



EirGrid/SONI

SSE response to

**Consultation on DS3 System Services Volume Capped
Competitive Procurement**

About SSE

SSE is Ireland's second largest energy utility and the country's leading developer and investor in cleaner energy infrastructure. It is part of SSE plc, a UK-listed, FTSE 100 company and the broadest-based energy utility on the London Stock Exchange. Since 2008, we have invested over €2 billion in the development of Ireland's sustainable energy infrastructure, helping to green our economy and secure our energy future.

In Ireland, SSE owns and operates 2,061MW of generation capacity, of which 768MW is from its portfolio of 28 onshore wind farms, making SSE the largest generator and provider of renewable energy in the all-island Single Electricity Market. In 2015, SSE commissioned Ireland's newest and one of its cleanest power plants, the 464MW CCGT (combined cycle gas turbine) power station at Great Island, Co. Wexford, which is generating enough greener energy to power over half a million Irish homes.¹

The DS3 programme, as developed by the respective all island TSOs; EirGrid and SONI is an important aspect in integrating further levels of renewable energy into the all island electricity mix.


Introduction

This consultation paper is divided into several sections focused on aspects such as;

- Product definition
- Network limitations
- Procurement approach
- Scalers
- Market interactions
- Mechanism for evaluation of applications

We are of the view that the primary purpose of this ruleset consultation is for the purposes of allowing potential service providers business plan potential DS3 bundled products to the TSOs. As such, the final decision should at a high level, focus on ensuring that a reasonable balance of risk is between service providers and TSOs is provided for. This consultation paper does refer to such a balance in certain aspects such as the proposed remuneration mechanism which is helpful.

¹ 232,725 tonnes of CO₂ emissions offset based on projected annual energy output of 592,176MWh and average CO₂ emissions in the Single Electricity Market of 0.393t/MWh (latest All Island Project Fuel Mix Disclosure, published 2016).



However, on other aspects such as the availability targets, we would suggest that a more granular approach to availability requirements commensurate with the value that a product gives to the network would be appropriate to consider.

In addition, we have several clarification queries in this response which would SSE would appreciate clarification on as part of the final decision paper on the ruleset.

Below we set out our comments in relation to each question posed in the consultation paper.

Question 1: Do you have any comments on the two options for service bundling proposed and the TSO's preferred option?

The TSOs options either include or exclude the provision of TOR2 services. In the TSOs view if this service was not included then a critical service for major frequency events would not be included.

Broadly, SSE is neutral to the TSOs proposals to include TOR2, but note that this should apply equally across all market participants who intend to offer the range of DS3 services. SSE notes that provision of TOR2 is likely to lead to an increase in the cost of the system due to battery sizing. However, TOR2 is also the least valuable service. In SSE's view, there are mitigation measures that may help to reduce this. This includes a lowering of the availability target for TOR2 which would be commensurate with the value it brings the system.

Question 2: Do you have any view on the technical requirements proposed, including the requirement for over-frequency response?

The Consultation Paper sets out a range of technical requirements that providers will be required to meet and requests feedback on the specifications.

In relation to the technical requirements for symmetrical under and over frequency response, SSE is of the view that the proposed specifications will not be cost effective for consumers, since high response should be available from other providers including wind, particularly in the timescales of SOR-TOR2.

SSE suggests specific mitigation measures which may reduce the cost impact of provision of high response. This may include;

- Exclusion of High TOR2 which has most impact on battery capacity, and should be easily provided by other technologies including wind.
- Specific arrangements for import tariff reductions, for systems where the MIL is based solely on the provision of high response.

In addition, we have several queries on the services as below;

- Will high response be separate products from Low response products?
- For these services, what will the rate cap be?
- Will High TOR1 and TOR 2 be dispatchable?

We would request clarification on these queries above as part of the TSOs Decision Paper.

Question 3: Do you have any comments on the availability obligation proposed?

The TSOs outline their proposals with regards to an availability target of 97% which will be assessed on a monthly basis and exclude planned maintenance periods.

As indicated in question 1, SSE is of the view that the availability requirement for TOR 2 should be reduced, given the low value/high cost of this service. This is on the basis, that SSE is neutral as to the inclusion of TOR 2 in the range of required services. If the availability requirement for TOR 2 was reduced, then this may result in an overall cost reduction.

The availability calculation should exclude the post- fault delay to start of recharge while waiting for the system to settle within the stipulated +/- 0.05 Hz from nominal. Higher SNSP and new RoCoF limits could mean that the delay time could increase from the current typical 17 minutes.

The 97% availability target will preclude the participation of some hybrid sites which have the potential to offer these services cost effectively. SSE is of the view that the availability requirement should only be mandated when SNSP is over 50%, as certain hybrid sites will not be called upon when SNSP is under 50%.

We would also like some clarifications on the Performance Scaler as per the queries below.

1. Does this replace the existing performance scaler ($P=PA*PE$) or the availability discount factor?
2. Can the TSOs clarify the application of this; is it per bundle or per product?
3. Is the performance scaler the sole mechanism for penalising a services provider?

