## **DS3 System Services Tariffs**

## **Recommendations Paper**

11 November 2022



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## **1. Introduction and Background**

The DS3 System Services arrangements have been designed to facilitate new and existing participants to provide services required to facilitate the maintenance of a resilient power system when up to 75% of demand is met by non-synchronous technologies. DS3 System Services expenditure has a cap<sup>1</sup> of €235M as set by the Regulatory Authorities (RAs) through SEM-17-080<sup>2</sup> (with an additional €20M in a high-wind year). This cap is designed to include expenditure related to the DS3 Qualification Trial Process, DS3 Volume Uncapped Arrangements (including market to physical) and the DS3 Volume Capped competition. Since the commencement of the Volume Uncapped Arrangements there has been a steady increase in DS3 expenditure with breach of the current regulatory cap likely in the 22/23 tariff year if control measures are not implemented.

It is important to note that Low Carbon Inertia Services and ramping services critical to the delivery of 2030 targets are outside the scope of the current consultation and do not form part of the expenditure cap detailed in SEM-17-080.

In line with the requirements set out in SEM-17-080, EirGrid and SONI ("the TSOs") report to the RAs on a monthly basis, forecast and actual expenditure for DS3 System Services. Information relating to volumes is also provided as part of this reporting. The TSOs have on several occasions reported concerns to the RAs and industry<sup>3</sup> that a breach of the current regulatory cap is likely due to the increased provision of system services from fast acting technologies. Such technologies have very high availability and also receive increased payments due to fast acting scalars.

In May 2021 the TSOs published an initial consultation<sup>4</sup> at the request of the RAs in which several options for mitigating expenditure risk were proposed. Subsequent to this consultation, the SEM Committee approved a rates reduction of 10% for FFR-TOR2<sup>5</sup> but with no additional measures approved to control future spend on DS3 System Services, should expenditure trend towards breaching the regulatory cap.

For the 22/23 tariff year, the TSOs forecasted that DS3 expenditure could breach the current regulatory cap of €235M if no further control measures are implemented. Following further engagement with the RAs, the TSOs were requested to published a consultation paper<sup>6</sup> in September 2022 outlining further

<sup>3</sup> Expenditure Notes

#### <sup>4</sup> Expenditure Consultation Paper

http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Service-Tarrif-Review-Consultation\_28-05-2021.pdf

<sup>5</sup> SEM Committee Decision

https://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Consultation-16-Sept-2022.pdf

 $<sup>^{1}</sup>$  The term cap is used throughout this document in the context of SEM-17-080  $^{2}$  SEM-17-80

https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-080%20DS3%20SS%20SEMC%20Decision%20Paper%20Regulated%20Arrangements%20Tariffs%20and%20Scalars %20Final%20version.pdf

https://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Expenditure-Note-16092020.pdf https://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Expenditure-Note-May-2021.pdf

https://www.semcommittee.com/sites/semc/files/media-files/SEM-21-089%20Correspondence%20-%20SEMC%20to%20TSO%20-%20System%20Services%20Tariff%20Rate%20Review.pdf

<sup>&</sup>lt;sup>6</sup> Expenditure Consultation Paper

options to mitigate high DS3 expenditure in excess of the current cap. The options provided in the consultation did not include an option for increasing the current cap on DS3 expenditure.

This consultation paper outlined significant increases in DS3 expenditure forecast due to increased provision of system services by new fast acting technologies and additional new technologies as part of Gate 7 for which contract execution commenced on 01 October 2022. The proposed alternative options to increasing the cap, were:

**Option 1**: Reduce tariff rates for FFR, POR, SOR, TOR1 and TOR2 by 35% for all service providers from Q1 2023. In addition, it was proposed that for every 100MW of Fast Acting Services procured at Procurement Gates following Gate 7, that FFR-TOR2 rates be reduced by 10%.

