metrics to simplify the approach and make it simpler to monitor and incentivise.

Of the three metrics, we identified two which satisfy the conditions for inclusion as a mechanistic metric for DSO, on data publication and a stakeholder survey. See Section 3 for a discussion of how we assessed metrics for inclusion as either mechanistic or panel-based, and Appendix A for details of potential metrics which we considered but did not include in our final suggested range of metrics.

Mechanistic metrics

<i>DSO-M1: Data publication</i>	
Linked objective	<p>The overarching linked objectives are DSO data accuracy, accessibility, and timeliness, as well as facilitating market participation and development. More specifically, this includes:</p> <ul style="list-style-type: none"> ● Issue of network planning data, including DFES, LTDS, network capacity and generation availability maps. ● Issue of network operation data, including operability constraints, DER dispatch, configuration, losses, and outages. ● Development of robust strategies for publishing additional information consistently. ● Increasing participation in the flexibility markets operated.
Metric definition	<ul style="list-style-type: none"> ● Publication, according to a regular schedule to be set by the DSO of: ● Annual stakeholder survey results and stakeholder feedback ● Annual forecasting documents, including: <ul style="list-style-type: none"> ○ DFES ○ Network Capacity map ○ Generation Availability map

	<ul style="list-style-type: none"> ○ Long Term Development Statement ● Annual DSO market reports, including: <ul style="list-style-type: none"> ○ Operability and constraint data ○ DER dispatch by DSO ○ Network configuration data ○ Losses at substations ○ Data on planned and unplanned outages ○ Feed MW/MVA utilisation and headroom/ foot room ○ Utilisation and curtailment in areas under CMZs ○ Data relevant to secondary trades ○ Visibility of network use through monitoring and analytics ● Bi-annual tender follow-up reports, including: <ul style="list-style-type: none"> ○ Tender results ○ Prices bid and paid for flexibility services ● Quarterly DSO operation report(s), including: <ul style="list-style-type: none"> ○ DER dispatch frequency and volumes ○ Curtailment as part of non-firm connection agreements ○ Carbon content of aggregated units ○ Number of participants completing registration, testing and change in technical capacity procedures ○ Number of participants completing flexible connections customer journey stage ○ Market trading and secondary trading from flexibility markets ○ Performance in clearing, dispatching, and settling flexibility markets ○ Quality of DER dispatch decisions (in terms of units put on standby vs utilised) ○ Number of enquiries (including complaints) from enrolled and enrolling market participants, and performance in resolving these ● An annual Data Catalogue
Unit	Score out of 10. Start on 10 points and lose one point for each failure to publish the required data/publication on time, down to a minimum of 0/10.
Target	10/10 each year.
Rationale for target	Publication of data in a timely manner is entirely under the DNO's control. Therefore, it is felt that any failure to publish data or publications on time should be penalised harshly. Although the incentive to publish data on time is lost after the tenth failure, the reputational damage incurred from that point should sufficiently incentivise improved performance.
Data gathering and validation	Companies assess their own performance on data publication, through a simple pass/fail mechanism for each publication/dataset to be published.

DSO-M2: Stakeholder survey	
Linked objective	Data accuracy, accessibility and timeliness and increasing participation in flexibility markets operated.
Metric definition	Through an annual survey, SSEN will seek stakeholders' views on DSO data provided, including: <ul style="list-style-type: none"> ● Format, quality, and accuracy of data and forecast provision ● Timeliness and frequency of data and forecast issue ● Level of support provided to market participants and potential participants ● Responsiveness to stakeholder requests and feedback

Unit	The survey outputs a number between 0 and 10 in each of the target areas above.
Target	Meeting a target for these scores dependent on 'baseline' score recorded in Year 0 - lower baseline scores require greater improvement over the period. If the initial score is above 9/10 the target will be to maintain the initial level, if not the target will be set based on improvement by half of the difference between the initial score and a 9/10 score. Meeting the target stakeholder survey score would result in achieving half of the maximum available number of points, while exceeding (or meeting the ultimate 9/10 target) would deliver maximum points (see Section 3 for more on methodology)
Rationale for target	Different companies will have different starting points, and stakeholder expectations on DSO are likely to vary significantly. The glidepath accounts for this by incentivising improved performance (or continued good performance if expectations are met early on).
Data gathering and validation	Companies (or Ofgem) will appoint a single independent survey company to conduct a survey of stakeholders. The findings are then subject to independent verification, before being sent to Ofgem and used to calculate the score. In addition to the quantitative questions on scoring performance, various qualitative questions will seek input on how services are not meeting requirements and what stakeholders would like to see improve in DSO services, to feed into future improvements and the panel review.

Panel metric

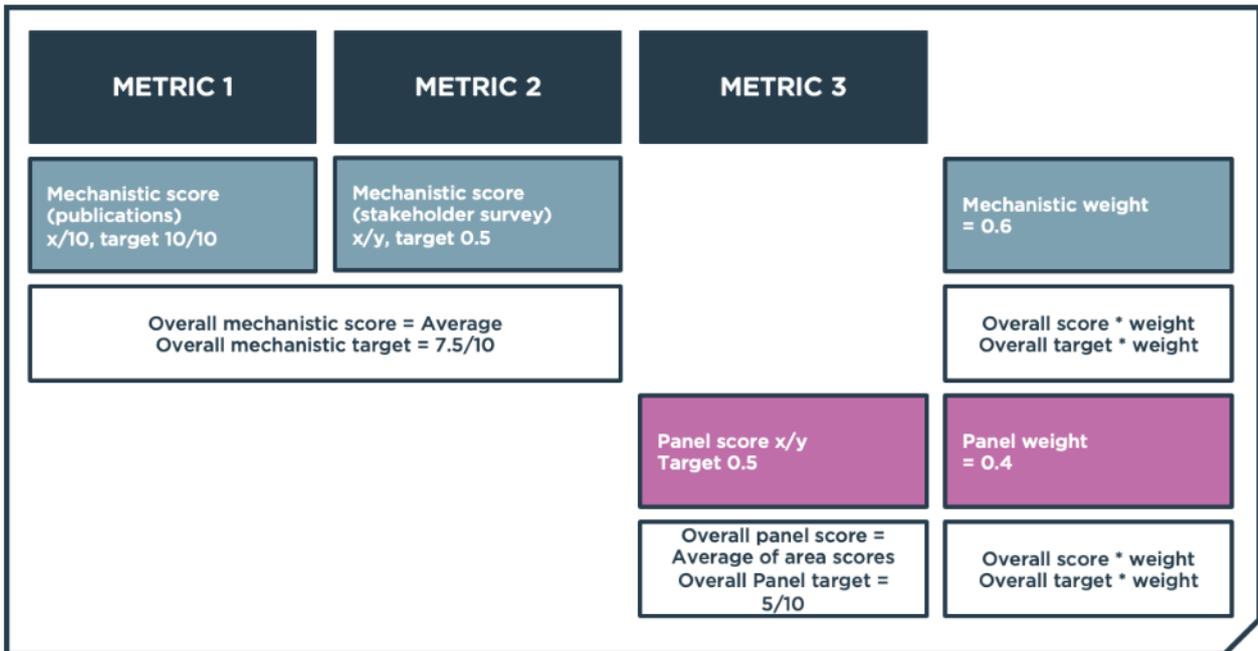
There is one further metric that is not mechanistic, linked to Performance Panel review scores:

<i>DSO-P1: Performance panel review scores</i>	
Linked objective	Improving DSO services across all three objectives.
Metric definition	Score from a panel, which would assess SSEN based on a qualitative standard against several specific and well-defined areas. This would include an assessment of required DSO functionality, information provision and other DSO functions based on stakeholder feedback. This is likely to change over the course of ED2, so is designed to be flexible.
Unit	Panel scores between 0 and 10 on relevant areas, which would be averaged across them.
Target	Target score to demonstrate delivery of the strategy: 5/10 Target score to deliver financial reward: 7.5/10
Rationale for target	The target is set in order to support our principle that delivery of the company's strategy should position it in a revenue neutral position, with high-performing DSO (in this case, upper quartile) able to secure financial rewards. The assessment areas are deliberately designed to include flexibility, to allow the panel to consider changing expectations from stakeholders, Ofgem and changes to DSO need and operation expected throughout the period.
Data gathering and validation	The panel would consider the companies' annual DSO report and plan, feedback from stakeholder surveys, performance on mechanistic targets, and its own judgement on qualitative targets. Although using qualitative evidence, it would be expected to provide an evidence-based response and be led by Ofgem and stakeholder requirements.

	<p>This would feed back into updated targets throughout the period. It is proposed that the panel for DSO would meet annually to allow for rapid feedback loops in this fast-evolving phase of DSO development.</p> <p>Detailed areas for panel assessment, and the basis of that assessment, are set out later in this section. In summary, these areas are the quality of data issued to the market; network visibility; quality of DER dispatch decisions; flexibility provider registration acceptance time and complaints; and meeting Service Level Agreements (SLAs) for market participant service.</p>
Assessment thresholds and criteria	
<p>Below target < 5 / 10</p>	<p>Company has not provided convincing evidence that its performance has met the standards it set for itself to achieve - for example, publications have not provided the required information, or have contained material inaccuracies; forecasts have been materially incorrect; DER has been incorrectly dispatched; and the company has not been able to evidence or justify why these errors have occurred</p> <p>Company has not sufficiently addressed Ofgem and/or stakeholder requirements for service improvements, or evidenced why it has decided not to address these</p>
<p>Meets target 5 / 10</p>	<p>Company has provided convincing evidence that its performance has met the standards it has set for itself, and that these standards meet its strategy commitments and/or the reasonable requirements from stakeholders and Ofgem</p> <p>Company has set plans to address the minimum requirements for improvement expressed by Ofgem and stakeholders</p>
<p>Exceeds target > 5 / 10</p>	<p>Company has provided convincing evidence that its performance has exceeded the standards it has set for itself, and that these standards meet or exceed its strategy commitments reasonable requirements from stakeholders and Ofgem</p> <p>Company has set and achieved challenging goals for future performance improvements, to meet the needs of the developing market, stakeholders and Ofgem</p>

Assessment and overall scoring approach

We propose to use a weighted average of the simple averages across the mechanistic and panel metrics to calculate the overall target for the DSO SDI.



Weighting approach

Our selected metrics fall into two main groups: mechanistic and qualitative. These metrics need to be weighted to build an overall scorecard. Our approach, which we have tested with our CEG, is to focus the weighting more towards the mechanistic scores. These are based on providing the information which will enable stakeholders to confidently invest and participate in the markets, building these to the required level of liquidity to deliver benefits to customers during this price control and future ones. They are directly measurable and more predictable to the DNO, and therefore form a more solid basis for work to meet and exceed targets.

The final scorecard will be scored out of 10 points, with these allocated to metrics to drive rewards for performers in the upper quartile (i.e., 7.5 points and over). The overall Scorecard is assembled as set out in the below equation.

$$\begin{aligned}
 \text{Final Scorecard} = & \left(3 \times \frac{\text{Publications Score}}{10} \right) + \left(3 \times \frac{\text{Stakeholder Survey Score}}{\text{Maximum Stakeholder Survey Score}} \right) \\
 & + \left(4 \times \frac{\text{Performance panel Score}}{\text{Maximum Performance panel Score}} \right)
 \end{aligned}$$

The mechanistic to panel weighting for DSO at 6:4 is different to that outlined for Vulnerability and Major Connections, where it is 8:2. This takes into account the developing nature of DSO activity, its nascent market structure and the different starting points of each DNO company. The panel would be better placed at this stage to provide a qualitative assessment of achievement whilst each DSO activity transitions.

As we will demonstrate in the next section, this methodology is set to target achievement of at least upper quartile performance in the mechanistic elements in order to avoid a penalty, with upper quartile performance overall including mechanistic and panel elements required to drive a reward.

Publications metric scoring

Unlike metrics under the Vulnerability and Major Connections SDIs, the publication of information is entirely controlled by the DSO. This means that the simple score out of ten methodology is less appropriate to this incentive.

Below, we propose a simple alternative metric which would penalise failure to issue information correctly more strictly.

For the metric concerning the publication of reports, the DNO would start the period with 10 points. For every publication deadline which is missed, 1 point would be deducted. This means that missing deadlines for a small number of publications would have a large impact on the score achieved. While we recognise that in theory this approach then provides no incentive to publish further materials on time, once more publication deadlines have been breached, in practice we consider companies will continue to have strong incentives to perform. In particular, the reputational impact of continuing to fail to meet publication deadlines will act as a deterrent to this behaviour, therefore, we do not consider developing a more complex mechanism is justified.

Stakeholder surveys and score improvement glidepath

The second of the key metrics is the outturn score of the annual stakeholder survey. We propose that a third-party survey provider with experience in designing appropriate questions and structuring correctly weighted survey groups across the range of stakeholders would design and run annual stakeholder surveys for the whole sector. A single survey provider across all companies would ensure consistency across the companies. However, companies should be able to provide materials to the survey operator (for example, to educate stakeholders about the services which they offer and their success in operating markets, and should be able to set some company-specific qualitative feedback which they wish the survey to achieve, in addition to the market-wide survey outcomes, to help them understand the nuances of DSO stakeholder requirements in their license areas.

The survey should target a representative sample of the active and potential DSO service provider community. This should include, as a minimum:

- DSO service providers and potential service providers
 - This should include those who dropped out during sign-up or were unsuccessful in tenders, and active engagement with flexibility providing companies like flexgen operators, aggregators and battery operators who have not yet engaged
- Investors in flexibility capacity, whether this be through the generation, storage, or flexible consumption markets
- Developers seeking connections (generation and consumption), and users seeking increased connection capacities

We expect that the survey provider will take a lead role in formatting questions, using their expertise to deliver the best results from the exercise. However, we note that the survey is intended to deliver two sets of results: qualitative feedback on where stakeholders see the need or potential for improved services; and quantitative scores out of ten, in response to the key topics for DSO services. We suggest that important topics on which to seek stakeholder feedback to track these score across would be:

- Format, quality, and accuracy of data provision
- Timeliness and frequency of data issue
- Level of support provided to market participants
- Responsiveness to stakeholder requests and feedback

These areas have been selected based on Ofgem’s minimum standards for DSO, with each topic targeting one of Ofgem’s DSO roles. Our own stakeholder research also echoed these areas, indicating that the most important areas for DSO service provision were data transparency and accuracy, facilitating provision and market making, and provision of forecasting data.

We note that these topics may evolve over time and need to be updated by the regulator. For example, if data issue became standardised across all companies through a central portal, this may become a less relevant area to track and review. These should therefore be considered for revision ahead of the launch of the next price control.

The simplest methodology of feeding stakeholder survey scores into the scorecard would be to simply average these four areas. However, this does not consider the different starting points of each company and differing stakeholder expectations. We also note that there is currently no baseline for scoring DSO performance in these areas.

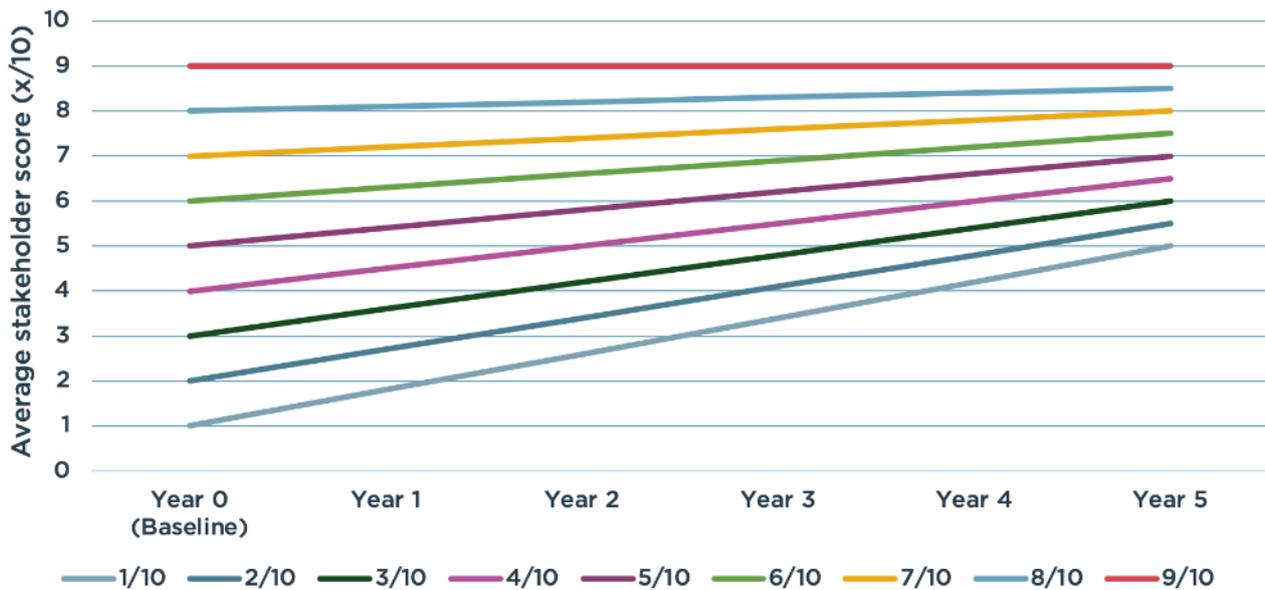
Consider two extreme examples:

- A stakeholder may consider that, given the historic absence of DSO services, any service provision at all deserves a very high score
- A stakeholder may have a long list of DSO service desires, which it does not feel are being met, and therefore give a very low score

We suggest therefore that a “Year Zero” stakeholder survey be delivered in the first year of the ED2 price control to set a baseline. Companies would then be targeted to achieve performance improvements over the price control in each of the four areas highlighted above. A sensible target for improvement over the term of the price control would be to improve performance to the mid-point between initial performance and the desired level of performance. If a company already exceeds the desired level of performance, it will have a flat glidepath to maintain that level.

A suitable desired level of performance for all DNOs would be 9/10, ± 0.5 , which is in line with desired customer survey scores in other areas of the incentive regime for ED2, such as C-SAT scores (for which we are targeting 90%), as well as historic regimes and those in other sectors. It is above the [UKCSI](#) average of 77.4/100.

Example glidepaths to the end of the ED2 price control, based on a range of initial survey scores, are presented below. This highlights the greater improvements in performance required from those DNOs which do not achieve such high scores in the initial Year Zero baselining survey. Note that while glidepaths provide an indicative trajectory for improvement over the course of the price control, incentives are only judged at the end of the period and this is an indicative pathway to help companies be aware of the required improvements and to manage their performance in-period.



In the final assessment at the end of the price control, points would be awarded to companies in each of the four survey areas based on their final survey performance, as follows:

- Exceeding the overall target score of 8.5/10 (9/10 - 0.5), or exceeding the target final glidepath score by more than 0.5 points, would receive a score of 2; or
- Meeting the glidepath, within the boundary of ± 0.5 points, would receive a score of 1; or
- Falling below the glidepath by more than 0.5 points would receive a score of 0

A company which delivered survey scores within the boundaries of the glidepaths would therefore receive a score of 1 for each area of the four areas, giving a total score of 4 out of 8, which would deliver a scorecard element of 1.5 out of 3 to indicate that it is meeting required performance levels.

Panel Scores

The panel will provide an annual qualitative review of the companies' performance in innovating, delivering improvements, and engaging with stakeholders to build the DSO market. This would be bound to key performance improvement areas, which reflect the Ofgem DSO roles and company DSO objectives. We set out overleaf the five key areas which we consider would benefit from monitoring and assessment by the panel.

