

**Summary of Responses to Consultation on
PR5 TSO
Investment Planning and Delivery
Multi-year Incentive Plan
2022-2026**

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Abbreviations

BGE	Bord Gáis Energy
CPP	Committed Project Parameters
CRU	Commission for Regulation of Utilities
ESBN	Electricity Supply Board Networks
IP	Indicative Programme
PR5	Price Review 5
RES-E	Renewable Energy Source - Electricity
SOEF	Shaping Our Electricity Future
TAO	Transmission Asset Owner
TDP	Transmission Development Plan
TSO	Transmission System Operator
WEI	Wind Energy Ireland

1. Introduction

EirGrid as Transmission System Operator (TSO) published a paper for consultation on 22nd October 2021¹ seeking interested parties' views on the activities proposed in the Investment Planning & Delivery (IPD) Multi-Year Balanced Scorecard 2022-2026. The consultation remained open until 19th November 2021.

The consultation paper contained a proposed methodology to incentivise, audit and assess the TSO's IPD performance during 2022-2026 using a multi-year Balanced Scorecard approach as requested by CRU. It contained the specific targets for the 2022, 2023 and 2024 calendar years (as well as 2025 and 2026 at high level) under each heading provided for in CRU/20/154, section 7.8. The TSO will also submit an updated multi-year plan to the CRU in September each year.

The TSO takes a consultative approach to infrastructure planning and delivery and this paper outlines the TSO's consideration of and responses to the consultation feedback provided. Three responses were received as part of this consultation process, one each from Wind Energy Ireland (WEI), Bord Gáis Energy (BGE) and Coillte. In the following sections we summarise and respond to the submissions received.

Finally, some comments submitted related to matters of policy and other areas, are outside the scope of the consultation. As a result, these comments were not addressed in this consultation response document. Any subject matter feedback that is not within scope for this consultation was channeled to the relevant areas of the business for consideration.

¹ <http://www.eirgridgroup.com/site-files/library/EirGrid/PR5-IPD-Incentive-Multi-Year-Plan-Consultation-Paper.pdf>

2. Consultation Responses

The respondents welcomed the opportunity provided by the IPD consultation process to comment on the PR5 IPD multi-year plan. The TSO is pleased that there is support for the consultative approach taken to the development of the IPD incentives and we will continue to work with our stakeholders as the multi-year IPD plans develop.

The following sections provide an overview of the submissions received and our responses to the issues raised.

Comments Received:

With regard to the IPD Multi-year plans, WEI stated:

“The plan would benefit from calling out specific projects that are included in the TDP and SOEF Roadmap and having specific targets for these in the relevant years that the TSOs could then be assessed against achieving. We note from EirGrid’s recent SOEF Roadmap that all candidate reinforcements identified as part of the initiative will need to enter EirGrid’s Framework for Grid Development process. Based on this we would have expected that a far higher number of projects would be in Steps 1 and 2 quantitative “Metric/Outcomes” for the Multi-Year Targets 2022-2026 period.

There are 44 candidate reinforcements listed for Republic of Ireland in SOEF for delivery by 2030 yet the 2022-2026 scorecard only states there will be incentives against 5 unnamed projects going through Step 1 and 6 unnamed projects going through Step 2 in the 2022-2026 period, and this appears only to be based on projects in the current TDP which had a data freeze date before the SOEF Roadmap was published. Along with the inclusion of SOEF projects in the scorecard we would also have expected a higher weighting assigned to Steps 1-3 to ensure there is sufficient focus and incentives on confirming project requirements to meet needs and to ensure they are progressed into the planning and delivery phases in Steps 4-6 in time for 2030 targets to be achieved. SOEF falls far short of enabling the onshore wind project pipeline we have today and the capacity targets in our national Climate Action Plan, and with the recent upward revision in the RES-E target to 80%, additional grid reinforcement projects will be required. These should be factored into the scorecard in due course over the 2022-2026 period”.

Similarly, with regard to the IPD Multi-year plans, Coillte stated:

“The scorecard metrics would benefit from calling out the specific projects that are included in the EirGrid TDP and SOEF Roadmap and having specific targets for these in the relevant years that the TSO could then be assessed against achieving”.