**Option 2**: Reduce tariff rates for all services by 25% from Q1 2023. In addition, it was proposed that for every 100MW of Fast Acting Services procured at Procurement Gates following Gate 7, that all rates be reduced by 7%.

**Option 3**: Reduce TSS values for all services from 6.3 to 2.5 when SNSP exceeds 70% and from 4.7 to 1.5 when SNSP is between 60% and 70% from Q1 2023.

**Option 4** was a combination of Option 1 and Option 3. It was a proposal to reduce tariff rates for FFR-TOR2 by 10% and to reduce TSS values for all services from 6.3 to 3.5 when SNSP exceeds 70% and from 4.7 to 2.5 when SNSP is between 60% and 70% from Q1 2023.

The RAs also requested that an option which utilises the Layered Procurement Framework to competitively procure FFR, POR, SOR, TOR1 and TOR 2 going forward also be considered as part of this consultation. Respondents were also invited to provide feedback on this proposal.

In this document, we summarise the responses received to the consultation, provide clarifications where necessary, and put forward our recommendations to the RAs for approval ahead of implementation.

### **2 Context: System Services Cap**

In the absence of approval from the RAs to increase the current DS3 expenditure cap of €235M, the proposals put forward in the consultation paper did not incorporate an increase in DS3 expenditure. It is important to consider this point when considering the responses received to the TS0s consultation.

The TSOs note that all of the 25 respondents have urged a review of the €235m budgetary allowance. The points below summarise the most common reasons cited in the consultation responses received for supporting this view:

- Significant changes have occurred in both the market and system since the original 2014 decision and therefore a review of the €235M budgetary allowance should be undertaken. This would allow for recognition of the change that has occurred in the market including the significant increase in fuel prices in recent months, issues associated with tightened security of supply as well as allowing for the changes in government policy aiming to achieve higher levels of renewable generation to 2030 and beyond.
- Many respondents referred to the Eu-Sysflex report: Financial Implications of High Levels of Renewables led by EirGrid and SONI published in March 2020 which shows the value of system services to be in the region of €711m p.a. in 2030 It was strongly argued that if 2030 decarbonisation is to be achieved, the current cap would need to be increased to a value in line with this.
- The delays associated with System Services Future Arrangements (SSFA) also creates a lot of
  investment uncertainty and requires an urgent need for bridging arrangements. Many
  respondents called for clear investment signals to support the development of a system that can
  meet the 2030 target of 70% RES-E and ~95% SNSP (with an interim 85% SNSP target by 2025),
  and considered that a reduction in tariff rates frustrates the investment signals required to deliver
  on these ambitious targets.
- It was also highlighted that the budgetary allowance was made in nominal terms at the time of decision in 2014, and therefore did not take inflation into account via an indexed annual budgetary allowance.

The TSOs recognise respondents' concerns regarding the expenditure cap but also acknowledge the RAs position expressed in SEM-17-080, that requires an increase in expenditure cap to be demonstrated to be commensurate with the consumer benefits. The TSOs consider this especially important in current times when consumers are already subjected to significant increases in electricity costs arising due to high gas prices. On balance, the TSOs consider that given the delay and uncertainty associated with delivery of SSFA and the importance of protecting future investment in provision of system services to meet 2030 targets, that the system services tariffs should not be changed (allowing DS3 expenditure to exceed the current cap) until there is sufficient time to implement a revised tariff mechanism prior to commencement of Future Arrangements.

## **3 TSOs' Consultation Paper: Four Proposed Solutions**

In the consultation paper, the TSOs presented DS3 expenditure forecasts for the coming tariff year as well as analysis on the strong correlation between SNSP and DS3 Expenditure. The results of the analysis showed that due to the high volumes of fast acting technologies forecast to provide system services at future procurement gates, expenditure for the 22/23 tariff year could reach levels of €280M with no mitigation measures in place.

Given the RAs have directed that the regulatory guideline of €235M as set out in SEM-17-080 could be exceeded, the TSOs outlined four options in the consultation paper to manage the budget so that expenditure does not exceed the regulatory guideline.