We suggest that the panel should meet annually to consider an annual report from each company, setting out evidence on its performance over the previous year. The panel will review company reports, hear evidence from company and independent experts, and provide feedback to the company on its performance. This will be related both to the scoring areas, and a more far-reaching assessment of DSO performance. This could include where a company is performing highly, where more stakeholder evidence gathering and engagement might be valuable, and where the company could look to improve its services. Essentially, the panel will be acting in an annual "critical friend" role to the companies, to help support efforts to improve DSO services during the course of the price control and providing a rapid feedback loop for companies during the course of ED2.

Evidence which should be provided to the panel on an annual basis, to inform its deliberations, should include:

- Information on the DSO's delivery of mechanistic elements during the past period, e.g. have reports and activities been delivered in a timely fashion and to pre-set deadlines
- An update on DSO activity during the year, including how DSO services have evolved and improved during that period, in response to the plans set out in the previous year
- An update on stakeholder engagement activities, including but not limited to the stakeholder survey, and how learnings have fed into the companies' plans for improving services
- A plan for improvement of DSO services over the coming year, reflecting on lessons learned from the past year, Ofgem and ENA announcements and evolving requirements, and the results of the stakeholder engagement activities carried out
- Evidence on exogenous or other factors which the companies have had to consider and which have affected performance or led to changes in planned activities

At the end of the price control, the panel will provide a final review of performance and scores on this performance, for the purposes of feeding into the scorecard and awarding an incentive payment or penalty.

The table overleaf sets out the five areas we recommend for panel scoring, how these would be assessed, and how companies might evidence success or the panel evidence failure against the area.

Performance panel scoring areas

Ofgem role	Area to monitor	Performance levels	Evidencing performance	Panel assessment
Planning and network development	Quality of data issued to market	<5 – Failed to provide information to the standards set out in the business plan (e.g. DFES which does not meet statutory requirements or contains incorrect base assumptions). Lower scores where errors are more numerous or material	<5 – Justified stakeholder complaints about accuracy, completeness, or quality of issued publications, compared to established ED1 baseline or the improved quality in ED2 (i.e. no rolling back improvements). NB – should exclude forecasting accuracy	The panel should score according to the perceived benefits of the increased information provision. For example, if stakeholders indicate that the information would be “nice to have”, it will drive a small increase in score. If the information is fundamental to market participation, it should drive a large increase in score. The panel will assess on a summative basis: the difference in information provision between the strategy set out at the beginning versus the end of the price control.
		5 – Documents issued provide information to the standards set out in the business plan	5 – No justified stakeholder complaints about accuracy, completeness or quality (or evidence why complaints are unreasonable)	
		>5 – Material step changes in published information. This could be in terms of frequency of publication, granularity of data, ease of access etc, but improvements must be linked to stakeholder needs or Ofgem requirements. Higher scores where improvements are more impactful to a wider set of customers or across a wider range of publications	>5 – Company should provide evidence that it has engaged stakeholders or reviewed Ofgem requirements and delivered improvements to publications.	
Network operations	Network visibility	<5 – Failing to meet the agreed 5-year plan for delivering the network visibility strategy and making this available to stakeholders. Lower scores where more serious failings	<5 – Showing that the information is not being collected, or if collected, is not being made available, in line with the Strategy	The panel should score according to the perceived benefits of the increased information provision. This could be evidenced on the basis of company, customer or stakeholder benefits. The panel will assess on a formative basis: if providing network visibility more rapidly has driven benefits, for example, these should be factored into scoring.
		5 – Meeting the agreed 5-year plan for delivering the network visibility strategy and making this available to stakeholders	5 – Showing that the information is being collected and made available to stakeholders, as per the expectations set in the Strategy	
		>5 – Exceeding the agreed 5-year plan for delivering the network visibility strategy and making this available to stakeholders either in terms of providing higher levels of visibility or by providing this more rapidly, or by providing tools and services (e.g. AI simulations) to help understand and make use of this data. Higher scores where more evidence of additional benefit	>5 – Company should provide evidence (e.g. Ofgem requirements, stakeholder feedback) to show that stakeholders have asked for or valued more rapid or additional levels of information above that set out in the Strategy, or have asked for, and/or have made use of, the tools provided. This may be quantitative (e.g. number of users accessing data) or qualitative (e.g. stakeholder feedback)	
	Quality of DER dispatch decisions	<5 – Rising level of short-term change across period without evidence that this is a result of well-structured learning-by-doing initiatives or other exogenous changes	Evidence report on numbers of units put on standby and units dispatched and providing evidence on dispatch strategies experimented with and exogenous factors.	The panel should score according to the perceived benefits of the increased dispatch certainty. This could be evidenced on the basis of company, customer or stakeholder benefits.
5 – Consistent share of units put on standby vs. actually utilised				

		>5 – Falling share of units put on standby but not dispatched, or evidence that well-structured and theorised experiments have driven instances of lower dispatch vs standby	This evidence will be technical in nature, reflecting either the system circumstances which led to changes, or the structure and success or failure of experimentation and learning-by-doing to improve dispatch. Lower scores should indicate that the DNO is not making efforts to improve, not that these efforts are not always 100% successful. This will avoid penalising potentially valid testing and experimentation	The panel will assess on a formative basis: if improving dispatch certainty more rapidly has driven benefits, for example, these should be factored into scoring.
Market development	Flexibility provider registration acceptance time and complaints	<5 – Increasing average time to register new market participants, or increasing numbers of complaints	<5 – failed to evidence exogenous factors mitigating an increasing average time to register new participants, or failing to provide stakeholder evidence that a longer average time to accede to the market is appropriate	The panel will assess on a summative basis: comparing the acceptance time and complaints level at the start and the end of the price control period, as well as evidence on mitigating and exogenous factors and on market access barriers which have been removed or mitigated.
		5 – DNO delivers a consistent performance against an agreed minimum speed of accrediting new members across the period, and maintains a	5 – average number of days between customer requesting to be registered and company completing registration, with carve-out for time taken by customer to provide additional required information or correct errors Baselined on ED1 performance levels	
		>5 – DNO improves the speed of registration of new market participants, reduces complaints for registering or registered market participants and/or makes material improvements in the ease of registration and contracting	>5 – provide evidence that the average time to completion of registration has fallen, and/or that other material barriers to market participation (identified by Ofgem or stakeholders) have been mitigated	
	Service Level Agreements (SLAs) for market participant service ²¹	<5 – Failed to meet SLAs for providing support to potential market participants joining, existing market participants, and resolving complaints	<5 – failure to meet standards	The panel will assess on a formative basis: considering the trajectory of SLAs performance and changes during the year, as well as the benefits evidenced from improved SLAs or levels of support.
		5 – Met SLAs for service provision and complaints resolution speed	5 – either a consistency in meeting SLAs which haven't increased, evidence that while the company has failed to meet increased SLAs, it is still meeting its original SLAs, or convincing evidence that failure to meet SLAs is due to exogenous factors beyond its control	
		>5 – Improved SLAs (and met improved SLAs) for market participant service and/or increased speed of resolving complaints	>5 – indicated by improvements to the speed or support provided, supported by evidence that this support is desired by Ofgem or stakeholders, or improved average speed in resolving complaints	

²¹ Individual DNOs will need to set their own SLAs, based on their existing standards and the perceived level of stakeholder requirement in their license areas, and in agreement with Ofgem/ stakeholders. We set out an example overleaf

Example SLAs for market participant services could include:

Customer journey stage	Standard	SLA (working days)
Registration	Registration and inclusion on the DPS Select List following submission of the completed questionnaire	10 days
Registration	Confirm errors/ missing information on registration form to customer	5 days
Responding to tender	Invitations to tender will be issued to all suppliers on the DPS Select List, and will remain open for a minimum of 10 calendar days from the date of issue	Minimum 10 days
Responding to tender	Confirm errors/ missing information on ITT responses to customer	10 days
Build	Set up account on web portal and provide API access - assuming user details correct/ complete	10 days
Build	SSEN elements of API setup, and schedule testing	10 days
Operate	Respond to customer performance and billing queries	5 days
Any	Respond to request for information or complaint	5 days
Any	Target to resolve request for information or complaint	10 days

The panel will score the companies' performance in each of the set areas, either on a summative basis (looking at total performance across the term of the price control) or a formative basis (looking at year on year performance) as explained in the table. Their final scores should be supported with evidence, with companies required to share their stakeholder and relevant operational evidence base with the panel, and there should be a principle set that the panel will reward the best performing companies across the DNOs.

Scoring and deadbands

Assessment period

We consider that these metrics should be tracked and reported to the panel on an annual basis. However, in view of delivery of a five-year strategy over the course of the price control, we suggest that scoring, creation of the Scorecard and award of an incentive should be delivered on an ex-post basis, following the end of ED2. This will minimise the time

required from Ofgem and companies, and therefore the costs of implementing the incentives and potential opportunities for challenge of the incentive.

Building the final Scorecard would combine the scores for mechanistic elements and the final panel scores.

$$\text{Final Scorecard} = \text{mechanistic score} + \text{panel Score}$$

Deadband

Our principles for setting SDI incentives state that successful delivery of a company's strategy, as evidenced by success in the mechanistic elements of the incentive, should not result in a penalty. We have therefore set a deadband which is structured on this basis.

The minimum deadband score should be **4.5/10**, made up of:

- A maximum 3/3 points for timely publication of information to the market
- An average 1.5/3 points for Stakeholder Survey scores, indicating a level of performance consistent with the improving glidepath over the course of the price control
- A minimum 0/4 points from the panel

Below this score, the DNO has underperformed and should be penalised.

To access a reward, high levels of ambition and performance should be mandated. We interpret this as upper quartile performance on the metric scores across the board, with a minimum score of **7.5/10** required to earn an incentive, made up of:

- A maximum score of 3/3 points for timely publication of information to the market
- An average 1.5/3 points for Stakeholder Survey scores, indicating a level of performance consistent with the improving glidepath over the course of the price control
- Upper quartile performance of 3/4 points from the panel, indicating strong achievement of improvements and innovations

Applying the incentive

In the following section, we set out the steps required to establish:

- The revenue stream subject to the incentive;
- The proportion of this subject to the incentive;
- Options for calibration

Establishing the revenue stream subject to the incentive

Note: this section and the numbers included are indicative at this stage, based on SSEN's current information to indicate available options and the range of outcomes possible. All figures will need to be recalculated at the Draft and Final Determination stage between companies and Ofgem.

We conducted research into the incentive rates of comparable incentives across water companies, electricity and gas networks under RII0-1, and the electricity transmission and gas incentives set to date under RII0-2. These are set on a variety of methodologies and at a range of quantum. Generally, activities that are core to the success of the business - in terms of providing services to customers - are more highly incentivised (or penalised) than peripheral activities. The total value of the incentive is also frequently expressed in relation to the relevant element of allowed revenues. For example,

water sector regulator Ofwat has set the C-MeX and D-MeX incentives, which look respectively at the quality of service provided to retail household customers and to developer services customers, at better -12% and +6% of residential retail revenues and developer services revenues respectively.

SSEN has implemented a “Flexibility First” principle and commitment during ED1, looking to flexibility as the first option when considering reinforcement, during planned maintenance work, and to ease post-fault conditions. However, DSO services are not currently incentivised during ED1, having been introduced only during this period as a new area of activity. We have committed to continuing our Flexibility First approach during ED2 and in light of the importance of DSO service to meeting our commitments to our customers and to supporting the changing electrical system to enable the UK’s net zero ambition, it is appropriate to consider a financial incentive and penalty for performance in delivering the DSO strategy and services during the period.

As the ED2 price control remains in development, we do not yet have a base revenue figure for the price control. Our equivalent base revenue for ED1, adjusted for the length of the price control and for inflation, is £4,105m. Under ED2, our strategy calls for spending of around £100m in relation to DSO services, with around £28m existing commitments carried over from ED1 and around £72m new spending for ED2, intended to improve services. The total commitment is broken down roughly as follows:

- £45m IT and related expenses
- £16m existing workforce and business support
- £29m new workforce and business support
- £10m anticipated flexibility payments during ED2

This cost makes up only a small share (2.44%) of adjusted ED1 base revenue. Furthermore, the level of DSO service need across different license areas is very different. We argue, therefore, that the incentive should be calibrated against the forecast DSO spending of the company, rather than a share of base allowed revenue. This would allow the incentive to demonstrate relevance against the outcomes being sought, as well as protecting customers from excessive incentive payouts in areas where there is good service but little need for DSO service (and therefore commensurately low value in providing this service).

Overall, our initial assessment of approaches to calculating the SDI rate suggests pros and cons with each approach, set out below. We again note that the figures underpinning this assessment figures have been provided on an illustrative basis and will need to be recalculated at Draft and Final determination stage between companies and Ofgem.

	Using proportion of base revenue	Using proportion of allowed revenue associated with the strategy
Pros	<ul style="list-style-type: none"> ● Avoids incentives for companies to reallocate inappropriately between activities ● Simple to apply ● In line with Ofgem’s wider approach to ODIs 	<ul style="list-style-type: none"> ● Ensures penalties and rewards are proportionate to the investment associated with the strategy ● Demonstrates direct relevance of incentive to services/ outcomes being delivered ● Enables consistent incentive rate across companies with a range of DSO strategies and needs

		<ul style="list-style-type: none"> Supported by out of sector practices
Cons	<ul style="list-style-type: none"> Likely to be disproportionate to actual investment associated with DSO activities Does not support consistent incentive rate across companies with different levels of DSO needs and spending 	<ul style="list-style-type: none"> Risk of companies being incentivised to reallocate costs inappropriately out of the revenue segment subject to the incentive Risk of companies underspending to minimise risk of penalty

However, these are forecasts, with the £10m on flexibility payments in particular subject to change depending on the volumes of flexibility which may be required and the extent to which services are dispatched. This means that were an incentive to be based on a percentage of spending on flexibility services, a low-performing company would be able to minimise its exposure penalty by minimising its spend on the services - a perverse outcome. We therefore suggest that the incentive be set based on forecast spend at the start of the price control, and not adjusted during the price control.²²

A large share of DSO spending is expected to be incurred during the early years of the price control, as staffing levels are increased, and IT systems procured. The benefits of DSO however will arise steadily over the course of ED2, with high levels of benefits expected towards the end of the price control. In light of the continual improvements expected during the period, and review of performance on an annual basis by the panel to provide a rapid feedback loop on development and improvement, we would suggest that the incentive should be judged at the end of the price control, rather than in stages or annually. This will enable companies to continually improve services across the five-year period in the most efficient manner.

Establishing the incentive rate

Our approach for setting incentives reflects notes that incentives must be sufficiently large to disincentivise poor performance, and to reward outperformance, thereby driving efforts and potentially spending to improve services offered to customers. DSO services are continuing to emerge and should offer a reduced cost-to-serve, reducing consumers’ overall energy expenses, if delivered well. If services are not delivered, then these benefits will not emerge.

For this reason, we propose a symmetrical incentive, set on a marginal basis. We proposed that this is set at a total of ±6% of total DSO services expenditure over the course of the price control, which for us would be ±£6m. This equates to around 0.129% of allowed revenue. This amount is material enough to drive efforts on service improvements, to avoid penalty or earn reward. We propose that this incentive is judged ex-post, once the price control is complete and the success, or otherwise, of companies’ implementation of DSO services over the period is recognised.

Options for Calibration

For comparison, the Electricity System Operator, which has a well-established and defined role, is exposed to an incentive of -£12m to +£30m, over its two-year price control. This creates an incentive range of approximately -2.4% to +6%, based on its allowed revenues of £504m over the two-year price control. This is well aligned with our proposed level in respect

²² The overall incentive may need to be subject to a re-opener by Ofgem, if it transpires that there is a much greater or lower level of delivery of flexibility services than has been initially forecast

of DSO spend within the DNOs total spend, with other DNO incentives accounting for the remainder of the DNO allowances. Whilst this gives the DSO a lower absolute incentive, the ESO has a different overall incentive framework and set of metrics compared with our proposed DSO metrics, with deliverables on correctly forecasting, delivering balancing cost savings and so on. It also undertakes a well-proven and understood set of activities with a well-established marketplace for procuring services. 6% also aligns to the incentive rate set by Ofwat for its new D-MeX incentives, which cover similar areas in terms of providing better developer services in a nascent market, although Ofwat's C-Mex incentives are aligned to providing a retail market as opposed to a wholesale market customer experience. The below table sets out these and several other comparators.

Industry	Incentive	Value	Relevance
Electricity System Operation	Panel review and award for efficient system operation, forecasting, and other services	-2.4% to +6% of allowed revenues	The nearest available comparator for DSO services. Note that the ESO only provides relevant services, making the assessment against total allowed revenues appropriate
Electricity distribution	Customer satisfaction with general enquiries, based on survey	±0.20% of base revenue	An incentive reflecting a requirement to meet a service standard and innovate within period to improve
Electricity distribution	Customer satisfaction with interruptions, based on survey	±0.30% of base revenue	An incentive reflecting a requirement to meet a service standard and innovate within period to improve
Electricity transmission	Environmental Discretionary Reward scheme	Up to £4m/year split across eligible TOs (up to 3)	Incentivises electricity transmission owners and system operator to encourage environmental and strategic planning, improve low carbon generator connections and innovate in smart networks. Marked through a scorecard approach with scores >70% required to drive a reward
Gas transmission	Customer satisfaction survey	-0.546% to +0.154% of base revenue	Customer service award, based on providing consistent and improving service over price control driving innovation
Water	Customer Measure of Experience survey outturn results	-12% to +6% of household retail revenues (potential +6% available for highest performers)	Based on customer feedback on successful delivery of services and innovations to improve services. Scoring high to receive a reward requires innovation and new service provision
Water	Developer Measure of Experience survey outturn results	-12% to +6% of developer service revenues	Based on a combination of mechanistic elements and stakeholder feedback on successful delivery of services and innovations. Scoring high to receive a reward requires innovation and new service provision

Customer Willingness to Pay

In this section, we discuss the relevant elements of our customer willingness to pay research. We have calculated implied willingness to pay rather than conducting direct research. This is a highly technical area, in which average customers may be unlikely to fully understand the implications of activities and deliverables. Furthermore, it is an area in which - unlike other areas such as Vulnerability and Major Connections - additional spending is intended to drive overall customer bill savings once DSO markets are fully implemented and functional.

In terms of the cost of the incentive to customers, the maximum value of £6m over five years equates to an average of £1.46 per meter over the period, or a maximum increase in bills of under £0.30 per meter per year on average.²³ This implied requirement for willingness to pay is considerably below the amounts which customers are willing to pay for service improvements in related areas.

Our research has shown that consumers are willing to pay for service improvements, network reliability improvements, and improvements to the connections process, elements of all of which will be provided by DSO services. For example, the mean willingness to pay for a small improvement in average duration of unplanned power cuts is £1.95 in the Southern region or £1.66 in the Northern region, considerably above this cost.