TSO Response:

Both the TDP and SOEF Roadmap will continue to be updated through the course of PR5. The TSO published the SOEF Roadmap in October 2021 following extensive consultation with key stakeholders, Government, and Industry. The roadmap clearly defines what is required in the areas of the Market, Network and Operation of our Grid to meet our 2030 targets. The targets and incentives included in the balanced scorecard will evolve over the years and projects will be added at the appropriate time to each of the relevant steps in the framework.

The TSO is also developing and refining the IPD scorecard in line with the CRU enhanced reporting framework, guidance and information published by the CRU which may amend the relative weightings and introduce new or remove specific metrics.

Ultimately, we are focused on the timely completion of the programme of work required to meet our 2030 targets.

Comments Received:

With regard to the IPD Multi-year metrics, WEI stated:

“We would strongly recommend the inclusion of one additional assessment criteria – namely “Overall Adequacy of Development Activity” i.e. the System Operators should be required to demonstrate that they have sufficient projects on a scheduled glide-path to delivery, to be capable of meeting the needs of the system for 2030, including a total of 8.2GW of onshore wind and the 5 GW of offshore wind with sufficient future proofing to allow for new shallow connections (e.g., new transmission stations should have space for future bays) and additional grid capacity (e.g. new cable installations should be capable of being ‘voltage uprated’ in future) in areas of the network where the renewable energy project pipeline is being progressed. In addition to the requirements of national renewable electricity targets this would need to consider increased demand due to electrification of heat, transport and new data centre capacity.

When considering system adequacy, it is necessary to consider time. Being adequate but 5-10 years late is effectively the same as being inadequate and this can have a significant impact on consumer costs. Under the current incentive design, it is possible that the TSO could do an excellent needs assessment, an excellent job selecting the best technologies to meet those needs and deciding on where these should be deployed.

However, it is also possible that by the time the projects move through EirGrid’s current six-step process and reach the point where they are actually on a transmission outage program to be delivered, that it is already 5-10 years later than the system needs would require. Under the existing incentive approach, provided the delivery takes place in line with this outage schedule (for 75% of projects), then this would be considered as a strong performance with a full incentive payment.”

Similarly, with regard to the IPD Multi-year metrics, Coillte stated:

“There should be a higher number of projects included in Steps 1-3 scorecard metrics over the 2022-2024 period to reflect the c. 44 candidate projects that have been identified in SOEF for delivery by 2030. The weightings for the Step 1-3 metrics should be increased given the importance of these projects being progressed as soon as possible to achieve Climate Action Plan targets. These steps are as important as delivery in steps 4-6. The number of candidate projects may also need to be added to when EirGrid completes studies to assess requirements for 80% RES-E by 2030.”

TSO Response:

The TSO received regulatory approval in PR5 based on our assessment of the requirements needed to develop and reinforce the network to 2025, while maintaining security of supply and cognisant of our 2030 obligations. The PR5 process involved the carrying out of a robust review of the required projects. The TSO & TAO were required to demonstrate that the capital projects were sufficient to meet our obligations. The PR5 regulatory framework also includes annual independent audits of the scorecard and incentives and regular progress reporting on the programme and key projects.

We have also developed the Network Delivery Programme (NDP) which contains projects that will provide significant uprating of the existing network and the building out of new network across all voltage levels. In consideration of time and delivering projects in a timely manner, the IPD incentives are focused on incentivising end to end delivery from concept to energisation over a multi-year period providing stakeholders with the visibility of energisation and delivery performance.

The TSO published the SOEF Roadmap in October 2021 following extensive consultation with key stakeholders, Government, and industry. The roadmap clearly defines what is required in the areas of the Market, Network and Operation of our Grid to meet our 2030 targets and these projects will be added to the NDP at the relevant time. The targets and incentives included in the balanced scorecard will evolve over the years and projects will be added at the appropriate time to each of the relevant steps in the framework.

Comments Received:

With regard to timely delivery, WEI stated:

“The TSO should be incentivised to incorporate the timelines for deploying various technical solutions and factor that into decision making around the “best technology” to meet the system need. It is fully plausible that in some circumstances, a cheaper network capex solution with slower deployment timelines, might have greater consumer cost impacts than a higher capex solution that could be deployed more quickly onto the system, i.e. the consumer cost impacts could be through higher dispatch balancing costs or higher constraint assumptions being factored into RESS auction bids. A balanced scorecard assessment should consider all of these points under an assessment heading of “Overall Adequacy of Development Activity”.”