**Option 1**: Reduce tariff rates for FFR, POR, SOR, TOR1 and TOR2 by 35% for all service providers from Q1 2023. In addition, it was proposed that for every 100MW of Fast Acting Services procured at Procurement Gates following Gate 7, that FFR-TOR2 rates be reduced by 10%.

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The RAs also included an option for respondents to comment on option which utilises the Layered Procurement Framework to competitively procure FFR, POR, SOR, TOR1 and TOR 2 going forward.

The consultation sought general feedback on these options, as well as asking interested parties questions on any areas that they felt the TSOs had not addressed adequately, whether the TSOs should focus on rate amendments rather than a hybrid of rates and scalars and their overall preferred approach of the four options put forward.

A RA /TSO webinar was held on 5<sup>th</sup> October 2022 with over 75 registered participants.

## **4 Consultation Feedback**

#### **4.1 Respondents**

The consultation ran from 16 September 2022 to 14 October 2022. In total, 25 responses were received with five responses marked confidential. Non confidential responses were received from the following parties:

BGE	
Bord na Mona	
DRAI	
Dublin Waste to Energy	
Cool Planet	
EAI	
Energia	
ESB GT	
ESI	
Federation of Energy Response Aggregators (FERA)	
GridBeyond	
Hanwha Energy	
IESA	
Lumcloon	
Mutual Energy	
Orsted	
SSE	
Strategic Power	
WEI	
All non-confidential responses are attached to this recommendation paper.	

### **4.2 Respondents Preferred Options**

Respondents were asked to indicate their preference of the four options posed by the TSOs as well as the RA's option on Layered Procurement Framework.

Of the options proposed, eighteen respondents did not support any option and, more fundamentally, did not support a reduction in the current tariffs.

Three respondents found reducing the tariffs equally for all services to be the most acceptable. Only one respondent, opted for option 1 that specifically targets reserve services and where there is overheating. A small number of participants found reducing the Temporal Scarcity Scalars or the implementation of a hybrid approach to be the most acceptable.

The TSOs understand the position of the eighteen respondents that did not support any option presented to manage expenditure; this should be considered in the context of an overriding preference from respondents for the cap of €235M to be re-baselined to reflect the current market, rather than the 2014 forecasts.

Eight respondents commented on the Layer Procurement Option put forward by the RAs. Participants generally considered that it was not viable that a Layered Procurement Option could be introduced within the required timescales. It was also considered inappropriate at time when industry has no visibility on how the final, enduring arrangements would look or operate. Respondents stated that this would be a significant change and would require separate engagement and consultation with industry.

#### **4.3 Additional Feedback**

In this section we discuss additional comments by respondents.

#### **4.3.1** Investment uncertainty

A strong theme emerging from the consultation responses is the adverse impact on future investment on the island should the tariff reductions proposed in the consultation paper be implemented. This has led to the majority of the respondents to not recommend any option and for some to ask that this consultation be terminated.

In the RA /TSO webinar held on 05 October 2022, the TSOs specifically asked for an open book approach from respondents to better understand the risk to current profitability. The TSOs have also been in touch with several consultation respondents who had offered to provide information on investment costs but have not yet received any evidence on the levels of profitability reductions from proposed tariff reductions outlined in the consultation paper. Some responses instead highlighted the level of revenue reductions of the options proposed. It is thus unclear to the TSOs what level of tariff reductions could be made before current providers become unprofitable and/or future investments do not proceed.