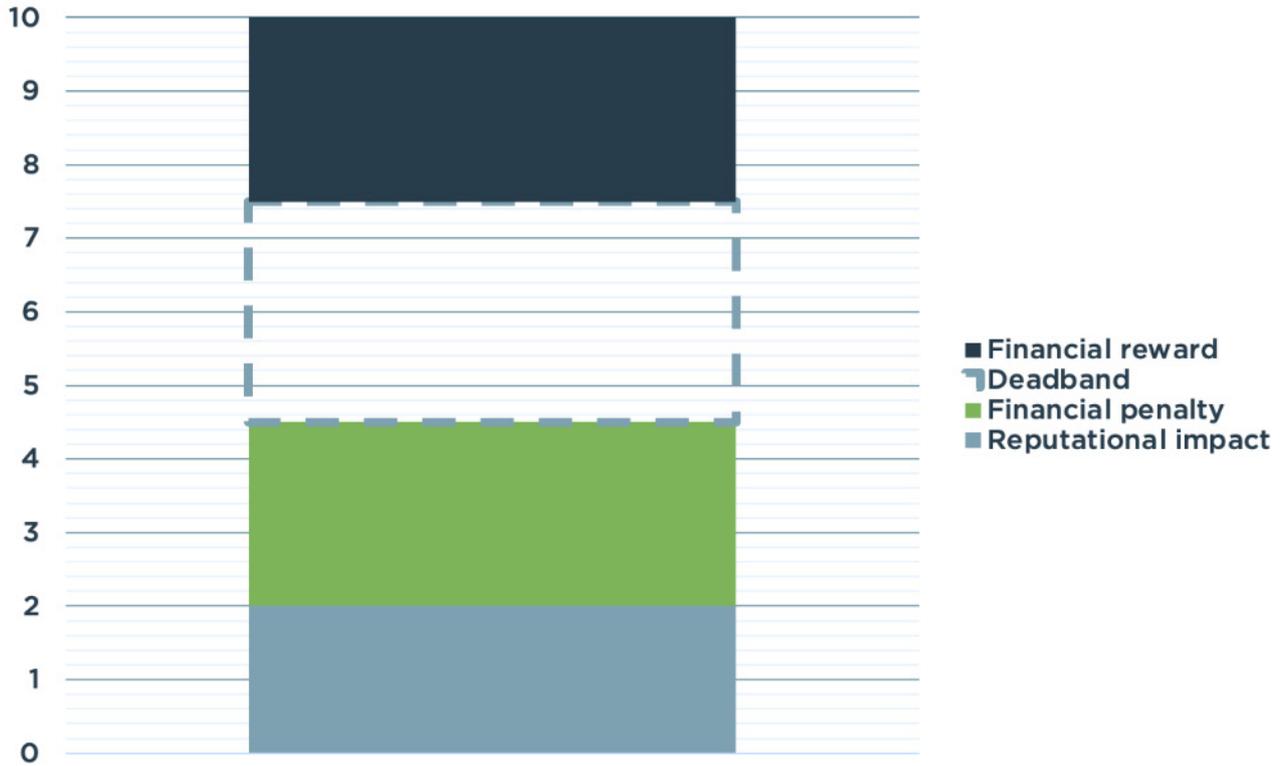
The combined total of the mean willingness to pay for related improvements to services²⁴ is £10.66 per customer in the Southern region, or £9.99 in the North Scotland region - roughly £40m in total across our customer base. The incentive offered here makes up only a small fraction of this total. Furthermore, we note that higher scores will indicate more successful implementation of DSO services, which will drive overall customer bills savings, mitigating the impact of the cost of the incentive to customers.

Cap and collar

We suggest that the incentive should be allocated symmetrically, with reward or penalty set on the same basis above and below the deadband. This would mean that there is a collar on the lowest score which would attract an additional penalty of 2 points. Each scorecard point (above and below the deadband) would be worth £240,000 in reward or penalty.

²³ Total values are averaged across 4.1m metered connections, to give an average “per customer bill” number. The 4.1 metered connection number is taken from our website here: <https://www.ssen.co.uk/Whoweare/>

²⁴ We included the mean willingness to pay of domestic customers in the following areas in this total: Small improvements to the duration of unplanned power cuts; low carbon heat pump connections by 2028; new electric vehicle connections by 2028; improvements to the connections process; Overall customer satisfaction score; Connection times for small/minor connections



Scores under 2 indicate a serious failing in the provision of DSO services and would create a reputational penalty in themselves. The chart indicates how the cap and collar on scoring would be implemented, in terms of scorecard points.

APPENDIX A: CREATING THE METRICS

VULNERABILITY

Vulnerability metrics sift and rationale

We used our structured framework to allocate the metrics to mechanistic or panel assessment. Of the three metrics which we set, 5 have been assessed as mechanistic and the remainder are allocated to the panel. The following tables set out how we have allocated metrics to either mechanistic assessment or to the panel. As per section 2, in order to be included in the mechanistic assessment metrics have to meet a range of criteria. There are a set of metrics that we do not believe are suitable for mechanistic analysis alone. We have included these as metrics to be reported to the panel where they will form part of the quantitative evidence base the panel will use to assess the DNOs performance against the relevant. In addition to the metrics which we have set for judging performance, there are a range of other elements which we considered and subsequently rejected from inclusion in the SDI.

Objective 1: Improve service provision to customers vulnerable during a loss of supply

Metric	Suitable for mechanistic assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment method
% households on PSR as proportion of eligible	Y	<p>This quantitative measure of PSR reach allows an assessment across DNOs of their success in registering customers in vulnerable situations.</p> <p>This metric is also comparable (unlike the absolute number of PSR registrations, which is not comparable across DNOs due to different sizes of customer base).</p> <p>We do note that vulnerabilities are constantly changing and a range of factors could drive an increase in the number of customers in vulnerable situations across all DNOs, driving up the number of people who are eligible to be on the PSR register.</p> <p>Despite this it is reasonable to expect DNOs to rise to this challenge and maintain high PSR registration in the face of increasing vulnerabilities.</p>	mechanistic	mechanistic	mechanistic
% medically dependent households on PSR as proportion of eligible	Y	<p>This quantitative measure of PSR reach allows an assessment across DNOs of their success in registering the most customers in vulnerable situations - those who are medically dependent.</p>	mechanistic	mechanistic	mechanistic
Customer satisfaction score for PSR customers experiencing an unplanned outage	Y	<p>Consistency: as with the common BMCS measure for PSR customers experiencing an outage, this survey data can be consistently collected across DNOs, allowing for comparisons across DNOs and improvements over time.</p>	mechanistic	mechanistic	mechanistic

		<p>It is clearly linked to the objective by capturing satisfaction support for customers in vulnerable situations during a power outage.</p> <p>It is within the DNOs control as it directly captures customer experience of service.</p>			
Customer satisfaction score for PSR customers experiencing an unplanned outage	Y	<p>Consistency: as with the common BMCS measure for PSR customers experiencing an outage, this survey data can be consistently collected across DNOs, allowing for comparisons across DNOs and improvements over time.</p> <p>It is clearly linked to the objective by capturing satisfaction support for during a power outage.</p> <p>It is within the DNOs control as it directly captures customer experience of service.</p>	mechanistic	mechanistic	mechanistic
% PSR customers contacted (attempted) within 24 months	N	Perverse incentive to remove people if they cannot be contacted	Y	DNOs should be demonstrating that they are attempting to contact and verify their PSR data	Report to panel
% PSR customers contacted - i.e. verified/deemed correct within 24 months	N	Perverse incentive to remove people if they cannot be verified	Y	DNOs should be demonstrating that they are successfully contacting and verifying their PSR data	Report to panel
# households removed from the PSR following data checks	N	Perverse incentive to remove customers	Y	DNOs should demonstrate that they are removing customers who no longer need to be on the PSR. This will free up support for those who are eligible. This prevents the PSR reach target from being artificially high as it ensures companies are removing as well as adding customers as appropriate.	Report to panel
# customers receiving support, broken down by PSR needs code and type of support delivered	N	Not comparable (due to different size and needs across DNOs)	Y	<p>Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.</p> <p>DNOs should evidence the support provided.</p>	Report to panel
Speed of contact and delivery of support and following supply interruption	N	Not suitable for mechanistic alone - exogenous factors and different DNO characteristics and levels of contact complicate this being used comparatively in a purely mechanistic way.	Y	DNOs should demonstrate they are providing prompt support during supply interruptions.	Report to panel

Details of support provided to those on the PSR during loss and supply	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel. DNOs should evidence the support provided.	Report to panel
Evidence of dedicated lines or prioritisation available for PSR customers	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel. DNOs should provide evidence of prioritisation for PSR customers.	Report to panel
Evidence that information is provided for PSR customers in formats suited to a range of communication needs and meets accessibility standards	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel. DNOs should provide evidence of accessibility standards.	Report to panel

Objective 2: Support customers in fuel poverty through provision of advice and support

Metric	Suitable for mechanistic assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment method
Customer satisfaction score for recipients of fuel poverty support	Y	Consistency: a common survey can allow data to be consistently collected across DNOs, allowing for comparisons across DNOs and improvements over time. It is clearly linked to the objective by capturing satisfaction with support for customers in vulnerable situations experiencing fuel poverty. It is within the DNOs control as it directly captures customer experience of service.	mechanistic	mechanistic	mechanistic
# households supported by type of support and type of customer	N	Not comparative (due to difference sizes of customer base)	Y	DNOs should report on the absolute reach of their support.	Report to panel
% households supported / total in fuel poverty	N	The number of households for each DNO in fuel poverty will be influenced by external factors, and so the denominator is out of DNO control.	Y	DNOs should report on the relative reach of their support to the degree of fuel poverty vulnerability in their area.	Report to panel
% referrals resulting in support	N	This metric is not sufficiently closely linked to the outcome of reducing	Y	DNOs should report as part of the evidence of the	Report to panel

		poverty alone to warrant inclusion as a stand alone mechanistic assessment.		effectiveness of their referrals partnerships in supporting customers in vulnerable situations.	
SROI per £ spent	N	Should not incentivise this alone - could incentivise certain projects being undertaken on the basis of high SROI alone.	Y	DNOs should be delivering high SROIs.	Report to panel
Estimated average financial saving per household	N	Should not incentivise this alone - could have perverse incentives and not help the customer base in the round.	Y	DNOs should be generating financial savings for customers and so report this to panel.	Report to panel
Strategy for targeting fuel poverty support	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel
Narrative justifying spending, reporting on the services provided	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel

Objective 3: Support customers in vulnerable situations to engage with and benefit from the energy system transition towards Net Zero

Metric	Suitable for mechanistic assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment method
# vulnerable households and NHH customers supported	N	Not comparative (due to difference sizes of customer base)	Y	DSOs should be supporting high numbers of vulnerable household and NHH customers and report this.	Report to panel
SROI per £ spent	N	Should not incentivise this alone - could incentivise certain projects being undertaken on the basis of high SROI alone.	Y	DNOs should be delivering high SROIs.	Report to panel
Narrative and evidence on how this is being spent on customers at risk of being left behind by the energy transition	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel
Community support strategic approach and delivery		Not quantitative		Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel

Objective 4: Use data, partnerships and training to deliver for customers in vulnerable situations, and make strategic, continual and adaptive investments to improve the experience of customers and communities in vulnerable situations

Metric	Suitable for mechanistic assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment method
Reporting on effective use of data to understand vulnerability and support strategy delivery	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel
Reporting on building effective partnerships to support customers in vulnerable situations	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel
Reporting on providing quality support to customers in vulnerable situations through company training, a focus on accessibility, and an embedded commitment across the business	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel
Reporting on strategic, continual, and adaptive investments to improve the experience of customers and communities in vulnerable situations	N	Not quantitative	Y	Qualitative - Metric requires reporting against a qualitative standard which would suit a Performance panel.	Report to panel

Metrics excluded from the Vulnerability SDI

Metric	Rationale for exclusion
<i>Customer satisfaction score for recipients of fuel poverty support</i>	<ul style="list-style-type: none"> Measurement - Not clear this is feasible, as with the possibility for community based support for customers vulnerable to being left behind by the energy system transition to net zero it is not clear that it would be possible to identify the impacted customers / beneficiaries of spending to survey.

MAJOR CONNECTIONS

Major Connections metrics sift and rationale

We used our structured framework to allocate the metrics to mechanistic or panel assessment. The following tables set out how we have allocated metrics to either mechanistic assessment or to the panel. As per Section 3, in order to be included in the mechanistic assessment metrics have to meet a range of criteria. Metrics that do not meet the requirements for mechanistic assessment are then considered for the panel.

Some metrics are considered to be unsuitable for either mechanistic or panel assessment. We also set these out below, including our reasons for excluding them.

Objective: Improve provision of information to customers at pre-application stage for major connections

Achievement	Metric	Suitable for mechanistic Assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment
Major connections customers satisfied with the service in pre-application stage	Average satisfaction score of stakeholders contacted about a connection	Y	Clearly links to the achievement/objective - Focusing on satisfaction of customers with SSEN Engagement events ensures this links clearly to the achievement/objective. Metric is a quantitative and specific measure which uses a survey so is straightforward to measure and regularly report and can be used consistently by DNOs .	mechanistic	mechanistic	mechanistic
Provide all necessary information for stakeholders interested in a connection	Average satisfaction score of stakeholders contacted about a connection	Y	Clearly links to the achievement/objective - Focusing on satisfaction of customers with SSEN Engagement events ensures this links clearly to the achievement/objective. Metric is a quantitative and specific measure which uses a survey so is straightforward to measure and regularly report and can be used consistently by DNOs .	mechanistic	mechanistic	mechanistic
	Information provided to pre-application customers via website/portal meets given set of requirements / criteria	N	Not quantitative: Whether website meets requirements/criteria lends itself more to a qualitative metric. Consistency: Other DNOs may wish to design their website/portal differently and include different information in response to stakeholder needs, so targets may not be consistent.	Y	Qualitative: Metric requires reporting against a qualitative standard which would suit a Performance panel. Changeable: Required website functionality might need to change over ED2 in response to stakeholder feedback, which would necessitate flexibility in the target along with a clear narrative on how this meets stakeholder needs.	Report to panel

Objective: Improve simplicity and transparency of the application journey for customers

Achievement	Metric	Suitable for mechanistic Assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment
Major connections customers are satisfied with level of service in their application journey	<i>Average satisfaction score of customers for their application journey</i>	Y	Clearly links to the achievement/objective - Focusing on satisfaction of customers with applications process links clearly to the achievement/objective. Metric is a quantitative and specific measure which uses a survey so is straightforward to measure and regularly report and can be used consistently by DNOs .	mechanistic	mechanistic	mechanistic
Provide all necessary information for stakeholders interested in a connection	<i>Information provided to post-application customers meets given set of requirements / criteria</i>	N	Not quantitative: Whether information meets requirements / criteria lends itself more to a qualitative metric. Consistency: Other DNOs may wish to include different information in response to stakeholder needs, so targets may not be consistent.	Y	Qualitative: Metric requires reporting against a qualitative standard which would suit a Performance panel. Changeable: Required information might need to change over ED2 in response to stakeholder feedback, which would necessitate flexibility in the target along with a clear narrative on how this meets stakeholder needs.	Report to panel

Objective: Ensure timely and economical connections are provided in line with customer requirements

Achievement	Metric	Suitable for mechanistic Assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment
Major connections customers satisfied with their connection	Average satisfaction score of customers for their connection experience	Y	Clearly links to the achievement/objective - Focusing on satisfaction of customers with connection process links clearly to the achievement/objective. Metric is a quantitative and specific measure which uses a survey so is straightforward to measure and regularly report and can be used consistently by DNOs .	mechanistic	mechanistic	mechanistic
Major connections customers satisfied with their connection	Time taken to conduct cost reconciliation and return funds to customers	N	Consistency - Different projects will have varying levels of cost complexity, and these may differ across market segments, regions and DNOs. It will therefore be difficult to measure performance against this target consistently.	Y	Qualitative: A qualitative assessment would allow SSEN to report on its general performance on cost reconciliation and returning funds, including any variances between market segments, avoiding being bound to a potentially unrepresentative quantitative metric. Changeable: The level of complexity of projects might change over ED2 in response to external factors, which would necessitate flexibility in the target along with a clear narrative on how this meets stakeholder needs.	Report to panel

Objective: Make continual and adaptive investments in the major connections process to improve customer experience

Achievement	Metric	Suitable for mechanistic Assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment
Make targeted investments and activities to improve customer experience	<i>Investments and activities undertaken by SSEN to address issues raised by major connections applicants</i>	N	<p>Not specific - This metric is broad and focuses on a range of investments and activities undertaken by SSEN to address feedback from applicants, rather than specific outputs that can be targeted.</p> <p>Consistency - Performance and targets for this metric would not be consistent across DNOs as it relates to feedback given by applicants to specific DNOs.</p>	Y	<p>Qualitative: This would suit a qualitative assessment as SSEN will narratively report on the investments and activities undertaken to address the issues identified by major connections applicants.</p> <p>Changeable: The main issues faced by applicants may change over ED2, which would necessitate flexibility of what SSEN focuses its activities and investments.</p>	Report to panel
Major connections customers report that their experience has improved	<i>Stakeholders and applicants who reported issues with the process now reporting that their experience has improved</i>	N	<p>Perverse incentives - A purely quantitative metric could drive perverse incentives as DNOs would be inclined to focus investments and activities on "easy wins" and short-term fixes to meet survey timelines.</p> <p>Consistency - Performance and targets for this metric would not be consistent across DNOs as it relates to feedback given by applicants to specific DNOs.</p>	Y	<p>Qualitative: This measure would better suit a qualitative assessment as SSEN will narratively report on positive feedback it has received from customers who have highlighted an improvement in the process, and SSEN will then link this to activities it has undertaken. The evidence and conclusions underpinning the assertions would be subject to scrutiny, avoiding perverse incentives or gaming as an overt focus on "easy wins" would be drawn out in the assessment.</p> <p>Changeable: The main issues faced by applicants may change over ED2, which would necessitate flexibility of what SSEN focuses its activities and investments.</p>	Report to panel

Metrics excluded from the Major Connections SDI

Metric	Rationale for exclusion
<p><i>Percentage of relevant stakeholders contacted about making a connection</i></p>	<ul style="list-style-type: none"> ● Measurement - Difficult to measure number of "relevant stakeholders" as SSEN does not always know who these are before they apply. Even if expressed on a qualitative (e.g. narrative rather than %) basis, this would be of limited value as it would simply be reporting an output (number of stakeholders contacted) rather than an outcome (stakeholders who have gained more knowledge following contact from SSEN). ● Consistency - Difficult for other DNOs to measure and report as "relevant stakeholders" does not have a consistent definition. ● Within SSEN's control - Changing economic circumstances may reduce the number of stakeholders interested in connections. ● Double jeopardy - If a more "outcome" focused approach as described above was used, this would duplicate and create double jeopardy with the satisfaction metric.
<p><i>Time taken to offer surgery sessions</i></p>	<ul style="list-style-type: none"> ● Tracking achievement - Does not clearly link to achievement of providing a good service to pre-application customers, as on its own the speed in offering survey sessions does not denote good service. ● Perverse incentives - Incentivising performance under this measure could drive DNOs to focus on speed in delivering surgery instead of quality of surgery participation and content, jeopardising the latter which is of far more importance to stakeholders and applicants.
<p><i>Average satisfaction score of website visitors</i></p>	<ul style="list-style-type: none"> ● Measurement - Difficult to measure due to challenges around identifying which website users were genuinely interested in a connection and therefore relevant for the survey. Even on a qualitative basis it would be difficult to report against this metric due to same challenge around identifying which website users were genuinely interested in a connection and therefore relevant for the survey. ● Verification - Difficult to independently verify which website users and therefore survey respondents are genuine major connections stakeholders.
<p><i>Time taken to provide a quote</i></p>	<ul style="list-style-type: none"> ● Tracking achievement - Major Connections customers generally do not care about the time taken to quote (as long as it is within the GSOPs); customers prefer quote quality over speed. However, without a substantial increase in operational costs to provide more service specialists, increasing the speed of quoting can actually diminish the quality of the quotes. This would not align with the objective of improving simplicity and transparency during the connections process. ● Changeable - Designs in applications will become more complex over time and therefore the quotation process will take longer on average, meaning it will be difficult to create a fixed target. ● Consistency - Applicant requirements will vary across DNO areas, so creating a consistent comparable metric will be very challenging. ● Double jeopardy - There is clear double jeopardy with GSOPs, as DNOs are already exposed to direct financial penalties for failing to deliver quotes in line with SLAs; this would not be mitigated even with a shift to a more qualitative measurement. Furthermore, if quality is diminished through increasing the speed of quotes, incentivising TQ would actually reduce the score under the metric for

Metric	Rationale for exclusion
	<p>“Average satisfaction score of customers for their application journey”. Having two metrics pulling in different directions suggests one needs to be dropped; given quality is more relevant to the objective than quotation speed, the latter should be dropped.</p>
<p><i>Time taken to provide a connection</i></p>	<ul style="list-style-type: none"> ● Measurement - Metric can significantly vary by different market segments, so challenging to provide a quantitative measure. At an aggregate level, there is no sensible way to set performance targets. To address this issue, the market segments would need to be significantly disaggregated, however the level of disaggregation required would result in an exponential increase in the number of sub-categories and therefore administrative burden. In addition, Ofgem has already recognised that Time to Connect for Minor Connections does not make sense as a metric for these same reasons, so introducing the metric for Major Connections would be inconsistent. ● Tracking achievement - Does not clearly link to achievement, as speed in offering a connection does not necessarily denote good service. ● Exogenous factors - Performance against this measure is significantly impacted by exogenous factors beyond SSEN's control (e.g. connection delays by other utility providers), and this cannot be easily mitigated.
<p><i>Time taken to complete reinforcement</i></p>	<p>Same issues as “Time taken to provide a connection”</p>
<p><i>Number of accepted requests for compensation due to delays in connection</i></p>	<ul style="list-style-type: none"> ● Consistency - Different DNOs will face different levels of complexity in connections which drive compensation claims. It is also possible that DNOs will have different compensation policies. Both of these will create challenges around consistent measurement. ● Double jeopardy - Any financial incentive based on this metric will create double jeopardy as companies are already paying compensation. ● Perverse incentives - This metric could create an (additional/stronger) incentive on companies to reject compensation claims from customers.