Question 4: Do you have any comments on pre-requisites with respect to Connection Offers?

SSE is of the view that the pre-requisites are acceptable, but would query whether the TSOs will be in a position to guarantee that all offers will be issued by the start of the procurement process. With a view to assisting service providers' business planning, we request that the TSOs give a firm commitment in terms of the timeframes for assessment. In addition, SSE is of the view that Connection Offers should be in process for a participant to enter the procurement process as outlined in this process document.

Question 5: Do you have a view on the two options provided with respect to managing network limitations?

In this section the TSOs outline two options regarding network limitations, with service providers either being remunerated or not remunerated due to network unavailability.

Network constraints are not within the control of the service provider. SSE agrees with option 1 for sites where there is no network constraint, but does not agree that constrained sites should be precluded from participating since constrained sites may still be capable of providing cost effective system services at times of high SNSP.

SSE suggests that the locational scalar is an alternative that could be used to accommodate grid based availability. Under this approach connecting service providers who have provided confirmation from the TSO/DSO that network limitations will not prohibit service availability will be remunerated if unavailable due to network limitations.

Connecting service providers who cannot provide confirmation from the TSO/DSO that network limitations will not prohibit service availability will be remunerated if unavailable due to network limitations but will have a locational scalar applied, proportional to the TSO/DSO assessment of the network limitation coincident with high SNSP periods.

Question 6: Do you have a view on the staged approach proposed for procurement under the volume capped arrangements?

Firstly, we seek clarification on how the stage approach ties in with ECP-1, which specifically sets aside 400 MW of capacity for DS3 services under the CRUs connection policy. What is the intent with regards to the remaining capacity in Ireland and how does this link to the overall 300 MW of total system services that will be procured.

Secondly, the TSOs proposals state that the limitation per connection site is 30MW, but the overall cap is 100MW. This could mean that the full capacity intended to be procured may not be, and so measures should be put in place that ensure that the full capacity is procured.

We would also question whether multiple phases may be connected on the service developers side as part of this process at a single connection point.

Question 7: Do you have a view on the proposed bid pricing requirements and the mechanism for assessing bids, determining price and remunerating providers?

In the consultation paper, the TSOs propose that a performance bond will be required which will be based on the contracted service volume of the applicant i.e. MWs. However, the paper does not provide a quantum of what may be required. The consultation paper suggests a per MW basis for a performance bond, but we would request worked examples and/or quantification in monetary terms for the purposes of the decision paper.

The TSOs propose using a typical wind year rather than real system conditions for remuneration of bids. Although there are merits in both approaches, SSE is broadly supportive of the TSOs approach as it represents a reasonable balance of risk between TSO and service provider.

Question 8: Do you agree with the proposed maximum contract volume proposed per separate grid connection?

In terms of the proposals that a maximum of 30 MW will apply per connection points, we appreciate that there is difficulty in determining what an appropriate level per connection point may be that results in the most efficient outcomes for system services. The current proposals whereby 100MW is procured in totality with a limitation of 30 MW per connection point could, in our view lead to underutilised capacity. For example, in a scenario where 3 participants provide 30 MW each, this could result in less than the 100 MW being procured. SSE suggests that the per connection limit is increased to 33 MW to ensure the maximum capacity is procured.

In addition, incremental bidding from providers will both facilitate the maximum number of bid options from participants and maximise efficiency outcomes and options for the TSOs and Providers. We would suggest that this should be considered in the bidding mechanisms.

Question 9: Do you have a view on the proposed application of performance, scarcity, product and locational scalars?

The scarcity scalar is not an issue where remuneration based upon the typical wind year is used. If the system settling period is excluded from the availability calculation, then this is acceptable to SSE.

Should the remuneration be based upon actual SNSP conditions with the scarcity scalar applied, there is a fundamental issue in that system changes and operational choices can significantly change the annual available remuneration to providers. Providers will require to cost this as a risk with large uncertainty. SSE suggests that the Scarcity Scaler could be based upon “SNSP percentile exceedance” rather than fixed SNSP percentage thresholds to allow the overall payment to be consistent year-on-year. This would also positively influence providers to target high availability at the times when the range of services are most needed.

Question 10: Do you have a view on the market interactions outlined here and the proposed mechanism for mitigating?

In terms of the TSO queries regarding the linkages between the DS3 services and the Capacity market, there is no guarantee that a service provider will be required. The TSOs suggest that it is a service provider's responsibility to ensure it is consistent with the obligations imposed as a result of a Capacity contract under CRM. There is a suggestion that the mandatory participation could be investigated by the Regulatory Authorities "as an alternative mitigation measure". SSE requests that the TSOs and the RAs (who ultimately determine the policy framework for both the CRM and DS3 work streams) provide clarity to participants on their respective obligations.

Question 11: Do you agree with the proposed mechanism for assessing applications?

SSE requests that a step 0 is included by the TSO (issuance of ITT). This would allow participants to be fully aware of the applicable timeframes that will apply.