

DS3 System Services

Quarterly Update

July 2018



1. Introduction

1.1 Background

System Services is a key work stream within the DS3 Programme¹. The overall aim of the DS3 Programme is to implement the required changes to system policies, tools and performance to support the realisation of 75% System Non-Synchronous Penetration (SNSP) on the island of Ireland by 2020.

In December 2014, the SEM Committee published a decision paper on the high-level design for the procurement of DS3 System Services (SEM-14-108) (“the Decision Paper”). The Decision Paper also set out the SEM Committee’s emerging thinking on many aspects of the detailed design and implementation of the new arrangements. Some of the key changes from this decision and the transition from the previous Harmonised Ancillary Services (HAS) arrangements include:

- An increase in the number of services procured from 7 to 14 services;
- An increase in the amount payable for the services from €60 million to €235 million by 2020; and
- Movement from bilateral contracts with service providers to a new more transparent procurement process, consisting of either a Regulated Tariff arrangement or an Auction depending on the level of competition for each service.

Since the Decision Paper was published, EirGrid and SONI (the TSOs) and Regulatory Authorities have worked to implement many aspects of the SEM Committee’s high-level design including the successful development and implementation of the DS3 System Services Interim Arrangements in October 2016.

Notwithstanding the successful implementation of the Interim Arrangements, a number of key issues have emerged which impact the design of the DS3 System Services programme of work as envisaged by the SEM Committee in its Decision Paper. In response, the SEM Committee published the DS3 System Services Future Programme Approach Information Paper on 23 March 2017², which outlines the emerging thinking of the SEM Committee for System Services going forward.

¹ [DS3 Programme - Delivering a Secure, Sustainable Electricity System](#)

² [DS3 System Services Future Programme Approach – Information Paper](#)

1.2 Purpose of this Paper

This paper presents an update on the status of delivery of the Enduring Arrangements, provides an overview of the key milestones, which have been delivered, and sets out key dates that will underpin development of the detailed programme plan.

This document is the seventh in a series of updates since the publication of the DS3 System Services Project Plan³ in May 2015:

- DS3 System Services Quarterly Update – August 2017¹⁴
- DS3 System Services Quarterly Update – March 2017⁴
- DS3 System Services Quarterly Update – December 2016⁵
- DS3 System Services Quarterly Update – September 2016⁶
- DS3 System Services Project Plan Quarterly Update – December 2015⁷
- DS3 System Services Project Plan Quarterly Update – October 2015⁸

³ <http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Project-Plan.pdf>

⁴ http://www.eirgridgroup.com/site-files/library/EirGrid/Quarterly_Update_March_2017.pdf

⁵ http://www.eirgridgroup.com/site-files/library/EirGrid/Quarterly_Update_Dec2016.pdf

⁶ http://www.eirgridgroup.com/site-files/library/EirGrid/160908-Quarterly-Update_Sept_FINAL.pdf

⁷ <http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Dec-15-Quarterly-Update.pdf>

⁸ <http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-System-Services-Quarterly-Update-FINAL.pdf>

¹⁴ http://www.eirgridgroup.com/site-files/library/EirGrid/Quarterly_Update_Aug2017.pdf

2. TSOs - Key Updates

The TSOs have been developing a revised plan for the delivery of DS3 System Services with key industry dates outlined in Sections 3 and 4 of this document. Key programme updates on current work streams including Regulated Arrangements Procurement (11 Services), Regulated Arrangements Procurement (3 New Services), and Volume Capped Procurement (Competitive Arrangements) are provided below.

2.1 DS3 System Services Industry Events

In October 2017, a DS3 System Services Industry Workshop was held in Dundalk. The forum included an update from the RA. While EirGrid presented on regulated tariffs, scalar design, contracts & procurement process, along with other presentations on the Qualification Trials Process (QtP) and Testing and Compliance.

The presentations from the DS3 System Services Industry Workshop are available on our website [here](#).

A DS3 System Services Regulated Arrangements for Volume Uncapped Phase 1 Bidders conference was held on the 19 December 2017. The workshop was well received by stakeholders and included a number of constructive discussions throughout the day, with over 90 people attending the event in Dundalk.

The conference covered the technical and commercial aspects of the procurement process and DS3 System Services contracts. This was followed by the TSO presenting on testing procedures, and a session on performance monitoring of Fast Acting Services.

The presentations from this conference are available on our website [here](#).

A DS3 Advisory Council took place in EirGrid office, Dublin on the 24 of January 2018 and a System Services update was given to the members of the Advisory Council.

A Bidders Conference for the Volume Uncapped Phase 2 Volume Uncapped tender was held on the 18 April 2018 in Dundalk, with 73 people in attendance. The conference gave an overview of the Volume Uncapped Phase 2 Procurement, the Tender Questionnaire and FFR Testing. The future procurement requirements of the two

remaining new services (Regulated Arrangement Procurement) DRR and FPFAPR were also presented.