DSO

DSO metrics sift and rationale

We used our structured framework to allocate the metrics to mechanistic or panel assessment. Of the three metrics which we set, two have been assessed as mechanistic while the third is allocated to the panel. The following table sets out how we have allocated metrics to either mechanistic assessment or to the panel.

We note that most of the measurement points examined in our previous draft DSO strategy have been incorporated into the “Publication of datasets” metric below, while others are incorporated into the stakeholder survey and service improvement metrics. This provides a simpler set of metrics to monitor and report progress against, ensuring clarity.

Metric	Suitable for mechanistic assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment method
Publication of datasets	Y	<p>Clearly links to the achievement/objective - Requirement to publish operational and forecasting data both helping the DSO market to grow and signalling success (or otherwise) in growing the DSO market to the correct size.</p> <p>Metric is a quantitative and specific measure tracking issue of publications, which is straightforward to measure and regularly report and can be used consistently by companies.</p>	N/A	N/A	mechanistic
Stakeholder survey scores	Y	<p>Clearly links to the achievement/objective - Focusing on satisfaction of stakeholders links clearly to the achievement/objective to satisfy stakeholder’s needs.</p> <p>Metric is a quantitative and specific measure which uses a survey to produce numerical scores, so is straightforward to measure and regularly report and can be consistently used by companies.</p>	N/A	N/A	mechanistic
DSO service improvements	N	<p>Not quantitative - Does not clearly link to a defined achievement, as it is structured around</p>	Y	<p>Qualitative - Metric requires reporting against a qualitative standard which</p>	panel

Metric	Suitable for mechanistic assessment?	Rationale	Suitable for panel Assessment?	Rationale	Assessment method
		<p>innovation and improving services in the future.</p> <p>Measurement - Difficult to measure due to challenge in converting qualitative feedback into quantitative scores via a mechanistic method, particularly when discussing potential future actions/ requirements.</p>		<p>would suit a Performance panel.</p> <p>Changeable - Required DSO functionality, information provision etc will need to change over ED2 in response to stakeholder feedback, which would necessitate flexibility in the target along with a clear narrative on how this meets stakeholder needs.</p>	

Metrics we have excluded

In addition to the metrics which we have set for judging performance, there are a range of other elements which we considered. In many cases, these were combined into our final metric list - for example, we initially posited 25 metrics tracking the publication of various datasets. These have subsequently been combined into a single metric, which tracks publication of the same (and some wider) datasets in a more comprehensible manner. Other metrics have been embedded into the role of the Performance panel in our hybrid incentive structure.

Potential metrics which we considered and rejected include:

Metric	Rationale for non-inclusion
Data cleansing	<ul style="list-style-type: none"> Some other companies put forward options for targets around data cleansing as part of information provision metrics. We consider that data cleansing and consequent accuracy should be part of BAU activities around providing accurate information, and tracked through stakeholder and panel feedback, rather than separately incentivised
Demand and flexibility forecasting accuracy	<ul style="list-style-type: none"> A metric targeting forecasting accuracy was proposed by Ofgem and one company. We, and most DSOs (4), suggested that this target is not suitable for inclusion in this incentive at the current time, given the significant exogenous factors affecting the outturn vs forecast volumes. These include the difficulty of forecasting technology rollout, the wider economic and policy factors, and the granularity of expected forecasts (compared, for example, to national-level forecasts from the ESO) We also note that there is a risk of gaming this incentive, with companies acting to meet forecasts (e.g. by accelerating or delaying connections, or by dispatching services) rather than in the interests of the system and customers

Metric	Rationale for non-inclusion
DSO service procurement targets (e.g. MW basis or % of forecast target)	<ul style="list-style-type: none"> ● Ofgem proposed a metric targeting the % of forecast flexibility required that is procured. We, and most DSOs (5), suggested that this target is unsuitable due to the low current levels of market liquidity and the risk of gaming, potentially creating a perverse impact on forecasting ● For example, companies may be incentivised to reduce forecasts to the expected level of flexibility available or to over procure flexibility when an asset-build solution is more efficient, to meet forecasts
DSO services spend or dispatch targets (e.g. £, MWh or service dispatch as % of service procured)	<ul style="list-style-type: none"> ● Ofgem proposed a metric targeting the % of procured flexibility service which is dispatched. We, and most DSOs (5), suggested that this target is not suitable for inclusion in this incentive at the current time, given the exogenous factors and the potential for this target to drive perverse behaviours ● Requirement to dispatch services is not under the companies' control, will depend on customers' behaviour and use of the network, and sometimes will involve unforeseen circumstances ● Arguably, encouraging efficient behaviour at customers' premises (e.g. avoiding consuming during network peaks) would minimise the opportunity to dispatch and could drive a penalty, creating a perverse incentive to avoid overall cost- and system-efficiency ● Companies may be incentivised to dispatch flexibility capacity either out of merit order or completely unnecessarily to meet this target ● We have included an additional metric which requires reporting on the frequency of near-term changes to DSO dispatch decisions, which will provide evidence on accuracy of forecasting and efficient dispatch
DSO service outturn savings	<ul style="list-style-type: none"> ● Some of our stakeholders suggested a metric which would track how spending on DSO services reduced customer bills. This will likely become an important metric for future price controls, when the market is better established, and flexibility options are better understood ● Overall, "efficient outcomes" was considered to be a top-three metric by only 27% of stakeholders surveyed (joint fifth place), with stakeholders appearing to understand that this phase of DSO development is about building the market and learning how to operate it, rather than pure customer bill savings
Target time to progress application for market accession to completion	<ul style="list-style-type: none"> ● Ofgem suggested a metric targeting the time taken to accept or register new applicants to the DSO market. We and all other DNOs agree that this could be incentivised, but we question whether this is a useful metric to drive improvements in service performance given exogenous factors such as providers' ability to supply data and respond to requirements ● An SLA for responding to queries, progressing applications to the next stage, and/or providing information, may be appropriate, delivery against which will be judged by the Performance panel ● Our registration process will clearly list the prerequisite information required to successfully complete the process ● We include a question in our Stakeholder Survey which will score performance in facilitating easy and rapid accession to flexibility market, and will provide qualitative evidence on the performance of DNOs against stakeholder expectations

APPENDIX B: OUR DRAFT STRATEGY METRICS (DSO)

In this section, we describe the work which we carried out to inform our draft business ED2 plan. This formed the basis and starting position for our work to develop the final proposed incentive. This section is based on the positions of Ofgem and other bodies at the time, and we note that industry and our own thinking has evolved during the interim period, with the content of this section in places no longer fully reflecting the situation as it stands on publication of the final ED2 business plan and in our final DSO Strategy. Nevertheless, we have included as it illustrates the pivotal role stakeholder research, customer journey mapping and external proof point referencing has played in the development of our strategy.

INTRODUCTION

The UK's electricity system is experiencing an unprecedented period of change as we rapidly decarbonise the economy and transition to net zero. Our DSO Strategy sets out the investments in DSO capabilities we need to make in RIIO-ED2 to be able to deliver the three primary DSO roles our stakeholders expect of us as we transition to net zero.

This Appendix sets out the high-level design of our three draft DSO performance metrics to enable stakeholders and Ofgem to evaluate our progress delivering our DSO Strategy throughout RIIO-ED2.

- **Metric 1: Data Accuracy, Accessibility and Timeliness:** this metric will evaluate our performance in publishing timely, accurate and accessible DSO data.
- **Metric 2: Facilitating Participation:** this metric will measure our success facilitating participation in the flexibility markets we operate.
- **Metric 3: Forecasting Provision Improvement:** this metric will enable stakeholders to measure our improvement in providing forecast information about the flexibility markets we operate.

The three draft plan proposed performance metrics were the culmination of a robust process where we developed a principles framework, examined relevant precedents, and used our DSO customer journey to develop a long list of possible metrics. We then tested this with our stakeholders to select three performance metrics. In parallel, we worked collaboratively and iteratively with Ofgem, the Energy Networks Association (ENA) and other DSOs in a working group to develop and understand how metrics will be used to evaluate DSO performance in RIIO-ED2, which helped shape our high-level design.

OFGEM'S RIIO-ED2 BUSINESS PLAN GUIDANCE

Ofgem's draft Business Plan Guidance required DNOs to submit a DSO Strategy that sets out their proposed approach to deliver DSO capabilities in RIIO-ED2. As a minimum requirement a DNO's Strategy must include the following with regards to the performance metrics:²⁵

- propose relevant performance measures which will enable stakeholders and Ofgem to evaluate the DNO's progress in delivering its DSO Strategy and associated outcomes. A performance measure could be attributed to a specific baseline expectation or more broadly to an activity or area of a DNO's strategy. Performance measures could be quantifiable metrics, including those which may be common to all DNOs, or other performance measures such as qualitative assessment, or a combination of performance measures. The DNO should make it clear how the measure is relevant to the baseline expectation(s), how the performance measure is calculated and why it is the appropriate measure of success. This information will inform Ofgem's assessment within period of how effectively the DSO Strategy has been delivered.
- where a DNO indicates the relevant performance measure is a quantifiable metric, it should include a baseline performance benchmark with justification to support this. This performance benchmark may be a single value or a range.
- be developed with stakeholder and CEG input and developed in line with the company's wider business planning processes and decisions.

We understood five key points from Ofgem's draft Business Plan Guidance:

- First, DNOs can propose a suite of performance metrics that help stakeholders and Ofgem evaluate our progress delivering our DSO Strategy. There is no requirement for DNOs to all propose the same performance metrics reflecting that DNOs are transitioning to DSO at different paces.
- Second, that performance metrics can be defined at the baseline expectation level or at an activity or strategic level.
- Third, irrespective of the level a metric is defined at, there is no requirement for the DNO's proposed suite of metrics to cover all the baseline expectations. In this Appendix we focus on three performance measures that cover a subset of the baseline expectations.
- Fourth, quantifiable performance metrics need to include a performance benchmark whereas non-quantifiable metrics do not need a performance benchmark. The high-level design of our proposed metrics and measurement points specifies which ones are and are not quantifiable. We will include a performance benchmark for each quantifiable metric or measurement point as part of our final RIIO-ED2 plan.
- Fifth, metrics should be developed with stakeholders and CEG input as part of the business planning process.

Throughout this Appendix we set out how our approach and high-level design of the three draft plan DSO performance metrics satisfies these requirements.

²⁵ Ofgem, RIIO-RIIO-ED2 Business Plan Guidance, April 2021, pp 26-33.

CREATING DSO PERFORMANCE METRICS

The UK's electricity system is experiencing an unprecedented period of change as we rapidly decarbonise the economy and transition to net zero. Our DSO Strategy sets out the investments in DSO capabilities we need to make in RIIO-ED2 to be able to deliver the three primary DSO roles our stakeholders expect of us as we transition to net zero.

- demonstrating a robust approach to **planning and network development** which incorporates potential non-network solutions such as **flexibility**;
- efficient and effective **network operation** that accommodates the increasing role of Distributed Energy Resources; and
- neutral facilitation of **the market** with simple, efficient processes to encourage its **development**.

We set out to create a set of performance metrics in a robust and credible way to make sure stakeholders and Ofgem can evaluate our progress delivering our DSO Strategy throughout RIIO-ED2.

Figure 1 sets out the approach we took. The structure of this section follows each step in this approach.

We started with three tasks:

1. We created a credible principles framework to assess each metric;
2. We looked outward for relevant precedents in other jurisdictions that use a set of metrics or performance measures to evaluate System Operator performance to see what could be learned; and
3. We considered how metrics could map to our DSO customer journey.

We then brought these three outputs together to develop a long list of potential DSO metrics. We then tested the long list of metrics, as well as our overall process for metric creation, with a group of 48 stakeholders. We asked stakeholders to rank the long list of metrics and choose those which were most valuable in their opinion, as well as to suggest any additional metric areas we ought to consider. This process resulted in a short list of metrics. We then developed the high-level design of the shortlisted metrics.

In parallel with our internal process, we worked collaboratively and iteratively with Ofgem, the ENA and other DNOs in a working group to develop and understand how these metrics will be used to evaluate DSO performance in RIIO-ED2. This also helped shape the high-level design of our proposed three performance metrics.

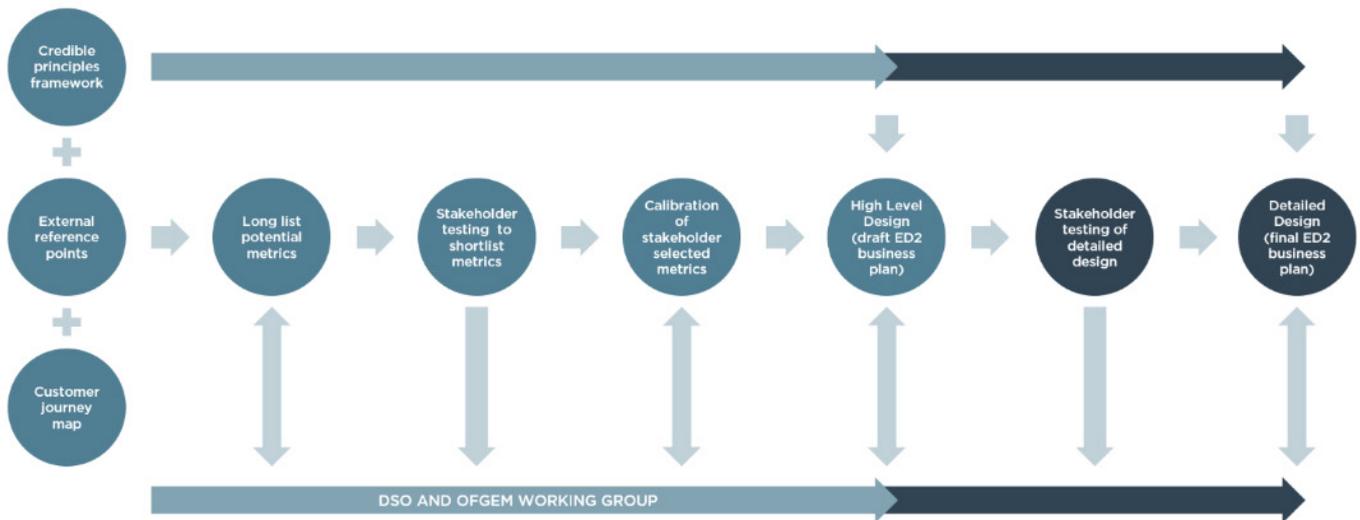


Figure 1 A high-level view of our process and timeline for metric creation.

A credible principles framework

To develop robust DSO performance metrics, we started by creating a principles framework. We included the criteria that Ofgem shared with the DNOs outlining what a ‘good’ metric looks like as well as some additional principles we see value in adhering to (Figure 2).²⁶ With this framework, we had a set of principles to design metrics against and confidence that the proposed metrics will hold up to both Ofgem and SSEN scrutiny and will deliver the best possible outcome for consumers.

OFGEM CONSIDERATIONS ON ‘GOOD’ METRICS	ADDITIONAL PRINCIPLES SSEN HOLDS ITSELF AGAINST
<ul style="list-style-type: none"> ▪ Relevant – the metric should be linked with long-term objectives ▪ Outcome focused – the measure should encourage effective delivery of the desired outcome ▪ Robust and transparent – the methodology proposed to set the benchmark should be transparent ▪ Appropriate – the metric should be suited to the area of performance ▪ Verifiable – there should be historical data by which performance can be tracked ▪ Attributable – the measure should be within the DNO’s control ▪ Proportional – the measure shouldn’t put an unreasonable burden on the DNO 	<ul style="list-style-type: none"> ▪ Avoid metrics that could conflict with our desire to be a neutral market facilitator ▪ Exclude things ultimately beyond our control in metrics ▪ Follow a clear development process grounded in stakeholder engagement ▪ Ensure metrics facilitate and enhance the best customer journey ▪ Learn from other jurisdictions and build from work already in place, as appropriate ▪ Pitch metrics at the role or principle level to allow for agility and cover multiple expectations

Figure 2 SSEN principles framework for metric development

²⁶ Ofgem, “DSO sub-group meeting.” March 2021, pp 5.

We tested this framework with stakeholders and then applied it to each of our chosen performance metrics. N.B. this principles framework formed the basis and starting point of the principles framework we have used in the final plan and is outlined in section 2.1 of this annex.

Learning from others

After developing a principles-based framework for designing DSO performance metrics, we identified and examined relevant precedents of performance metrics applied in other jurisdictions. The value from this exercise was to identify and evaluate the appropriateness of applying or adapting relevant precedents to inform our draft DSO performance metrics.

We drew on examples from three jurisdictions: The Federal Energy Regulatory Commission in the U.S., the Australian Energy Market Operator, and National Grid ESO. The key points from the three jurisdictions are summarised below.

Australian Energy Market Operator (AEMO)

Key institutional arrangements:

- AEMO is a not-for-profit organisation that is jointly owned by government and industry
- AEMO has roles both in transmission planning as well as market and system operation
- The Australian Energy Regulator imposes compliance incentives to AEMO's market and system operator roles. These are monitored and enforced by the regulator. It is rare for the regulator to take any compliance action against AEMO.

Key learnings:

- Performance measures appear to be self-set by AEMO without formal oversight from the regulator, although, being jointly owned by government and industry, those stakeholders likely have some input into the measures. This is akin to Ofgem's business plan guidance described in Section 2, that DNOs set their own performance benchmark for their proposed quantifiable metrics.
- Performance is measured both quantitatively and qualitatively. The use of 'target actions' to cover planned activities is a useful distinction of non-quantifiable measurement points. In our proposed metrics we plan to seek stakeholders' feedback on how we perform these target actions. This qualitative feedback will then enable us to measure and report improvement in our performance.
- Quantitative Performance Measures: There are a small number of quantitative performance measures, largely in the form of Key Performance Indicators.
- Qualitative Performance Measures: AEMO has a set of 'target actions' which are largely planned activities. Rather than being measured on their performance for any given activity, simply completing the activity gets a tick.