Similarly, with regard to timely delivery, Coillte stated:

“There should be an incentive that rewards decision making that looks at system adequacy to meet the needs and targets identified in Ireland’s Climate Action Plan. The TSO should be required to demonstrate that they have sufficient projects on a scheduled glide-path to delivery, to be capable of realistically meeting the needs of the system for 2030, including a total of 8.2GW of onshore wind, with sufficient future proofing to provide capacity for an onshore wind pipeline that is well placed to deliver for targets to 2030 and beyond. New circuits, such as 110kV and 220kV cables should be installed so that they can be readily ‘voltage uprated’ if needed in future. New transmission stations, especially if they use gas insulated switchgear, should have sufficient space for future expansion for new connections for renewable generation, storage and system reinforcements.”

The TSO should be incentivised to incorporate the timelines for deploying various technical solutions and factor that into decision making around the “best technology” to meet the system need. It is fully plausible that in some circumstances, a cheaper network capex solution with slower deployment timelines, might have greater consumer cost impacts than a higher capex solution that could be deployed more quickly onto the system, i.e. the consumer cost impacts could be through higher dispatch balancing costs or higher constraint assumptions being factored into RESS auction bids. A balanced scorecard assessment should consider all of these points under an assessment heading of “Overall Adequacy of Development Activity”.”

TSO Response:

The joint TSO/TAO incentives framework already includes an incentive which promotes the collaboration of both organisations for the deployment of new technologies in a timely manner. As public bodies both organisations are also subject to separate robust governance arrangements which take account of the full project lifecycle timelines, costs and the required levels of quality. The TSO and TAO are both incentivised under the joint scorecard to optimise the time taken to deliver grid infrastructure across all of the steps with clear metrics.

Comments Received:

With regard to quantitative assessment as part of the six step process, BGE stated:

“BGE’s concern with the deference to this six-step approach as evidence of an efficient, rigorous end to end process, and reference to the Transmission Development plan (TDP) for a list of ongoing projects, is that it does not appear that a quantitative assessment is being carried out at the outset of a project to determine whether it is the right choice solution or not. Such an assessment in our view is required if clear consumer benefits are to be delivered in line with the intent of the PR5 decision.”

With regard to Dublin constraints and CBA assessment, BGE stated:

“A CBA assessment of constraints that could be alleviated in Dublin, or Cork for example with the arrival of Celtic and Greenlink interconnectors, could help inform to what extent a project(s) should be prioritised or not. It is the case too that a particular suite of projects can fix multiple constraints and CBA assessments of possible projects with this objective in mind should be undertaken too to help determine prioritisation of projects by reference to the quantified benefit it gives end consumers”.

“We therefore ask that CBAs for what are currently known to be major constraints in Ireland like Dublin and Cork are undertaken to help prioritise planning and delivery of those projects of most benefit to consumers this decade. If projects are not initially quantified for costs/benefits then it is very difficult to ensure improvements and achievements under this IP&D are being targeted, achieved and therefore measured in the correct manner”.

TSO Response:

Quantitative assessment lies at the heart of EirGrid’s six step process for developing the grid, in particular, in the optioneering steps, Step 2 and Step 3. In these steps a long list of appropriate options is developed from analysis of the system need in Step 1 and the toolbox of solution technologies and options available to meet the need.

Throughout Steps 2 and 3, a suite of five criteria are analysed leading to a multi-criteria assessment which determines the best performing solution option. The criteria assessed are technical performance, economic performance, environmental impact, socio-economic impact and deliverability. These criteria are applied in increasing detail as the list of solution options is reduced. The economic performance criterion includes cost benefit analysis culminating in least worst regrets analysis.

At the start of every step in the six step process the need for network development is re-assessed to ensure the need remains robust and the options to meet the need remain appropriate. The SOEF analysis and roadmap has identified an optimum suite of candidate reinforcements (effectively the priority reinforcements) considering the wide range of inputs and variables in meeting the 2030 targets.

Comments Received:

With regard to the relative benefits of projects being delivered, BGE stated:

“Regarding the proposed metrics and measurement of success under this incentive, simply targeting that a number of projects will be completed through steps 1-6 with no reference to their value or benefits to customers/ end consumers is insufficient in our view. Targets and metrics applied under this incentive should be focused on progressing the priority projects, determined via our proposed CBAs, as having the most quantifiable benefit to consumers.

