DS3 System Services Market Ruleset

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1. Introduction and Background

On the 8th June 2018 the SEM Committee published their decision paper, SEM-18-032¹, on the DS3 System Services Market Ruleset following a consultation and a submission of the TSOs' recommendations paper² in March 2018. The Market Ruleset implements the SEM Committee Decision, as set out in SEM-14-108 and SEM-17-080, to determine a provider's system service payments based on the provider's market position, and kept whole where the TSO dispatches the provider from their market position. The DS3 System Services Market Ruleset sets out the rules that will be used for settlement with respect to a unit's market position for providers of DS3 System Services.

To provide clarity the TSOs are now publishing the Market Ruleset as directed by the SEM committee decision paper (June 2018) and applied since I-SEM go-live.

¹ SEM-18-032 SEMC Decision Paper on DS3 System Services Market Ruleset.pdf (semcommittee.com)

² https://www.eirgrid.ie/site-files/library/EirGrid/DS3-System-Services-Market-Ruleset-Recommendations-Paper-16052018.pdf

2. Market Ruleset

2.1. Overview

The DS3 System Services Market Ruleset can be broadly grouped into the following categories:

- Basis of Remuneration the granularity with regard to services and time periods over which availability³, and as such, remuneration, will be assessed.
- Treatment of Providing Units and Services the application of the remuneration of market or physical dispatch position with respect to different types of technology and the 14 System Services.
- Scalar Framework the correct application and calculation of scalars with respect to interactions with market versus physical dispatch considerations.
- Forced Outages the arrangement for circumstances where the providing unit themselves experience an issue with their apparatus such that they can no longer fulfil their position.
- Ongoing Monitoring the format of ongoing monitoring of this ruleset and the evaluation and evolution of it in the future.

2.2. Basis of Renumeration

Remuneration will be applied on a per System Service basis and per trading period basis.

2.3. Treatment of Providing Units and Services

Section 2.3.1 to 2.3.3 details the approach to remuneration, specifically with respect to the principle of paying the higher of market or physical dispatch position, for various types of potential service providers as well as for the 14 System Services themselves.

2.3.1. Treatment of Providing Units

Units not registered in I-SEM Energy Market - For units that do not participate in the I-SEM energy market, they will be remunerated based on a physical dispatch position.

Synchronous Compensators - Synchronous compensators will be remunerated based on a physical dispatch position.

Demand Side Units - DSUs will be remunerated based on a physical dispatch position.

Battery Storage Units - Battery Storage Providers will be remunerated based on the higher of market or physical dispatch position.

Wind Power & Solar Power - Wind power units and solar power units will be remunerated based on a physical dispatch position.

Interconnectors - Interconnectors will be remunerated based on a physical dispatch position.

Synchronous Generation - Synchronous units will be remunerated based on the higher of market or physical dispatch position.

³ A Providing Unit's availability refers to its capability to provide DS3 System Services to the Power System. A Providing Unit will be considered unavailable in the event that it is incapable of providing DS3 System Services to the Power System for any reason.

2.3.2. Treatment of Services

Reserve Products (FFR, POR, SOR, TOR1, TOR2, RRS, and RRD) & Synchronous Inertial Response (SIR) and Steady State Reactive Power (SSRP)

For FFR, POR, SOR, TOR1, TOR2, RRS, RRD, SIR and SSRP as appropriate for the technology type, units will be remunerated based on the higher of market or physical dispatch position.

Ramping Margin (RM1, RM3 and RM8), Fast Post Fault Active Power Recovery (FPFAPR) and Dynamic Reactive Response (DRR)

Regardless of technology type, for RM1, RM3, RM8, FPFAPR and DRR, units will be remunerated based on a physical dispatch position. with a provider's physical dispatch position where a TSO action increases their available service volume.

2.3.3. Summary of Recommended Ruleset for Providing Units and Services

	Reserve Services (FFR, POR, SOR, TOR1, TOR2, RRS, RRD)	Ramping Margin (RM1, RM3, RM8)	Synchronous Internal Response (SIR) and Steady State Reactive Power (SSRP)	Fast Post Fault Active Power Recovery (FPFAPR) and Dynamic Reactive Response (DRR)*
I-SEM registered synchronous generators and battery storage providers	Higher of Market or Physical Dispatch Position Paid	Physical dispatch position paid	Higher of Market or Physical Dispatch Position Paid	Physical dispatch position paid
I-SEM registered wind, solar, DSUs, I/Cs and Synchronous Compensators	Physical dispatch position paid	Physical dispatch position paid	Physical dispatch position paid	Physical dispatch position paid
Units not registered in I- SEM	Physical dispatch position paid	Physical dispatch position paid	Physical dispatch position paid	Physical dispatch position paid

Table 1: Recommended ruleset for types of providers and services

2.4. Scalar Framework

The temporal scarcity scalar will only be applied to payments associated with the market position of providers registered in the I-SEM energy market. For the avoidance of doubt, the temporal scarcity scalar will not apply to constrained on units registered in the I-SEM energy or to any additional payments associated with a provider's physical dispatch position where a TSO action increases their available service volume.

The temporal scarcity scalar will apply to the actual output of providers that are not registered in the I-SEM energy market, as they do not have a market position.

2.5. Forced Outages and Unavailability

Per the Service Provider's DS3 System Services Agreement, the Service Provider shall only receive payment for making available and providing the relevant DS3 System Service to the TSOs.⁴ If the DS3 System Service is not made available and/or cannot be provided for any reason, the Service Provider will not receive payment. Scenarios where the Service Provider will not be paid include, but are not limited to; where the Providing Unit is incapable of making DS3 System Services available, situations involving scheduled or unscheduled maintenance due to transmission system faults, forced outages or otherwise, circumstances of force majeure, disconnection, de-energisation or de-commissioning. For the avoidance of doubt, this ruleset does not purport to exhaustively specify the circumstances in which no payments will be made.

Where a Providing Unit is incapable of making available and providing DS3 System Services, Providing Units are expected to declare their unavailability immediately and update their market position to reflect this as soon as possible.

2.6. Ongoing Monitoring

The TSOs will monitor the effectiveness of the Ruleset on an ongoing basis. Any changes to the Ruleset will be subject to a consultation process and Regulatory Authority approval.

⁴ For the avoidance of doubt 'Outturn Availability' has no applicability to eligibility for payment of system services. Outturn Availability is related to 'Availability' of a unit as defined in the respective Grid Codes (i.e. Availability pertaining to the provision of Active Power (Energy)/Electricity to the system). Such Availability separate to the declaration of technical parameters which include ancillary services etc.