Federal Energy Regulatory Commission (FERC)

• Key institutional arrangements:

- FERC regulates most Independent System Operators (ISOs) and Regional Transmission Organisations (RTOs) in the U.S.
 - The ISOs and RTOs are not-for-profit entities
-

-
- These ISOs and RTOs are typically governed by stakeholder boards that represent different types of participants
-

Key learnings:

- FERC recently introduced performance comparisons across ISOs and RTOs using a combination of qualitative and quantitative measures. These measures cover several categories such as network planning, forecasting, system operation and process delivery. This is akin to Ofgem’s Business Plan Guidance, and we have set out our proposed metrics under the DSO roles we will perform in RIIO-ED2.
- These performance measures do not contain financial incentives. We think it is prudent that not all performance metrics should be subject to a financial incentive.

National Grid Electricity System Operator (NGESO)

Key institutional arrangements:

- NGESO is the electricity system operator in Great Britain and is a privately-owned company.
- A new regulatory and incentives framework was introduced in April 2018. It was designed to encourage NGESO to work flexibly with its stakeholders to maximise consumer benefits across the full spectrum of its activities.
- The approach includes a set of Roles and Principles designed to set clear expectations about the baseline behaviours. Each year, NGESO engages with stakeholders to produce a Forward Plan which includes performance measures and should demonstrate how it will meet expectations.
- A performance panel evaluates NGESO’s performance and makes recommendations on whether it should be rewarded or penalised.

Key learnings:

- In the past, regulation of NGESO was based around discrete and measurable objectives, but Ofgem has moved to a more principles-based style of regulation. A principles-based approach has the benefit of driving more proactive and customer-focused behaviours. We consider it is appropriate to apply a principle-based framework to DSO performance metrics, and we have developed and applied our own principles as part of developing our three DSO performance metrics.
- Qualitative metrics appear to be much more prevalent than quantitative metrics and that this is the direction of travel preferred by Ofgem for NGESO. A less prescriptive approach, assigning roles and behaviours, gives the NGESO the opportunity to work flexibly with stakeholders as the electricity system undergoes rapid change and evolution. We support a stakeholder led approach and have followed this in selecting our proposed performance metrics. We agree this is pertinent in the unprecedented pace of change the electricity sector is experiencing.

Table 1: Relevant precedents in other jurisdictions

Our DSO customer journey

Our DSO Customer Journey is a key element we considered in our internal metric development as well as in our work with stakeholders. Delivering a high level of service to our customers is important and we set out to design our DSO performance metrics around this. The DSO customer journey maps each of the stages and touchpoints where we interact with our customers.

By designing metrics around these interactions, we can measure our performance in each of these areas. The feedback we receive will help identify any areas of improvement for us to focus on.

Figure 3 sets out SSEN’s DSO customer journey map. The italicised text indicates what the customer will be seeking from us at each stage and touchpoint, which in turn is where we can evidence that we are providing a high level of service to our customers.

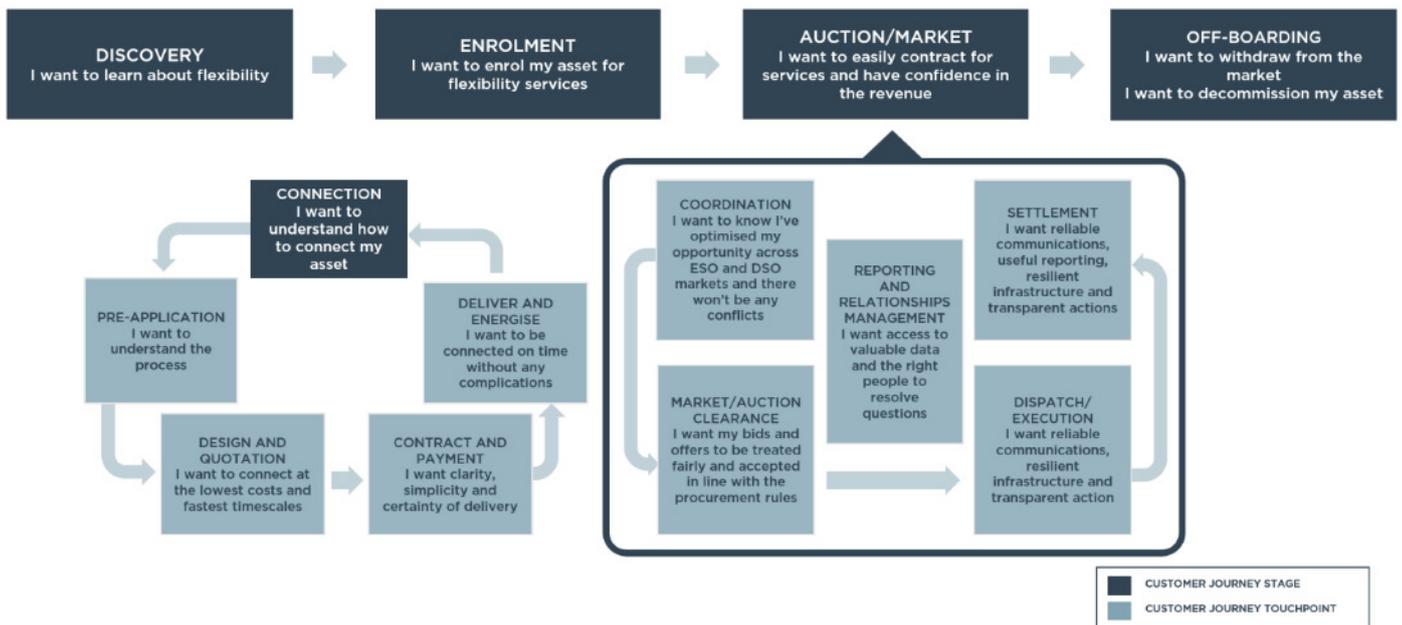


Figure 3: SSEN DSO customer journey map

The three draft plan performance measures are specific to the three DSO roles. While several existing performance measures apply in these work areas, they are not specific to DSO roles. In practice we should not double count, incentivise or remunerate performance in multiple parts of the price control. To the extent our performance is measured, reported, and remunerated under the Broad Measure of Customer Satisfaction or elsewhere this performance should not be measured, reported and remunerated as part of our DSO performance metrics.

Creating a long list of metrics

Using our Principles Framework for metric development, relevant precedents from other jurisdictions and our DSO Customer Journey, we developed a long list of eight potential DSO performance metrics. The eight metric areas were the product of our work internally and our collaboration with Ofgem and the other DNOs through the ENA, while keeping in mind how these could be mapped onto the customer journey.

Metric area	Description
1. Data transparency and accuracy	Providing the market with what it needs to find opportunities and make informed operational decisions. For example, a measure of the quality and timeliness of communications.
2. Facilitating participation	Enabling and encouraging participation in local flexibility markets to resolve network issues. For example, an annual market engagement score or qualitative measure of efforts made by DNOs.
3. Efficient and accurate procurement	Ensuring that the commercial process is efficient and robust for all parties. For example, time-to-contract metrics and qualitative stakeholder feedback.
4. Accurate dispatch	The DSO needs to dispatch participating DER according to the commercial or connection agreements. For example, comms availability and failure rate metrics.
5. Reliable response	Encouraging participants to provide reliable services. For example, reporting of market fulfilment percentage against agreed metrics.
6. Customer satisfaction	Engaging with DSO customer groups more broadly across the range of DSO activities. For example, broad Customer Satisfaction type metric or qualitative engagement and satisfaction metric.
7. Efficient outcomes	Steering balancing of outcomes across customers, flex participants and policy agenda. For example, metrics on carbon intensity of the DNO network or qualitative measures of policy adherence.
8. Forecasting	Encouraging improvement of forecasting across specified voltage levels for defined time periods. For example, reporting on the difference between actual and forecast demand.

Table 2 The eight potential Metric areas presented to stakeholders in the DSO Metrics webinar.

Stakeholder testing

Throughout the development of our draft DSO Strategy, we engaged with stakeholders on their views, priorities and needs. This has significantly informed our final plan submission set out in the main body of this annex. From our publication of *Supporting a Smarter Electricity System* in 2017 to the publication of the draft business plan, we have held over 14 events specific to DSO and have seen attendance from a broad array of stakeholder groups. Stakeholder representation has spanned from community energy groups and local council authorities to connections and development representatives, supply chain partners, utility companies and regulators. Seeking input from this representative group of stakeholders is important as our DSO performance metrics ultimately need to work for them. Our

stakeholder’s feedback and views on DSO have helped to shape and influence our thinking on the development of DSO functions and the transition to a smarter, more efficient electricity system.

Continuing this pattern of co-creation and iteration was a key part of our approach to develop DSO performance metrics. This engagement was important to us because these stakeholders represent the customers we serve and the groups for whom these metrics must deliver a benefit. The following table summarises the forums by which we have engaged with various stakeholder groups in developing our proposed DSO Metrics.

The remainder of this section outlines our stakeholders’ views on our principled framework to develop draft plan metrics, our DSO customer journey, and our long list of proposed metrics. We reached our short list of proposed metrics by way of a measured approach, grounded in feedback from our stakeholders.

Stakeholder group	Summary of our engagement
DNO and Ofgem working group	Throughout the development of our DSO metrics, discussions in the DNO and Ofgem working group meetings have helped to inform our thinking. We participated in co-creating a long list of potential metrics with the Ofgem/DNO working group. Ofgem communicated their initial views on long list of metrics and proposed a short list of six metrics to pursue. While this appendix represents SSEN views on DSO metrics, discussions within these groups influenced our thinking.
Internal SSEN DSO Steering Group	The DSO Steering Group was presented with our framework for metric creation as well as the long list of metrics collaboratively created with the ENA. The purpose of this workshop was to ascertain support of our approach to metric creation as well as to inform the list of metrics we would ultimately present to our external stakeholders.
DSO Metrics Stakeholder Webinar	We described to our stakeholders our process for creating metrics, seeking their feedback on whether they agreed with our approach and asking what we had missed. The event was widely attended by a diverse group of stakeholders, captured in Figure 3.

Table 3: SSEN stakeholder engagement forums

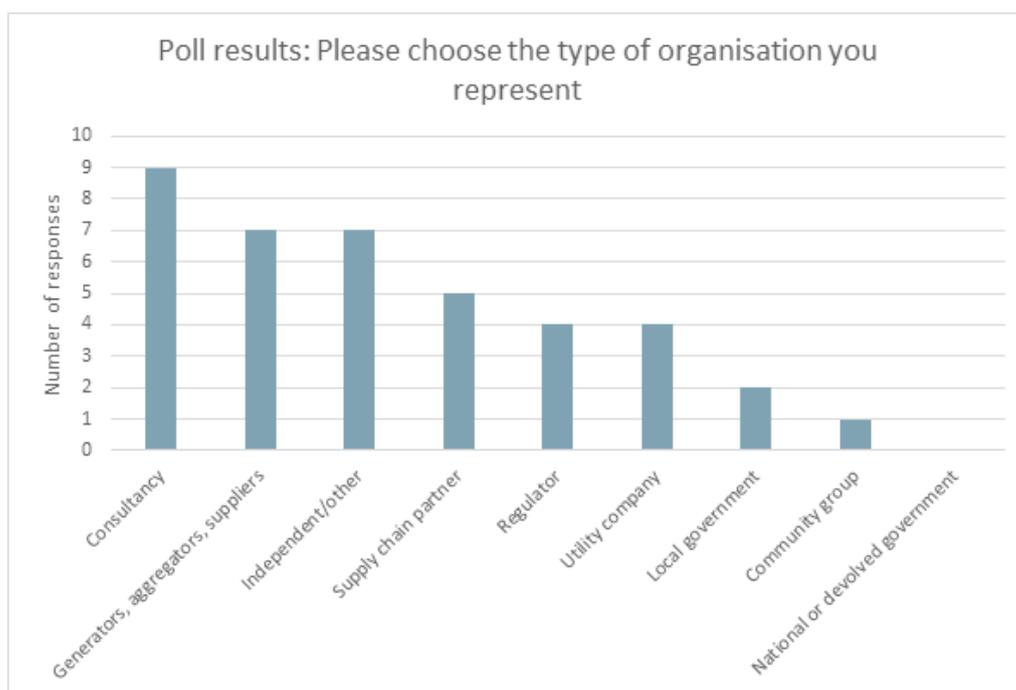


Figure 3 Organisations represented at SSEN DSO Metrics Webinar on 12 March 2021.

Principles framework

In our DSO Metrics Stakeholder Webinar, 85% of stakeholders either Agreed (65%) or Strongly Agreed (15%) that our principles framework (Figure 4) was a good approach when polled. We then asked our stakeholders what else they thought we should be considering in this framework. Some of that stakeholder feedback along with our responses is included in the table below.

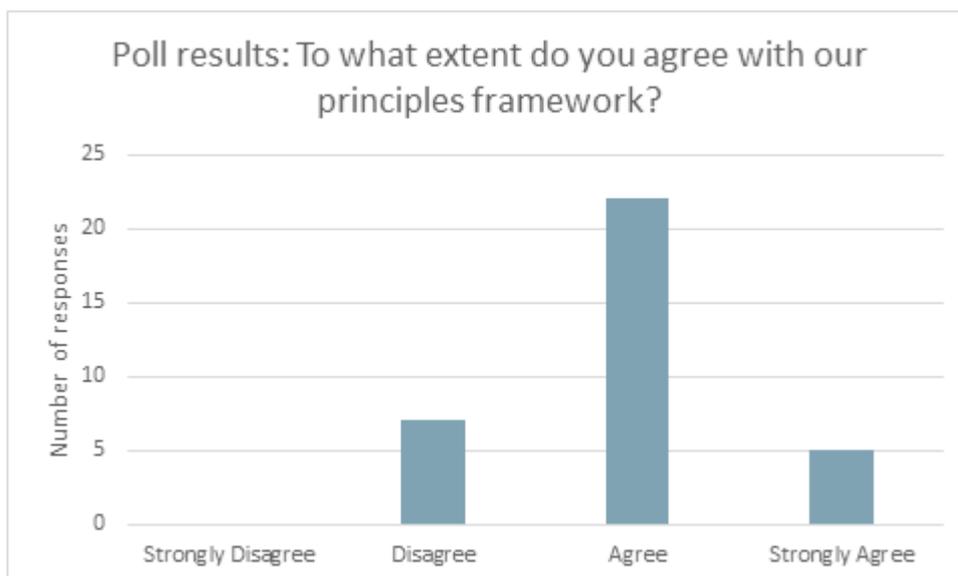


Figure 4 Delegate responses to the question 'To what extent do you agree with our credible principles framework?' at the SSEN DSO Metrics Webinar on 12 March 2021.

Poll responses: Regarding our Credible Principles Framework for Metric Development, is there anything additional we need to consider?	
Stakeholder Feedback	SSEN Response
A very real need to be able to demonstrate consumer and community benefits of DSO functions	It is our desire to provide strong value to consumers with a coordinated, efficient, and cost-effective DSO operating plan.
Interaction and working together with other DSOs and ESO. Feeding into the bigger picture of reducing the overall system operation cost.	It is SSEN's view that we should ensure that our roles and responsibilities develop in coordination with the ESO's. We have been engaging with the ESO and other DNOs to ensure alignment and efficiency and will continue to do so in RIIO-ED2.
DNOs don't exist in isolation. You have a key role in delivering Net zero, for example, but it's not "within your control". I think the framework needs to recognise the wider role of DSO	The scope of our DSO strategy includes a vision to make best use of our electricity networks, data and emerging technology to facilitate Net zero.

Net zero will require collaboration with many other DSO's and this needs to be clear and measured.	We plan to continue our engagement and collaboration with other DNOs and with the ENA's Open Networks project in RIIO-ED2.
Many of the SSEN 'additional principles' appear to already be Ofgem requirements, even if not framed as a principle by Ofgem	While there may be overlap in certain areas, we see value in identifying and adhering to our additional principles.
Improving and enhancing the connectivity for community renewable energy installations.	Our approach of focusing on the customer journey should enable us to identify areas where enhancements to the connections process can be made.
Evidencing that stakeholders are happy you are dealing with real and perceived conflicts of interest	We agree this is important. This type of information could be gathered in a qualitative stakeholder feedback survey as part of a DSO performance measure.
Data quality and availability	We agree that data is an important aspect of DSO and this was presented to stakeholders as a potential metric area for consideration.

Table 4 Stakeholder feedback on principles framework for metric development with our responses.

In their feedback regarding our principle's framework, our stakeholders stressed the importance of considering the broader effects that our actions in this area can have. We shared their opinion that DSO performance measures and our wider DSO Strategy should have the aim of achieving overall system benefits, including progress to Net zero and positive outcomes for consumers, and we believe this is reflected in our strategy.

Feedback on our DSO Customer Journey

In our DSO Metrics stakeholder event, stakeholders were polled and asked to what extent they agreed that our DSO customer journey (Figure 5) was reflective of their journey, priorities and what they need from SSEN at these stages. The results of the poll are below, with 12% Strongly Agreeing and 48% Agreeing that the journey we presented was reflective of their own. This indicated to us that we could proceed to design metrics based on the customer journey with confidence that this will allow us to illustrate how we are delivering good service to our customers.

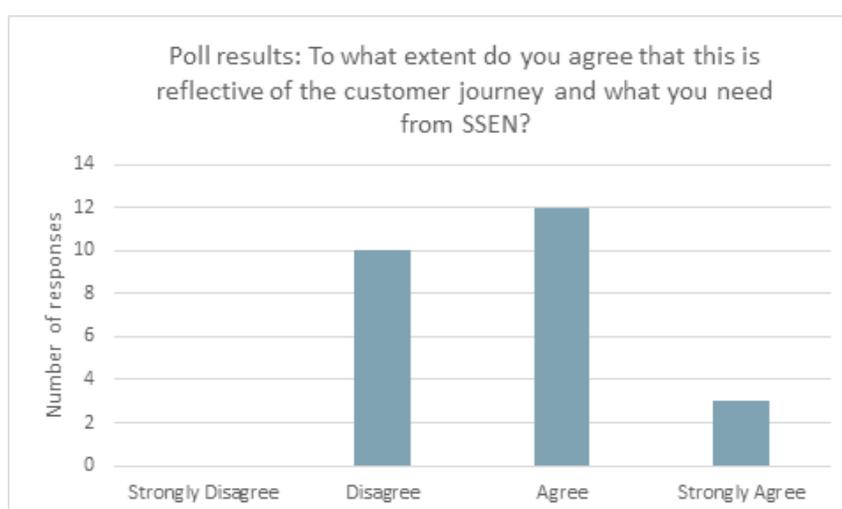


Figure 5 Delegate responses to the question 'To what extent do you agree that this is reflective of the customer journey and what you need from SSEN?' at the SSEN DSO Metrics Webinar on 12 March 2021.

Long list metric testing

We presented a list of eight potential metric areas to our stakeholders (Table 3) and asked them to vote on those which were their priority. The eight metric areas were the product of our work internally and with the ENA, keeping in mind how these could be mapped onto the customer journey. The potential metric areas presented to our stakeholders along with their description are below (Table 5). We asked our stakeholders to select the three metric areas they considered to be most valuable and to provide feedback on any metric areas they thought we had missed and should consider.