TSO Response:

As noted in the previous response the SOEF analysis undertaken has identified an optimum suite of candidate reinforcements (effectively the priority reinforcements) considering the wide range of inputs and variables in meeting the 2030 targets. These priority projects and other projects required to deliver our obligations as TSO, are brought forward to capital approval and progressed to completion while always mindful of the ultimate benefits to consumers that their delivery brings.

The TSO also prioritises transmission outages on the transmission system based on the criteria outlined in our revised Outage Prioritisation guidance document published on 11th May 2022². The benefits to consumers that are achieved arising from the delivery of the TSO’s annual work programme are outlined in the annual IPD report which is published on EirGrid’s website³.

² <http://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid-Outage-Prioritisation-Guidance-Documents-Final.pdf>

³ <http://www.eirgridgroup.com/how-the-grid-works/tso-regulatory-publicatio/>

Comments Received:

With regard to the step 6 transmission outage planning (TOP) reporting, BGE stated:

“Regarding the Transmission outage programme (TOP) under step 6 metric, for better transparency we ask that a distinction is made between capex projects and maintenance projects driving the outages.

Consideration could for example be given to requiring a focus in delivery of projects that are on the top end/ portion of the savings that a wide range of capex projects examined under CBAs could deliver.

We also ask that the metrics include evidence that the TOP was taken at the optimal cost as the cost of taking certain outages at one time versus another time can be extremely high”.

TSO Response:

EirGrid, in its role as TSO, is responsible for coordinating a programme of outages on the transmission system, to facilitate works including maintenance and construction activities that reinforce the system and/or connect customers.

The TSO confirms that the IPD step 6 TOP delivery metric is entirely composed of the Transmission Capex outage programme baseline which does not include maintenance outages. The maintenance programme is an integral part of the final annual TOP however this incentive metric is specifically focused on the measurement of the annual delivery of transmission capital works.

The TSO must determine, on an objective and proportionate basis, which works are deferred and which should go ahead during each outage season. The impact of delaying projects is taken into account when making such decisions and our goal is to operate, maintain and develop the transmission system as efficiently as possible for the benefit of all users of the system.

The TOP is developed to maximise the volume of outages on an annual basis to deliver transmission capital projects in a timely manner. Given the scarcity of transmission outages as a key resource in the delivery of transmission projects, we believe value for the consumer is achieved in the development of a fully optimised transmission outage programme while ensuring the safety and security of the transmission system for each calendar day within the outage season.

The TSO considers that this metric is appropriately designed to assess its delivery performance across the transmission capital projects within the annual TOP. The TSO does not currently propose any amendments to the step 6 TOP incentive metric.

Comments Received:

With regard to the IPD step 4-5 CPP issuance metric, BGE stated:

“we ask that re-consideration is given to the step 4-5 targets around CPPs issued to the TAO. While timely issuance of CPPs to the TAO is very important we understand that this timely issuance is already being incentivised through the TSO/ TAO joint incentive”.

TSO Response:

The timely issuing of the CPPs by the TSO to the TAO is a key milestone and activity in the project lifecycle as it facilitates the commencement of the scoping process by the TAO. It is also a valuable metric across the annual suite of CPPs to monitor project development trends and track issues that may arise and require intervention.

The CPP related metrics within the IPD and Joint TSO/TAO incentive frameworks were chosen to reflect the importance of the milestone but are inherently measuring different aspects of the overall process. The IPD metric “CPP Issued” relates to the issuing of the CPP by the TSO to the TAO, achieved within specific timeframes. The Joint “IP issued to CCP agreed” metric contains three separate milestones, IP issued, CPP issued and CPP agreed.

The purpose of this specific metric is to monitor and track joint project development between the TSO and TAO in a timely manner. This combination of milestones incorporated into an overall metric provides valuable timely delivery data analytics and insights as to where issues may be arising across different types of projects, enabling appropriate interventions to be undertaken. When viewed together the two metrics are complimentary and supportive of overall programme delivery.

The TSO does not currently propose any amendments to the IPD CPP metric or to the Joint IP Issued-CPP agreed metric which is part of the TSO/TAO Joint Incentives.

3. Conclusion

EirGrid thanks all those who responded to this consultation, which was specifically to receive feedback on our IPD multi-year plans for 2022-2026 as set out in the TSO’s consultation paper from October 2021.

All responses were reviewed and considered and where possible, we will incorporate the feedback into the final IPD multi-year plan. In addition, relevant feedback that will not be incorporated will be noted and will be considered for our future plans, as we continue to enhance our IPD multi-year plan.