# 4.3.2RecoveryMechanismforUnderExpenditure \ Implementation of K Factor

In the SEM Committee High Level Design of DS3 System Services paper of  $2014^7$  it was outlined that there would be a glide path to an expenditure cap in 2020 for DS3 systems services of €235M. This expenditure cap was based on anticipated consumer benefits of the introduction of DS3 System Services and the enablement of much greater levels of renewable energy into the All - Island energy markets. A number of respondents have noted that for every year since the current Price Regulation Framework commenced that the TSOs have not exceeded €235M cap. Seven respondents called for some form of a recovery mechanism, whereby system service providers would be remunerated should a reduction in the tariff rates prove excessive for keeping expenditure in line with the current €235m cap. The TSOs consider it important to also highlight that the €235m figure is inclusive of costs associated with Market Physical, QTP and Volume Capped arrangements. Further, the figure reflects the upper limit the RAs have in place on DS3 expenditure, it has not been set as a target spend figure.

Implementation of some form of recovery mechanism would also be a fundamental change to financial arrangements already in place between the RAs and TSOs, for management of DS3 expenditure. The TSOs also note, that respondents did not specifically propose how they envisaged such further remuneration being calculated or allocated, were the proposal to be advanced. Were the RAs minded to explore this option, it is the TSOs view that the timeframes for consideration, approval and implementation of such a mechanism, depending on the complexity, would not be feasible to implement in the 22/23 tariff year.

## **4.3.3 Interaction of DS3 Market with Energy and Capacity Markets**

Eight participants urged the RAs to consider interaction of DS3 markets with the energy and capacity markets. It is argued that reducing DS3 tariffs will not necessarily reduce consumer costs, that units would be forced into recouping revenues from energy and capacity markets and if this did not materialise, inefficient exit signals for existing plant could arise.

Responses from Demand Side Units (DSUs) and battery technologies also highlighted that they are not currently in receipt of energy payments to offset tariff reductions. For battery technologies, work on enabling units to participate in the energy market is part of the Scheduling and Dispatch project currently underway. In SEM 22 036<sup>8</sup>, the SEM Committee have consulted on an Enduring Solution to Enable Energy Payments in the Balancing Market for DSUs.

#### **4.4.4 Future Arrangements for System Services**

With regard to System Services Future Arrangements, the majority of respondents expressed concern that the implementation timeline for the SSFA is very unclear and requested a need for further engagement with the RAs to progress the detailed design. One respondent asked that elements of the "cost recovery" decision made in the 2022 high-level design (HLD) for System Services Future Arrangements (SSFA) be brought forward.

The TSOs are very much in agreement that there is an urgent need for progression of the SSFA detailed design and that in order for this to happen that it is pivotal for joint governance between the TSOs and RAs.

<sup>&</sup>lt;sup>7</sup> SEM Committee Decision

https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-14-108%20DS3%20System%20Services%20Decision%20Paper.pdf

<sup>&</sup>lt;sup>8</sup> SEM 22 036

https://www.semcommittee.com/publications/sem-22-036-enduring-solution-enable-energy-payments-balancing-market-dsus-consultation

### **5 TSOs Recommendations and Next Steps**

Following the consultation period and the comments received as part of the consultation process, the TSOs do have concerns about the adverse impact of the proposed options on the future investment that is required on the island in order to reach 2030 targets.

The TSOs recommend that the tariff rates remain unchanged for the 22/23 tariff year (allowing DS3 expenditure to exceed the current cap) until there is sufficient time to implement a revised tariff mechanism prior to commencement of Future Arrangements. If the RAs require a reduction in DS3 expenditure, the TSOs would have preference for an option that targets reserve services (FFR-TOR2), where overheating is clearly evident and detailed in the consultation paper published in September 2022<sup>6</sup>.

It should be noted that any increase in the €235m cap is for the current System Services and that new services including low carbon inertia and ramping services will require additional funding.

We make ourselves available to the RAs to discuss any aspects of this recommendation, including the comments received during the consultation process, should such discussion prove useful during the decision-making process. In addition, we consider it of extreme importance to highlight the urgent need for joint governance between the TSOs and RAs on strategic projects such as FASS.

Following a decision by the SEMC, an explanatory document will be published on the TSOs' websites, detailing the rationale behind any changes and other relevant information for interested parties.