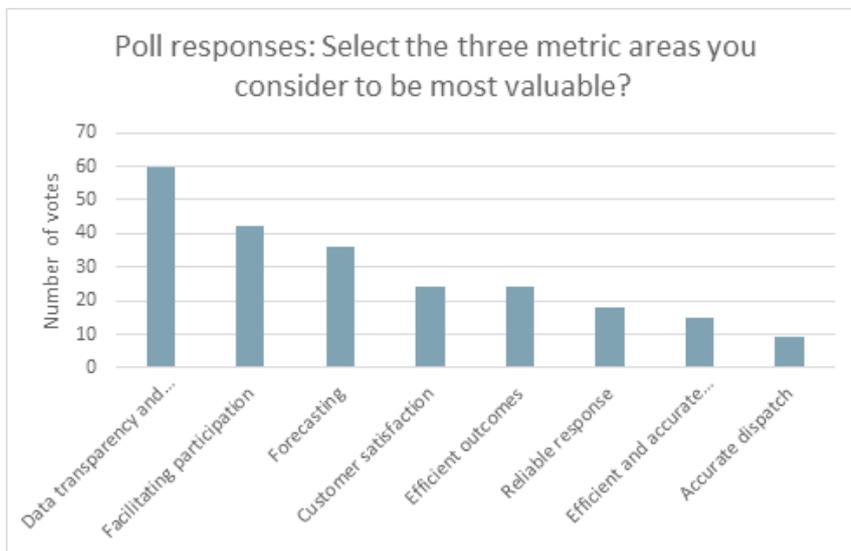


Figure 6 Delegate responses to 'Select the three metric areas you consider to be most value' during SSEN DSO Metrics Webinar on 12 March 2021.



Figure 7 Delegate responses regarding additional metric areas to consider collected during the SSEN DSO Metrics webinar on 12 March 2021

Calibration and metric shortlisting

Based on stakeholders' feedback we shortlisted three performance metrics to include in our draft RIIO-ED2 plan. These three metrics were stakeholder's top priority in our testing and had higher scores relative to the other metrics on our long list.

We decided not to take forward the other suggested metrics proposed by our stakeholders at the draft plan stage. Some of the suggestions did not relate specifically to the DSO roles while others are better captured as specific measurement points within one of our three chosen metrics rather than as standalone metrics. You can see in the main body of the annex how we have iterated on this feedback to produce our final metrics and incentive proposal.

Metric	Description
Metric 1. Data transparency and accuracy	This metric will evaluate our performance in publishing timely, accurate and accessible DSO data.
Metric 2: Facilitating participation	This metric will measure our success facilitating participation in the flexibility markets we operate.
Metric 3: Forecasting provision improvement	This metric will enable stakeholders to measure our improvement in providing forecast information about the flexibility markets we operate.

Table 5: SSEN DSO performance metrics

We have mapped each of these metrics to the three DSO roles in the below table. Collectively we consider that our three proposed performance metrics cover the three DSO roles our stakeholders expect us to perform in RIIO-ED2. Further, we below map our three selected performance metrics to the metrics developed by the ENA and Ofgem working group. This shows our three-performance metrics have broad coverage of the six metrics being developed through that working group. We would also reiterate that the Business Plan Guidance does not require DNOs to all propose the same performance metrics reflecting that DNOs are transitioning to DSO at different paces.

DSO Role	Metric 1	Metric 2	Metric 3
Planning and network development	✓		✓
Network operation	✓		
Market development	✓	✓	✓

Table 6 Mapping our three DSO performance metrics to the three DSO roles

Iterating with wider industry

Alongside the internal development of our proposed DSO performance metrics, we have been contributing to a separate, prototypical set of metrics within the Ofgem and ENA working group, which is a sub-group of the Overarching Working Group. Upon providing feedback on the long list of metric areas the DNOs had proposed, Ofgem assigned the DNOs a short list of six metrics to develop. The high-level description of these six metrics is listed in Table 7 along with commentary on how our proposals metrics compare to them. Given this is the first time DSO performance measures will be included in business plans, this exercise has given the DNOs the opportunity to better understand how DSO metrics could be developed and has helped to inform our thinking.

Table 7 presents a side by side comparison of the six Ofgem and ENA working group metrics and our three-performance metrics. We would reiterate two points from our understanding of Ofgem’s April Business Plan Guidance, described in

Section 2, that there is no requirement for DNOs to propose the same performance metrics and that performance metrics can be defined at different levels.

Ofgem and ENA working group metrics	SSEN performance metrics
<p><i>Ofgem ENA Metric 1: Forecasting</i></p> <p>Encourage continual improvement of network capacity forecasting accuracy by refining input processes, data gathering and analytics.</p> <p>Evidence and visibility of increasing accuracy in forecasts could give customers confidence in decision-making.</p>	<p>SSEN Metric 3 is designed to improve our provision of forecast information across frequency and scale dimensions (Q.3.1 and Q.3.2).</p>
<p><i>Ofgem ENA Metric 2: Network asset data quality</i></p> <p>Sharing accurate network data can provide market participants with confidence in participating in a flexibility market, understanding where they can connect to the network and make investment decisions.</p>	<p>SSEN Metric 1 has measurement points relating to publication of network asset data (Q.1.1, Q.1.2, Q.1.3, TA.1.5, Q.1.4, Q.1.5). The Metric 1 stakeholder survey (NQ.1.1) could be used to measure the accuracy and quality of network data and encourage continual improvement</p>
<p><i>Ofgem ENA Metric 3: Decision making framework for DER dispatch</i></p> <p>Encouraging the operation of a decision-making framework for dispatching DER in real-time will promote overall system security, resilience, coordination and maximise liquidity.</p>	<p>SSEN Metric 2 measurement point (Q.2.3) relates to publishing data regarding our performance in dispatching of flexibility markets. Metric 2 could include publication of self-derogations and deviations from the framework and the stakeholder survey can provide evidence of continual improvement.</p>
<p><i>Ofgem ENA Metric 4: Network Coordination between ESO and DSOs</i></p> <p>Coordinating network operations and sharing of operational data can deliver whole system efficiency savings and benefits. Engaging with the ESO can encourage transparency in network operation.</p>	<p>SSEN Metric 1 measurement point (Q.1.2) relates to the information given to the ESO about the DER we are planning to dispatch. Q.1.1 relates to publishing network constraint information more broadly. We agree there is value in coordination, but we think this metric requires a corresponding metric applicable for the ESO.</p>
<p><i>Ofgem ENA Metric 5: Flexibility Market Volume and Value</i></p> <p>Encourage use of flexibility services to support active management of the network and ensure security of supply, resilience and cost-effectiveness.</p>	<p>SSEN Metric 2 contains target actions measurement points that cover this type of information (TA.2.2). It is SSEN's view that this type of information could be beneficial for the market, although any processes that feed into the data need to be robust and transparent.</p>

Ofgem ENA Metric 6: Efficient, user-friendly and accurate processes, contracting and procurement

Ensure access by a wide range of participants to the flexibility market. Offer visibility of products at tender stage, user-friendly procurement and ensure participants have the ability to stack benefits across markets.

SSEN Metric 2 stakeholder survey (NQ.2.1) measures participants' view on our processes and customer experience from different stages and touchpoints from our customer journey, including enrolment, contracting and procurement.

Table 7 Mapping our three DSO performance metrics to the Ofgem Working Group Metrics

OUR THREE PROPOSED DSO PERFORMANCE MEASURES

Our draft RIIO-ED2 plan

This section sets out high-level design of three draft plan DSO performance metrics that will enable stakeholders and Ofgem to evaluate our progress delivering our DSO Strategy throughout RIIO-ED2.

- **Metric 1: Data Accuracy, Accessibility and Timeliness:** this metric will evaluate our performance in publishing timely, accurate and accessible DSO data.
- **Metric 2: Facilitating Participation:** this metric will measure our success facilitating participation in the flexibility markets we operate.
- **Metric 3: Forecasting Provision Improvement:** this metric will enable stakeholders to measure our improvement in providing forecast information about the flexibility markets we operate.

Why we chose high-level design in our draft RIIO-ED2 plan

We opted to set out the high-level design of our three DSO performance metrics in our draft RIIO-ED2 plan for two reasons:

1. SSEN worked collaboratively and iteratively with Ofgem, the ENA and other DNOs to develop and understand how metrics will be used to evaluate DSO performance in RIIO-ED2. This process was incredibly useful and brought to life numerous challenges and potential solutions to underpin the choice and design of performance metrics. This process is ongoing, and it is possible that Ofgem issues further guidance to the Business Plan Guidance issued in April 2021 that DNOs would need to follow. If this was to happen, SSEN and other DNOs would likely need to change their proposed metrics, and these changes could be material²⁷.
2. SSEN worked with our stakeholders to understand their needs and priorities and incorporate these into selected metrics. This stakeholder driven approach is a key facet of our draft RIIO-ED2 plan. If the Business Plan Guidance from Ofgem meant we had to materially change our proposed three metrics, the high-level design makes it easier for us to explain this to our stakeholders.

Within this context we believe it was prudent to develop the high-level design of our chosen metrics for our draft RIIO-ED2 plan. We consider the high-level design provides enough detail for stakeholders and Ofgem to understand and comment on our proposed performance metrics while also demonstrating how we met Ofgem's minimum requirements and several baseline expectations. This also minimises the likelihood of confusing our stakeholders, which is particularly important to us.

DSO performance metric high-level design

In the remainder of this Appendix, we present the high-level design of our three draft plan DSO performance metrics, which includes:

- setting out the context, purpose and consumer value underpinning the choice of each metric
- describing the methodology to select each measurement point for each metric
- specifying the high-level design of each metric
- explaining which baseline expectation each metric satisfies
- assessing each metric against Ofgem's criteria and SSEN's principles.

²⁷ This in fact did occur, with new guidance issued in October 2021 by Ofgem

METRIC 1: DATA ACCURACY, ACCESSIBILITY AND TIMELINESS

This metric will evaluate our performance in publishing timely, accurate and accessible DSO data.

Context

In RIIO-ED2, DNOs will need to provide timely and accurate DSO information. This information covers all three DSO roles; network planning, network operation and market development and needs to be readily accessible to stakeholders and customers alike. Making this data available will be fundamental in adapting to the increasingly complex electricity system and in facilitating new markets. To do this will require investment to scale up and create new capabilities and IT/OT to deliver this in RIIO-ED2.

Purpose

This metric will allow us to ensure that the data we publish provides stakeholders with the information they need to find revenue opportunities, make informed bids and offers, and trust the information being shared. It will encourage improvement of the accuracy, timeliness and accessibility of information we share across the three DSO roles via a combination of quantitative and qualitative measures. The metric will indicate where improvements to the data we publish can be made thereby improving customers' experience of network planning, network operation, connecting and participating in flexibility services markets.

Consumer Value

As the electricity system becomes increasingly complex, we will strive to provide information that gives customers a clear understanding of our long-term network planning, how the network will operate in RIIO-ED2 and how markets for DSO services will function. Access to this information will give potential and existing market participants confidence in our activities and in their ability to plan efficiently, connect to the network, participate in the market and make well-informed decisions. This confidence will drive increased participation and competition in the market, resulting in lower costs for consumers.

Methodology

To measure our success in publishing timely, accurate and accessible data, we selected a range of measurement points covering various DSO relevant data items from all three DSO roles. This metric allows stakeholders to track that we have published this DSO relevant data on time. Through the annual stakeholder survey, we will ask stakeholders' views on the timeliness and accessibility of the information we publish. We will also establish a continuous improvement process to use this feedback to improve the timeliness, accuracy and accessibility of the data we publish.

The combination of quantifiable, target action and qualitative measurement points complement one another. The quantifiable and target action measurement points provide the basis from which the qualitative feedback will be sought from stakeholders. The qualitative feedback across the measurement points can then be used to produce a single performance score, for example a balanced score card type basis. Our performance can then be measured through year on year change in that score card. Similarly, quantifiable measurement points can be measured by the year on year change on our performance against the benchmark we set.

High-level design

This table sets out the high-level design of our first proposed DSO performance metric, relating to the provision of timely, accessible, and accurate data. The high-level design includes:

- A list of measurement points and their naming convention. The measurement points are classified as follows:
 - Quantifiable
 - These are measurement points for which we can measure performance against a benchmark.
 - Not Quantifiable
 - Target action: these measurement points represent binary actions that we do not think are appropriate to attribute individual performance benchmarks to them.
 - Qualitative: Non-binary measurement points which are not measured against a benchmark e.g. a stakeholder survey
- We use the following naming convention for the measurement points:
 - Q.1.x [Quantifiable].[Metric 1].[Measurement point number]
 - TA.1.x [Target action].[Metric 1].[Measurement point number]
 - NQ.1.x [Not Quantifiable].[Metric 1].[Measurement point number]
- A description of each measurement point and why we have chosen it.
- The applicable DSO role, SSEN customer journey stage or touchpoint and baseline expectation that measurement point relates to.
- A description of the deliverable associated with each measurement point, our intended frequency of publishing that deliverable and whether this will be a Business as Usual (BAU) activity at the end of RIIO-ED1; and
- A description of the evidence we will provide to stakeholders and Ofgem that we have met and or exceeded this expectation. We have described if we think it is plausible to develop a performance benchmark and what that could consist of. As mentioned above, we have not set any applicable performance benchmark or incentive as part of the high-level design. This will form part of the detailed design in our final RIIO-ED2 plan.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverable	Performance Benchmark - Evidence of meets or exceeds expectations
	<i>A description of the measuring point.</i>	<i>Three categories Network Planning, Network Operation and Market Development</i>	<i>Relate to SSEN customer journey stages</i>	<i>How frequently will the measuring point be measured/ evidenced</i>	<i>This picks up the “As-Is” field – is this BAU by the end of RIIO-ED1?</i>	<i>Numerical reference to the baseline expectations defined within the business plan guidance e.g. 2.1.2</i>	<i>How will the measuring point be evidenced</i>	<i>A description of the measuring point to be delivered to achieve a meet and/or exceeds performance rating.</i>
NQ.1.1	Through and annual survey we will seek stakeholder’s views on the accessibility and timeliness of SSEN DSO data	Network Planning, Network Operation and Market Development	Discovery, Enrolment, Auction / Market, Off-Boarding	Annual	No	3.1.2 3.1.3	SSEN conducts its annual stakeholder survey SSEN publishes its annual stakeholder report	This is not a quantifiable measurement point. In our December business plan submission, we will evaluate the merit in developing a score based on stakeholder feedback of the accessibility, accuracy and timeliness of our DSO data. This could then form the basis of how we meet and potentially exceed expectations.
TA.1.1	Distribution Future Energy Scenarios (DFES) can help potential and existing network users to plan investments and can help local governments plan for decarbonisation	Network Planning	Discovery	Annual	Yes	1.1.2	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.
TA.1.2	Network capacity map – can help network users identify where to connect, inform their investment and operations	Network Planning	Discovery	TBD	Yes	1.1.2	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.
TA.1.3	Generation Availability Map - can help network users identify where to connect, inform their investment and operations	Network Planning	Discovery	TBD	Yes	1.1.2	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.
TA.1.4	Long Term Development Statement (LTDS) – can assist existing and prospective network users assess opportunities for new connections or additional use of the distribution system	Network Planning	Discovery	TBD	Yes	1.1.2	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverable	Performance Benchmark - Evidence of meets or exceeds expectations
Q.1.1	Data on operability constraints – publication of this data can help avoid conflicting actions being taken by other network and system operators	Network Operation	Connection	TBD	Yes, but data not currently published	2.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the timeliness of publication. For example, we could define an appropriate frequency at which the data should be updated. Performance benchmarks for ‘meets’ and ‘exceeds’ expectations can be drawn from the service standard.
Q.1.2	Information about DER the DNO is planning to dispatch – this can help the ESO identify which DER are available for its own needs and improve the ability for DER to stack across markets	Network Operation	Auction / Market, Dispatch / Execution	Weekly	No	2.1.2	The DNO will communicate this information with the ESO via an API	This measurement point is quantifiable. For final BP submission, we could develop service standard for this data set regarding the timeliness of the data shared. For example, a service standard around occurrence of data shared beyond the deadline. Performance benchmarks for ‘meets’ and ‘exceeds’ expectations of timeliness can be drawn from the service standard.
Q.1.3	Working network configuration data – this can support network relevant stakeholders make better decisions about how to use the network	Network Operation	Discovery, Connection	TBD	Yes, but data not currently published	2.1.4	This data to be published/made available once the flexibility market is sufficiently mature for this information to be helpful	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the timeliness of data shared. For example, we could define a minimum number of updates required for the data throughout a one-year period. Performance benchmarks for meeting and exceeding the target number of updates could be drawn from the service standard.
TA.1.5	Losses recorded at substation level	Network Operation	Discovery, Connection	Annual	No	2.1.4	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverable	Performance Benchmark - Evidence of meets or exceeds expectations
Q.1.4	Data on planned and unplanned outages	Network Operation	Discovery, Connection	Possibly daily, if IT solution can enable	Unplanned outages – Yes Planned Outages - No	2.1.4	Publication of this data in RIIO-ED2 would require an IT solution	This measurement point is quantifiable. If the IT solution required for this function is enabled, we could develop a service standard to apply to this performance measure for our final BP submission. For example, if the IT solution allows for daily updates, we could define a benchmark from the minimum number of days we must publish on time to establish we are meeting the expectation.
TA.1.6	Historic feeder MW/MVA utilisation and calculated foot room/headroom	Network Operation	Discovery, Connection	Annual	No	2.1.4	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.
Q.1.5	Utilisation and curtailment of areas under the control of capacity management systems	Network Operation	Discovery, Connection	TBD	No	2.1.4	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the frequency and timeliness of publication. For example, we could define an appropriate frequency at which the data should be updated. Performance benchmarks for 'meets' and 'exceeds' expectations can be drawn from the service standard based on how many instances out of the required standard the data is updated on time.
TA.1.7	Data relevant to secondary trades – this data is linked to working network configuration data. The data associated with baseline expectation 2.1.4 is the data relevant to secondary trades.	Network Operation	Discovery, Connection	TBD	No	2.2.2	The data relevant to secondary trades to be published on SSEN website	As the data relevant to secondary trades is encompassed in measurement points D.1.7 through D.1.11, we do not envisage a separate measurement applying to data set D.1.12.
TA.1.8	Tender results – this data can help market participants identify and value opportunities to provide network services to DNOs	Market development	Discovery, Enrolment, Auction / Market	Twice per year	Yes	3.1.1	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverable	Performance Benchmark - Evidence of meets or exceeds expectations
TA.1.9	Publish prices bid and paid for flexibility services - this data can help market participants identify and value opportunities to provide network services to DNOs	Market Development	Discovery, Enrolment, Auction / Market	Twice per year	No	3.1.1	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.
Q.1.6	How often DER is dispatched (and volumes) - this data can help market participants identify and value opportunities to provide network services to DNOs	Market Development	Auction / Market	TBD	Yes, but data not currently published	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard to apply to this performance metric. We will determine a suitable number of days to publish this once a settlement period is complete. Performance benchmarks for 'meets' and 'exceeds' expectations of timeliness can be drawn from the service standard.
Q.1.7	Curtailment as part of non-firm connection agreements - this data can help market participants identify and value opportunities to provide network services to DNOs	Market Development	Connection	TBD	Yes, but data not currently published	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard to apply to this performance metric. For example, we could determine an appropriate frequency at which to update/publish this data. Performance benchmarks for 'meets' and 'exceeds' expectations of timeliness can be drawn from the service standard.
TA.1.10	Carbon content of aggregated units - this data can help market participants identify and value opportunities to provide network services to DNOs	Market Development	Discovery	Annual	No	3.1.1	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action.

Table 8 Metric 1 high-level design

Relevance to Baseline Expectations

The below table indicates the baseline expectations for which Metric 1 can be used to evidence performance and the corresponding Metric 1 measurement point. While we understand that a metric is not required for each baseline expectation, our DSO Strategy describes how we meet the DSO minimum requirements in RIIO-ED2.

Ofgem's Baseline Expectation	Metric 1 measurement point relevant to the baseline expectation	How Metric 1 meets Ofgem's Baseline Expectations
1.1.2 DNOs to have in place standard and effective processes for sharing network planning information with other network licensees, including the ESO, network users and other interested parties, for example to enable innovation and support the development of local government plans for decarbonisation.	TA.1.2, TA.1.3, TA.1.4	The quantitative measure will demonstrate where this data is published and published on time. The Stakeholder survey can indicate areas for overall improvement, including improvements to accessibility.
2.1.1 DNOs to improve network visibility and identification and sharing of operability constraints, including publishing this data to help avoid conflicting actions being taken by other network and system operators. DNOs must take reasonable steps to access and subsequently share, including by publishing, data and operability constraint information in a timely manner.	Q.1.1	The quantitative measure will demonstrate where this data is published and published on time. The Stakeholder survey can indicate areas for improvement.
2.1.2 DNOs to provide the ESO with information across timescales about the DER it is planning to instruct to dispatch. Data should include contracted parties, availability and information on scheduled and unscheduled utilisation. Sharing this information in a timely manner should enable the ESO to identify which DER are available for its own needs and improve the ability of DER to stack value across markets	Q.1.2	Metric 1 (measurement point D.1.6) requires the DNO to communicate with the ESO via API what DER it is planning to dispatch.
2.1.4 DNOs to make available operational data that supports network users and other relevant stakeholders to make better decisions about how to use the network.	Q.1.3, TA.1.5, Q.1.4, TA.1.6, Q.1.5	The quantitative measure will demonstrate where this data is published and published on time. Where applicable, service standards will encourage improvement in timely sharing of information. The stakeholder survey can indicate additional areas for improvement.
3.1.1 DNOs collate and publish as much relevant data and information as reasonable that will help market participants identify and value opportunities to provide network services to DNOs and take market actions that support efficient whole system outcomes.	TA.1.8, TA.1.9, Q.1.6, Q.1.7, TA.1.10	The quantitative measure will demonstrate where this data is published and published on time. Where applicable, service standards will encourage improvement in timely sharing of information. The stakeholder survey can indicate areas for improvement.
3.1.2 DNOs should, with stakeholder input, develop robust strategies for how they will collate and publish more helpful information, wherever possible consistently and in coordination with other network licence holders, and communicate this clearly.	NQ.1.1	The stakeholder survey will indicate where improvements to information shared by the DNO can be made. The feedback will be published within the annual stakeholder report.

Ofgem's Baseline Expectation	Metric 1 measurement point relevant to the baseline expectation	How Metric 1 meets Ofgem's Baseline Expectations
3.1.3 DNOs should regularly and actively engage with market participants to understand what data and information is helpful to support market development. While there will be minimum legal requirements set out in licences, we expect DNOs to use their stakeholder engagement to consider the most effective format and frequency of publishing that data to ensure it is user-friendly. The information must be easily accessible and navigable. We expect this includes publishing data in machine-readable formats.	NQ.1.1	The stakeholder survey will indicate where improvements to information shared by the DNO can be made. The feedback will be published within the annual stakeholder report.
3.1.5 DNOs should seek to ensure the information they publish is as accurate and unbiased as reasonable (ie correct at time of publication, as close as possible to the actual value and not skewed in any direction).	NQ.1.1	The stakeholder survey will indicate where improvements to information shared by the DNO can be improved.

Table 9 Metric 1 mapped to Ofgem's Baseline Expectations

Assessment against Ofgem criteria and SSEN principles for metric creation

It was important to us to adhere to the principle’s framework for metric creation, especially given that **85%** of our stakeholders agreed with the merits of this framework. We also learned via the Ofgem working group the significance of ensuring that any proposed metric meet the criteria set out by Ofgem. In the following tables, we describe how Metric 1 meets both Ofgem and SSEN criteria for metric design.

Relevance	Outcome focused	Robustness & transparency	Appropriateness	Verifiability	Attributable	Proportioned
The measure is linked with long-term objectives to make the best use of our electricity networks, data and emerging technology.	Providing stakeholders with accurate, accessible, and timely information will facilitate efficient use of the network and confidence in the market for DSO flexibility services.	Including both stakeholder views on the DSO information we share, and the possibility of service standards can provide a robust assessment of our performance in this area.	A mix of quantifiable and non-quantifiable measures to assess the delivery of the metric best suits the area of performance as a historical benchmark cannot be identified.	There are no historical measurements in this area however, over time we will be able to use stakeholder engagement and reporting of performance of service standards to evidence improvements in performance.	The area of performance is within our control, but the extent at which we can cost-effectively produce and publish DSO data may have dependencies on the growth and maturity of the market for DSO flexibility services.	For those data fields which are not currently published in BaU in RIIO-ED1, further investigation ahead of the final BP submission is required to determine whether the costs of producing the data and enabling IT solutions for sharing the data are proportionate to the customer benefits.

Table 10 Metric 1 mapped to Ofgem’s criteria

Conflict with desire to be NMF?	Does the metric evaluate things within our control?	Have stakeholders given feedback on the metric?	Does it facilitate and enhance the customer journey?	Does it map to DSO Roles or Activities?	Does it promote whole system outcomes?
No. The provision of DSO data to stakeholders does not conflict with our desire to be a Neutral Facilitator of the markets we operate.	We will investigate and address this ahead of the detailed design for the December submission.	Yes. The metric areas we are developing were selected based on stakeholder input. We anticipate that ahead of the final BP submission, we will consult stakeholders again regarding the more detailed design and benchmarks for the metrics.	Yes. Providing data that our stakeholders can trust and have confidence in using will enhance the customer journey and facilitate entry into the market. Stakeholder feedback will highlight where improvements to published data can be made.	Yes. This metric maps to all three DSO roles and to multiple baseline expectations.	Yes. Making the relevant data available will enable coordination across parties and facilitate efficient use of the network and confidence in the market for DSO flexibility services.

Table 11 Metric 1 mapped to SSEN’s principles

METRIC 2: FACILITATING PARTICIPATION

This metric will measure our success facilitating participation in the flexibility markets we operate.

Context

In RIIO-ED1 our 'Flexibility First' approach has brought significant benefits to network customers by deferring reinforcement, but we also utilise it to support planned maintenance works and ease post fault management or restoration activities, whilst maintaining a safe and reliable network. In RIIO-ED2 we will remain committed to a 'Flexibility First' approach and this forms a core principle of the DSO Operating Plan.

The use of flexibility services and flexible connections will play a major role in our DSO Strategy, delivering exceptional customer service and a continued growth in benefits. In RIIO-ED2 we plan to secure flexibility services across all our voltages including the Low Voltage (LV) network. We intend to secure flexibility for every constrained LV substation. In addition, we plan to grow our flexible connections to 3733MW of capacity across 35 zones helping customers avoid £417.6m of reinforcement cost and offsetting 1.8mtCO₂. To achieve this ambition, it must be easy and effortless for stakeholders to discover, connect and enrol their assets and participate in the flexibility markets we operate.

Purpose

This metric is designed to evaluate our performance facilitating participation in flexibility services and flexible connections through various stages and touchpoints we have with market participants throughout the DSO customer journey. Through a stakeholder survey we will gather feedback on our market participants experience through various stages and touchpoints. This feedback will help us to continually improve our performance. By publishing data on various facets of the customer journey we can demonstrate the volume of work we have undertaken to facilitate participation.

Consumer Value

We expect the number of Constraint Management Zones, flexibility services required in those CMZs and flexible connections to increase during RIIO-ED2. By utilising flexibility services and flexible connections benefits to network customers by deferring or avoiding reinforcement, but we also utilise it to support planned maintenance works and ease post fault management or restoration activities. In RIIO-ED1 we delivered £60m of benefits by using 'Flexibility First'.

Methodology

We will employ both qualitative and quantitative approaches as part of this performance metric. To measure our success in facilitating participation in the flexibility markets we operate and the flexible connections we selected a range of measurement points covering different stages and touchpoints in our DSO customer journey. We will seek feedback from participants who completed those stages or touchpoints. This feedback will identify our performance in each stage or touchpoint. We would then measure how our performance improves over time and publish an annual stakeholder report on our DSO performance. This could be through individual service standards or collectively via a customer satisfaction score or balanced scorecard. We will develop this in the detailed design as part of our final RIIO-ED2 plan, including any applicable performance benchmarks and incentives attached to them it is appropriate to do so. We will also use this feedback to improve our customer experience by updating and augmenting our processes, procedures and supporting systems.

We will also report the volume of market participant enrolments, connection applications, market actions and inquiries and other data points from the various stages and touchpoints of our customer journey. This compliments the feedback from stakeholders.

The combination of quantifiable, target action and qualitative measurement points complement one another. The quantifiable and target action measurement points provide the basis from which the qualitative feedback will be sought from stakeholders. The qualitative feedback across the measurement points can then be used to produce a single performance score, for example a balanced score card type basis. Our performance can then be measured through year on year change in that score card. Similarly, quantifiable measurement points can be measured by the year on year change on our performance against the benchmark we set.

High-level design

This table sets out the high-level design of our second proposed DSO performance metric, relating to facilitating participation. The high-level design includes:

- A list of measurement points and their naming convention. The measurement points are classified as follows:
 - Quantifiable
 - These are measurement points for which we can measure performance against a benchmark.
 - Not Quantifiable
 - Target action: these measurement points represent binary actions that we do not think are appropriate to attribute individual performance benchmarks to them.
 - Qualitative: Non-binary measurement points which are not measured against a benchmark e.g. a stakeholder survey
- We use the following naming convention for the measurement points:
 - Q.2.x [Quantifiable].[Metric 2].[Measurement point number]
 - TA.2.x [Target action].[Metric 2].[Measurement point number]
 - NQ.2.x [Not Quantifiable].[Metric 2].[Measurement point number]
- A description of each measurement point and why we have chosen it.
- The applicable DSO role, SSEN customer journey stage or touchpoint and baseline expectation that measurement point relates to.
- A description of the deliverable associated with each measurement point, our intended frequency of publishing that deliverable and whether this will be a BAU activity at the end of RIIO-ED1; and
- A description of the evidence we will provide to stakeholders and Ofgem that we have met and or exceeded this expectation. We have described if we think it is plausible to develop a performance benchmark and what that could consist of. As mentioned above, we have not set any applicable performance benchmark or incentive as part of the high-level design. This will form part of the detailed design in our final RIIO-ED2 plan.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverables	Evidence for meets and/or exceeds expectation
	<i>A description of the measuring point to be delivered to achieve a meets performance rating.</i>	<i>Three categories for SSEN: Network Planning, Network Operation and Market Development</i>	<i>Relate to SSEN customer journey stages</i>	<i>How frequently will the measuring point be measured/ evidenced</i>	<i>This picks up the “As-Is” field – is this BAU by the end of RIIO-ED1?</i>	<i>Numerical reference to the baseline expectations defined within the business plan guidance e.g. 2.1.2</i>	<i>How will the measuring point be evidenced</i>	<i>A description of the measuring point to be delivered to achieve an exceeds performance rating.</i>
NQ.2.1	Through an annual survey we will seek stakeholder’s views on their experience through various stages and touchpoints of our DSO customer journey. We will use this feedback to improve our processes and procedures.	Market Development	Discovery, Enrolment, Auction / Market, Off-Boarding	Annual	No	3.1.2 3.1.3	SSEN conducts annual stakeholder survey SSEN publishes annual stakeholder report	In our December business plan submission, we will evaluate the merit in developing a baseline customer satisfaction score. This could then form the basis of how we meet and potentially exceed expectations.
TA.2.1	Publish headline information on the number of participants who have completed the registration, testing and change in technical capability procedures.	Market Development	Enrolment	Quarterly	No	3.1.1	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action. We will capture stakeholder’s views on their experience going through this process as part of metric NQ.2.1.
Q.2.1	Publish headline information on the number of participants who have completed the flexible connections customer journey stage.	Market Development	Connections	Quarterly	Yes	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop service standard for this data set regarding the timeliness of publication. Develop a service standard that could apply to either the time to quote and or the time to connect. The number of days will be the service standard.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverables	Evidence for meets and/or exceeds expectation
TA.2.2	Publish anonymised and sanitised market trading and secondary trading data from our flexibility markets. This could include flexibility services offered and in which Constraint Management Zones (CMZ), products offered, contract types and lengths, flexibility contracted (signed, MWh contracted), trade volumes (trades, MWh traded) and prices.	Market Development	Auction / Market	Quarterly	No	3.1.1	Publish data on SSEN website	This is not a quantifiable measurement point. It is fulfilled via the targeted action. We will capture stakeholder's views on their experience going through this process as part of metric NQ.2.1.
Q.2.2	Publish our performance in clearing the flexibility markets that we operate	Market Development	Auction / Market	Quarterly	No	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the timeliness of publication. Develop a service standard that could apply to either the number and or percentage of settlement periods cleared within certain number of minutes. The number of minutes will be the service standard.
Q.2.3	Publish our performance in dispatching the flexibility markets we operate	Market Development	Auction / Market	Quarterly	No	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the timeliness of publication. Develop a service standard that could apply to either the number and or percentage of curtailments and or derogations taken.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverables	Evidence for meets and/or exceeds expectation
Q.2.4	Publish our performance in settling the flexibility markets that we operate	Market Development	Auction / Market	Quarterly	No	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the timeliness of publication. Develop a service standard that could apply to either the number and or percentage of settlement periods settled within a certain number of days. The number of days will be the service standard. The service standard could also include the number and or percentage of error corrections made. The number of corrections made will be the service standard.
Q.2.5	Publish the number of inquiries (including complaints) received from enrolled market participants and our performance resolving those inquiries.	Market Development	Auction / Market	Quarterly	No	3.1.1	Publish data on SSEN website	This measurement point is quantifiable. For final BP submission, we could develop a service standard for this data set regarding the timeliness of publication. Develop a service standard that could apply to either the number and or percentage of inquiries resolved within a certain number of days. The number of days will be the service standard.

Table 12 Metric 2 high-level design

Relevance to Baseline Expectations

The below table indicates the baseline expectations for which metric 2 can be used to evidence performance and the corresponding Metric 2 measurement point. While we understand that a metric is not required for each baseline expectation, our DSO Strategy describes how we meet the DSO minimum requirements in RIIO-ED2.

Ofgem’s Baseline Expectation	Metric	How Metric 2 meets Ofgem’s the Baseline Expectations
<p>3.2.1 DNOs to have clear processes in place for developing and amending distribution flexibility services products, contracts, and qualification criteria, that are, wherever possible, standardised. The processes should be transparent and participatory, involving other DNOs, the ESO, and current and potential distribution flexibility service providers. DNOs should also coordinate and engage with third party platform providers, who can offer system value by providing new routes to market and driving whole system outcomes. DNOs should not prevent the emergence of this sector and should enable third party platforms to ‘plug-in’ to DNOs’ flexibility procurement processes. Products and contracts should be adaptive to reflect prevailing system needs, type, and availability of flexible resources. The objective of these processes is to enable as wide participation in distribution flexibility services markets as possible.</p>	<p>NQ.2.1</p>	<p>Through an annual survey we will seek stakeholder’s views on their experience through the Discovery, Enrolment, Auction / Market and Off-Boarding stages of our DSO customer journey. We will use this Stakeholder feedback to improve our processes and procedures.</p>
<p>3.2.2 DNOs should identify the optimum combination of longer- and shorter-term lengths of markets and contract lengths reflecting the network need. Needs should be neutrally defined, to allow for a range of flexibility providers to participate. This will help improve market liquidity and the opportunities for innovation and dynamic competition. Individual decisions and frameworks for deciding market timeframes and contract lengths should be transparent, informed by stakeholders and justified as being the most economic and efficient solution. Notwithstanding, deviations from the standard should be justified with clear governance processes for managing change that should be clearly communicated. DNOs should have clear, comprehensive, and transparent mechanisms and associated commercial structures for coordinating distribution flexibility services and ESO flexibility services procurement. DNOs shall not act as the commercial route for DER accessing ESO flexibility services. Transparent (and possibly tripartite) commercial agreements may be required to reflect the potential effects of DER dispatch on distribution system operability and the role of DNOs in setting dispatch parameters (as set out in Activity 2.1 and 2.2). These agreements should remove exclusivity clauses as far as possible, including with regard to non-firm connections. Coordination on dispatch parameters should enable a closer to real-time understanding of what DER needs to be armed and available for a particular service, and what can be available to provide other services. DNOs should consider arrangements to support DERs to provide services that meet both DNO and ESO needs.</p>	<p>TA.2.1, TA.2.2, Q.2.3, NQ.2.1</p>	<p>The quantitative measures will demonstrate the number of participants enrolling and participating in the flexibility markets we operate. Publishing anonymised trading data will inform participants and stakeholders of our performance procuring and dispatching the flexibility markets we operate. Through an annual survey we will seek stakeholder’s views on their experience through the Discovery, Enrolment, Auction / Market and Off-Boarding stages of our DSO customer journey. We will use this Stakeholder feedback to improve our processes and procedures.</p>

Table 13 Metric 2 mapped to Ofgem’s Baseline Expectations

Assessment against Ofgem criteria and SSEN principles for metric creation

It was important to us to adhere to the principle’s framework for metric creation, especially given that **85%** of our stakeholders agreed with the merits of this framework. We also learned via the Ofgem working group the significance of ensuring that any proposed metric meet the criteria set out by Ofgem. In the following tables, we describe how Metric 2 meets both Ofgem and SSEN criteria for metric design.

Relevance	Outcome focused	Robustness & transparency	Appropriateness	Verifiability	Attributable	Proportioned
Key deliverable as we expect the number of CMZs to increase and the number of flexibility services in each CMZ to increase.	Wider participation in flexibility services will increase competition and flexibility market maturity.	Non-quantifiable measurement points help improve our customer experience and our customer journey. Quantifiable measurement points give context to the number of customers going through each stage of the customer journey.	A mix of quantifiable and non-quantifiable measurement points to assess our performance.	There are no historical measurements in this area however, over time we will be able to use stakeholder engagement and reporting of performance of service standards to evidence performance improvements.	The area of performance is within our control.	Supports our ‘Flexibility First’ commitment to offer an option value to our network decisions and is a core principle in our DSO Operating Plan for RIIO-ED2.

Table 14 Metric 2 mapped to Ofgem’s criteria

Conflict with desire to be NMF?	Does the metric evaluate things within our control?	Have stakeholders given feedback on the metric?	Does it facilitate and enhance the customer journey?	Does it map to DSO Roles or Activities?	Does it promote whole system outcomes?
Facilitating wider participation in flexibility services supports being a Neutral Market Facilitator	The metric is designed to measure activities that are within our control.	47% of our stakeholders said that facilitating participation was valuable to them. We anticipate that ahead of the final BP submission, we will consult stakeholders again regarding the more detailed design and benchmarks for the metrics.	This metric is key to improving the customer experience through multiple stages and touchpoints in our customer journey.	This metric relates to: DSO role 3: Market Development	Wider participation facilitates the efficient use of our network and the greater use of flexibility services.

Table 15 Metric 2 mapped to SSEN’s principle

METRIC 3: FORECASTING PROVISION IMPROVEMENT

Improving the provision of forecasting over RIIO-ED2, providing greater insight across different time horizons and over more Constraint Managed Zones (CMZs).

Context

Forecasting is important as DSO's seek to support customers with flexible connection choices and accessing the provision of flexibility services, which can help us operate and manage our network more efficiently. The flexibility markets we operate today, known as CMZs, are nascent and it will take time for them to mature into liquid short-term markets. At this time, our ambition is to continually improve the provision of forecast information for both new and existing CMZs across RIIO-ED2 to enable greater utilisation of flexibility services enabling a more efficient network and outcomes for consumers.

Purpose

DSO capabilities allows us to utilise more flexibility to operate and manage our network more efficiently, either in terms of investment planning or optionality as we deliver the capacity necessary to decarbonise the energy system. Improvements in forecasting is fundamental to the deliverability of DSO's role in network planning and market development.

Our ambition is to improve the frequency and scale of the forecasting information we provide by:

- Providing forecasts across different time horizons; and
- Increasing the volume of effective CMZ which we provide forecasts for.

Consumer Value

DSO forecasts can enable markets to work ahead of time to deliver lower costs to consumers through the development of flexibility markets and reducing overall capacity requirements on the network and impact of network constraints.

Making data available that is accurate, accessible and published in a timely fashion will give potential and existing market participants confidence in our activities and their ability to participate. This will drive increased participation and competition in the market which will result in lower costs for consumers.

Methodology

Given the ongoing engagement with Ofgem, we are committed to developing a meaningful metric that measures the improvement of our provision of forecasting information with respect to frequency (across time horizons) and scale (across CMZs). The detailed methodology will require an ambitious, yet realistic targeted level of forecast provision for each year of the RIIO-ED2 period, with a starting position aligned to the expected level of provision in 2022/23. We consider this metric is quantifiable and will develop our view on an appropriate benchmark as part of our final RIIO-ED2 plan.

We recognise that to make the measurement meaningful, we need to ensure that such forecasts are developed where there is the potential of market benefits. When developing the associated incentives, we consider that it will be necessary to avoid perverse incentives associated with improving performance across CMZs where there are limited benefits – i.e. providing forecasts that are not meaningful. The calibration of such incentives requires development to ensure that we

only benefit where there are benefits to consumers. We will work with our stakeholders to ensure our calibration of willingness to pay takes these issues into account.

High-level design

This table sets out the high-level design of our third DSO performance metric, forecasting provision improvement. The high-level design includes:

- A list of measurement points and their naming convention. The measurement points are classified as follows:
 - Quantifiable
 - These are measurement points for which we can measure performance against a benchmark.
 - Not Quantifiable
 - Target action: these measurement points represent binary actions that we do not think are appropriate to attribute individual performance benchmarks to them.
 - Qualitative: Non-binary measurement points which are not measured against a benchmark e.g. a stakeholder survey
- We use the following naming convention for the measurement points:
 - Q.3.x [Quantifiable].[Metric 3].[Measurement point number]
 - TA.3.x [Target action].[Metric 3].[Measurement point number]
 - NQ.3.x [Not Quantifiable].[Metric 3].[Measurement point number]
- A description of each measurement point and why we have chosen it.
- The applicable DSO role, SSEN customer journey stage or touchpoint and baseline expectation that measurement point relates to.
- A description of the deliverable associated with each measurement point, our intended frequency of publishing that deliverable and whether this will be a BAU activity at the end of RIIO-ED1; and
- A description of the evidence we will provide to stakeholders and Ofgem that we have met and or exceeded this expectation. We have described if we think it is plausible to develop a performance benchmark and what that could consist of. As mentioned above, we have not set any applicable performance benchmark or incentive as part of the high-level design. This will form part of the detailed design in our final RIIO-ED2 plan.

#	Measurement points– meets	DSO Role	Customer Journey stage / touchpoint	Frequency	BAU in RIIO-ED1	Baseline requirement	Deliverables	Evidence for meets and/or exceeds expectation
	<i>A description of the measuring point to be delivered to achieve a meets performance rating.</i>	<i>Three categories for SSEN: Network Planning, Network Operation and Market Development</i>	<i>Relate to SSEN customer journey stages</i>	<i>How frequently will the measuring point be measured/ evidenced</i>	<i>This picks up the “As-Is” field – is this BAU by the end of RIIO-ED1?</i>	<i>Numerical reference to the baseline expectations defined within the business plan guidance e.g. 2.1.2</i>	<i>How will the measuring point be evidenced</i>	<i>A description of the measuring point to be delivered to achieve an exceeds performance rating.</i>
Q.3.1	Improve the frequency of provision of forecasting information across time horizons will provide richer market data to facilitate a healthier and more liquid market.	Network Planning and Market Development	Discovery, Auction / Market	TBD	Nascent but improving capability in RIIO-ED1	1.1.1, 1.1.2, 1.1.3	Publish data on SSEN website	This measurement point is quantifiable. We could develop a service standard to apply to this performance measure for our final BP submission. We would likely seek to measure the year to year improvement in the frequency of providing forecast information.
Q.3.2	Expanding our forecasting capability across more CMZs will enable the benefits of flexibility services to be realised by a larger proportion of our network.	Network Planning and Market Development	Discovery, Auction / Market	TBD	Nascent but improving capability in RIIO-ED1	1.1.1, 1.1.2, 1.1.3	Publish data on SSEN website	This measurement point is quantifiable. We could develop a service standard to apply to this performance measure for our final BP submission. We would likely seek to measure the year to year improvement in the scale of CMZs we provide forecast information for

Table 16 Metric 3 high-level design

Relevance baseline expectations

The below table indicates the baseline expectations for which metric 3 can be used to evidence performance and the corresponding Metric 3 measurement point. While we understand that a metric is not required for each baseline expectation, our DSO Strategy describes how we meet the DSO minimum requirements in RIIO-ED2.

Ofgem's Baseline Expectation	Metric	How Metric 3 Meets the BE
<p>1.1.1</p> <p>Define and develop enhanced forecasting, simulation and network modelling capabilities, with processes in place to drive continual improvement to meet network and user needs.</p>	Q.3.1, Q.3.2	Increased provision of forecasting, will be evidence of us developing enhanced forecasting simulation and network modelling capabilities
<p>1.1.2</p> <p>Develop standard and effective processes for sharing network planning information with other network licensees, including the ESO, network users and other interested parties, for example to enable innovation and support the development of local government plans for decarbonisation.</p> <ul style="list-style-type: none"> As part of this, we expect DNOs to liaise with their network users to collate and share data, to publish comprehensive and comparable heat maps that provide network users high value information about where to connect, and to inform their operations. These geographic information system datasets should be available for download or for access independently of DNO websites (for example, via Web Map Service server connections). Ofgem-led reforms to the LTDS will seek to licence minimum standards against these improvements. 	Q.3.1, Q.3.2	In order to share the forecasts, we will need to develop standard and effective processes for sharing network planning information.
<p>1.1.3 Have in place transparent and robust processes for identifying and assessing options to resolve network needs, using competition where efficient.</p> <ul style="list-style-type: none"> This should include demonstrable cross-sector engagement, optioneering, and planning with sectors or vectors other than their own. DNOs should consider flexibility and promoting energy efficiency in addition to innovative use of existing network assets and traditional reinforcement. The process of identifying options should include engaging with other network licence holders and current and prospective network users. Options must be fairly compared against one another, with flexibility used where it is economic and efficient compared to investing in traditional reinforcement or technological solutions. <p>We expect a consistent approach for valuing flexibility, taking into account the option value it provides in the context of uncertainty. DNOs must ensure transparency in their approach to allow scrutiny of decision-making.</p>	Q.3.1, Q.3.2	Increased provision of forecasting aligns with increasing transparency for assessing options to resolve network needs.

Table 17 Metric 3 mapped to Ofgem's Baseline Expectations

Assessment relevant to our principles for metric development

It was important to us to adhere to the principle’s framework for metric creation, especially given that **85%** of our stakeholders agreed with the merits of this framework. We also learned via the Ofgem working group the significance of ensuring that any proposed metric meet the criteria set out by Ofgem. In the following tables, we describe how Metric 3 meets both Ofgem and SSEN criteria for metric design.

Relevance	Outcome focused	Robustness & transparency	Appropriateness	Verifiability	Attributable	Proportioned
The measure is linked with our ability to enable market development and plan future network development	The measure is designed to enable improvement in measurable forecasting provision over RIIO-ED2	CMZ and time horizon data will be directly observable	Aligned with the ambitions to facilitated market participation	CMZ and time horizon data will be directly observable	SSEN will be directly responsible for the output	Aligned with overall ambition to improve forecasting capabilities over RIIO-ED2.

Table 18 Metric 3 mapped to Ofgem’s criteria

Conflict with desire to be NMF?	Does the metric evaluate things within our control?	Have stakeholders given feedback on the metric?	Does it facilitate and enhance the customer journey?	Does it map to DSO Roles or Activities?	Does it promote whole system outcomes?
Improving our forecasting provision supports being a Neutral Market Facilitator.	The metric is designed to measure activities that are within our control.	40% of our stakeholders said that forecasting was valuable to them. We anticipate that ahead of the final BP submission, we will consult stakeholders again regarding the more detailed design and benchmarks for the metrics.	Improving our forecasting provision supports the market / auction and dispatch / execution parts of our customers journey.	This metrics relates to: DSO role 1: Planning and Network Development DSO role 3: Market Development	Yes. Improving forecasting provision facilitates the efficient use of our network and the greater use of flexibility services.

Table 19 Metric 3 mapped to SSEN’s principles

Appendix B: Our Draft Strategy metrics (Major Connections)

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation <small>As per Appendix 2 in Ofgem's Business Plan Guidance</small>	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
Support connection stakeholders prior to application by providing accurate, comprehensive and user-friendly information	Customer Satisfaction of Stakeholder Engagement Score of 9/10 Pre-Application Information and Surgeries	1. Provide access to up to date and relevant information to enable a connection stakeholder to decide whether, and where, to connect to the distribution network. This should include, but not be limited to, graphical network records that show the location, size and type of assets.	Applies to all RMS	Access to our GIS system with real-time network information.	Yes	From 2023	<p><u>Customer Satisfaction past performance</u></p> <p>SSEN AVG score of 7.6 in 2020/21</p> <p>We have considered our past performance and averages across other industries to set our target.</p> <p>There is quite a variation in score across the industries and therefore, we have chosen to set our target at the average of our industry at 8.5 and ambition at 9. That is an increase of 0.9 from our current performance to baseline.</p> <p>A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of</p>
				Long Term Development Statement updated every 6 months	Yes	From 2023	
				Embedded capacity register updated monthly	Yes	From 2023	
				High Level Heat Maps updated monthly	Yes	From 2023	
				HV Schematics updated monthly	Yes	From 2023	
				ECCR Register updated daily	Yes	From 2023	
		2. Communicate a clear connections process for all customers. This should include providing clarity of DNO, customer and third-party responsibilities. This should also include providing clarity on how issues that arise can be raised and resolved.	Applies to all RMS	Flowcharts for each connection type	Yes	From 2023	
				Videos showing customers an interactive connections journey	Yes	From 2023	
				Simply documented responsibilities throughout a connection project	Yes	From 2023	
				Contacts in the business for help and support	Yes	From 2023	
				Clear complaints processes	Yes	From 2023	
				3. Provide clear explanations of the types of connection products	Applies to all RMS, except Unmetered	Clearly documented products and services	

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation <small>As per Appendix 2 in Ofgem's Business Plan Guidance</small>	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
		available, the associated costs of each and the information that would need to be provided by the customer to make an application. Where appropriate, this should also include the provision of general information on the potential implications for a customer's connection offer if they change their own requirements, if other customers are seeking to connect in the same area or if they do not accept an offer within its validity period.		Clear costs associated with these services	Yes	From 2023	Transmission, Gas and Water.
				Simple information on the implication of changing requirements throughout the project	Yes	From 2023	Through our engagement on RIIO-ED2 to date our major connections customers have asked us for easier application forms and processes, clear and up to date information on requirements and policies, involvement in policy change discussions and greater and more granular levels of network information.
				Interactivity and Queue Management guidance	No	From 2023	
		4. Provide support and help to customers through appropriate channels which should include, but not be limited to, connections surgeries.	Applies to all RMS, except Unmetered	Help and support through our help channels i.e. email, telephone, livechat	Yes	From 2023	
				Virtual Assistant	No	2024/25	
				FAQ sections on our website	Yes	From 2023	
				Account Management available for Major Customers	Yes	From 2023	
				Connections meetings and surgeries	Yes	From 2023	
		5. Have robust processes in place to proactively engage with stakeholders. This should include how the DNO plans to both identify and address connections issues.	Applies to all RMS	Connections Expert Panel	Yes	From 2023	
				Continued 'commitments' agreed with our stakeholders	Yes	From 2023	
				Increased levels of virtual events	No	From 2023	

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation <small>As per Appendix 2 in Ofgem's Business Plan Guidance</small>	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
				Biennial LA meetings to review Local Area Energy Plans	No	From 2023	
		6. Provide clearly signposted information on capacity available to enable points of connection to be identified.	Applies to Metered demand HV, EHV and 132kV; Metered DGHV	Transformer loading data	Yes	From 2023	
				High Level Heat Maps updated monthly	Yes	From 2023	
				Live Interactive Demand and Generation Capacity Maps	No	2024/25	
				Live detailed Network Monitoring data	No	2024/25	
		7. Provide guidance that explains to customers the criteria to allow an unmetered connection to be made, ensuring compliance with the Unmetered Supply Regulations.	Applies to Unmetered LA, PFI and Other	Unmetered Guide and Unmetered FAQ available on website	Yes	From 2023	
		8. Provide support in the form of tailored pre-application communication to suit different stakeholder needs.	Applies to Unmetered LA, PFI and Other	Unmetered Connections Meetings and Account Management	Yes	From 2023	
Deliver value for customers by ensuring simplicity and transparency through the applications process	1. Customer Satisfaction of our application process - score of 9/10	9. Have clear and simple customer application process, which accounts for the particular needs of different groups of customers and which can be shaped by the parties involved. This should include, but not be limited to, providing options for how customers can apply for new	Applies to all RMS	Clear and simple application forms. Which can all be completed entirely online via web portal.	Yes	2023/24	
				Continued ability to submit applications via email, telephone and post	Yes	From 2023	SSEN AVG score of 7.6 in 2020/21 We have considered our past performance and

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation <small>As per Appendix 2 in Ofgem's Business Plan Guidance</small>	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
	Communication and quotation & design quality	connections and ensure these are clearly communicated.		Engagement on our applications processes with stakeholders	Yes	From 2023	averages across other industries to set our target.
	2. Average time to quote - See Appendix B	10. Provide tailored communication plans to suit different customer needs, including the provision of specified points of contact during the application process. This should include the provision of various channels through which customers can access support or help.	Applies to all RMS, except Unmetered	Single points of contact at the application stage	Yes	From 2023	There is quite a variation in score across the industries and therefore, we have chosen to set our target at the average of our industry at 8.5 and ambition at 9. That is an increase of 0.9 from our current performance to baseline.
				Single points of contact throughout the design stage	Yes	From 2023	
				Further help and support through livechat, email and telephone channels	Yes	From 2023	
		11. Provide customers with clear connection quotation cost breakdowns, listing out the cost components and any assumptions used in the formulation of a connections offer.	Applies to all RMS, except Unmetered	Costs broken down to task level	Yes	From 2023	A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of Transmission, Gas and Water.
				Consistent and clear electronic design drawings	Yes	From 2023	
				Clear assumptions and explanations of why reinforcement or network configuration is required	Yes	From 2023	
		12. Have processes in place to help customers identify how they could make changes to their connection requirements, that would meet their needs and allow them to get connected more quickly or cheaply.	Applies to all RMS, except Unmetered	Pre-application information to inform customers of how they can reduce costs and time to connect	Yes	From 2023	Through our engagement on RIIO-ED2 to date our major connections customers have asked us for better communication, access to live project updates and tracking, increased technical information on quotes, more information on costs and increased flexible
				Tipping Point to discuss large reinforcements required and how customers can amend their applications	Yes	From 2023	
				Flexible Connection services for both large demand and generation	Yes	From 2023	

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation As per Appendix 2 in Ofgem's Business Plan Guidance	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
				Developing Flexible Connection Services for smaller demand and generation	No	By 2028	connection offerings. Some stakeholders have also suggested quicker quotation times however that is dependent on the type of connection.
		13. Specifically, in relation to flexible connection customers, provide clarity around conditions and circumstances of current and future curtailment associated with a connections offer.	Applies to Metered demand EHV and 132kV; Metered DGHV and EHV	Curtailment assessments provided with their offer	Yes	From 2023	
		14. Provide guidance that explains to customers the criteria to allow an DG connection to be made to ensure compliance with relevant Engineering Recommendations (G98/G99).	Applies to metered DGLV, HV and EHV	Documented guidance and clarity on the criteria of connecting	Yes	From 2023	
				Worked examples of how to apply	Yes	From 2023	
		15. Have in place options for 'fast track' reconnections of critical infrastructure such as internet cabinets that have been damaged in road traffic accidents or similar.	Applies to Unmetered Other	Continue to provide this service to our UM customers	Yes	From 2023	
Facilitate the delivery of timely and economical connections that meet customers' needs.	Customer Satisfaction of our delivery process - score of 9/10	16. Provide tailored communication plans to suit different customer needs, including the provision of specified points of contact during the delivery process. Ensure various	Applies to all RMS, except Unmetered LA, PFI and Other	Single points of contact throughout the delivery stage	Yes	From 2023	SSEN AVG score of 7.6 in 2020/21 We have considered our past performance and

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation <small>As per Appendix 2 in Ofgem's Business Plan Guidance</small>	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
	Communication and timeliness of connections	channels are available for customers to access support or help.		Further help and support through livechat, email and telephone channels	Yes	From 2023	averages across other industries to set our target. There is quite a variation in score across the industries and therefore, we have chosen to set our target at the average of our industry at 8.5 and ambition at 9.
		17. Complete any cost reconciliation in a timely manner.	Applies to all RMS	Complete any refunds to our customers within 60 working days of all works complete	Yes	From 2023	That is an increase of 0.9 from our current performance to baseline.
		18. Where there are slow moving projects and where these may impact on other customers, have processes in place for releasing capacity that is not being used.	Applied to Metered demand HV, EHV and 132kV; Metered DG HV and EHV	Queue management and Interactivity processes	No	From 2023	A further increase of 0.5 to achieve a target of 9.0 by the end of the price control for the satisfaction of major connections customers is above average of Transmission, Gas and Water. Through our engagement on RIIO-ED2 to date our major connections customers have

Ofgem's Principle	Measurement Point	Ofgem's Baseline Expectation <small>As per Appendix 2 in Ofgem's Business Plan Guidance</small>	Relevant Market Segments (RMS)	Deliverable	BAU in ED1	Delivery Year	Evidence of meets and/or exceeds expectations
		19. Have processes in place for the promotion of certain types of customers (such as storage) in connection queue in circumstances where they will help others connect more quickly/cheaply.	Applies to Metered DG HV and EHV	Queue management and Interactivity processes	No	From 2023	asked us for better communication, access to live project updates and tracking, processes in place to recoup capacity and reduce capacity banking, early notification of cost variances and timely closure of projects.
		20. Provide access to services that facilitate the delivery of timely and economical connections such as 'rent a jointer' services.	Applies to Unmetered LA, PFI and Other	Continue to provide this service to our UM customers	Yes	From 2023	