The presentation slides from the bidder's conference are available on our website [here](#).

To facilitate industry engagement on the Volume Capped consultation, an Industry Forum was held on the 25 April 2018 in Dundalk, with 83 people in attendance. The event covered the aims and drivers of the consultation and key topics such as product bundling, application of scalars and I-SEM interactions.

The presentation slides from the Industry Forum are available on our website [here](#).

EirGrid and SONI hosted 13 bilateral meeting with interested parties on the DS3 System Services Volume Capped procurement process consultation before the deadline closed on the 11 May 2018.

The DS3 team supported the EirGrid/SONI Storage Technology Workshop that was held on the 15 May 2018 following substantial interest in developments resulting from the Volume Capped Procurement Consultation. There were over 130 industry attendees on the day. The Battery Energy Storage working group will now discuss the outcomes from the workshop in more detail and the next steps in the process.

The presentation slides from Storage Technology Workshop are available on our website [here](#).

A DS3 Advisory Council took place in SONI office, Belfast on the 23 of May 2018 and a System Services update was given to the members of the Advisory Council.

2.2 Regulated Arrangements Procurement (11 Services)

The OJEU Notice for DS3 System Services Regulated Arrangements and associated decision papers, contracts and procurement documents were published on Tuesday, 12 December 2017.

Queries on the DS3 System Services Regulated Arrangements procurement process closed on Monday, 8 January 2018. 101 queries were received; EirGrid and SONI have responded to all queries, which are available on the eTenders website.

The 8 February 2018 was the deadline for submitting tenders; there was a significant increase on the amount of Interim Arrangements submitted to EirGrid/SONI. The tender evaluation tender process for Phase 1 was completed on schedule. Contracts have been issued to all successful tenderers.

2.2.1 DS3 System Services Proven Technology List

The [DS3 System Services Proven Technologies List](#) included as part of the DS3 System Services Regulated Arrangements tender documentation sets out the type of technologies that are considered proven by the TSO's at this time. The list does not indicate individual manufacturer technology considered to be proven to provide DS3 System Services, and the TSOs will not be approving individual manufacturer equipment as a "DS3 Service Approved" technology.

The designation of a technology as "proven" does not entitle any individual service provider to a DS3 System Services contract. Each individual service provider must pass the compliance assessment and meet all service provision standards in terms of performance. While a technology may be considered proven for multiple services, this does not mean that it can provide all of these services at the same time. Some services can only be provided in certain operational modes. Finally, for some types of service provider (e.g. windfarms, pumped hydro), the ability of the service provider is dependent on the underlying technology used. The [DS3 Systems Services New Signals Requirements](#) and [DS3 Performance Measurement Device Standards for Fast Acting Services](#) outline the minimum requirements for service providers.

2.2.2 Short Term Active Response (STAR) scheme

As noted in SEM-17-01 DS3 System Services Future Programme Approach, the Interim Arrangements Framework Agreements were extended until the 30 April 2018 after which time the DS3 System Services Regulated Arrangements came into effect. EirGrid had issued extension letters to all service providers who were members of the Interim Arrangements Framework.

2.3 Regulated Arrangements Procurement (3 New Services)

One new Fast Acting Service, FFR will be procured as part of the Regulated Arrangements Procurement Phase 2 Volume Uncapped tender. The deadline for receipt of clarifications on Phase 2 Volume Uncapped tender was the 27 April 2018. The deadline for responses for the tender (FFR service) was the 29 May 2018 with Phase 2 contracts scheduled to execute on 1 September 2018.

It is intended that the other new Fast Acting Services, FPFAPR and DRR will be procured at a future procurement gate because, as per the contractual arrangements, both services will be paid for only when SNSP is above 70%. An overview of the future procurement requirements for DRR and FPFAPR were presented at the Bidders Conference for Phase 2 on the 18 April 2018. These are in the process of being further developed.

As mentioned above, the presentation slides on DRR and FPFAPR are available on our website [here](#).

A full list of Regulated Arrangements Procurement milestones are listed below.

2.4 Volume Capped Procurement (Competitive Arrangements)

On the 29 March 2018, the DS3 System Services Volume Capped procurement process consultation was published. The consultation closed on the 11 May 2018 and 24 responses were received. The procurement exercise aimed to put in place contractual arrangements which will enable new service providers to build in Ireland and Northern Ireland, with the predominant interest so far coming from potential battery storage providers.

The Volume Capped procurement process has not yet concluded. Coordination is ongoing between the Regulatory Authorities and the TSOs to deliver this as soon as possible.

The timelines of the Volume Capped procurement process will need to align with the decisions of the forthcoming SEM Committee Decision Paper and therefore will move from those previously communicated. A new timeline for the procurement process will be published in due course.

2.5 Market Ruleset

The TSOs published the [DS3 System Services Market Ruleset recommendation paper](#) on the 31st May 2018, subsequent to a consultation which closed in April 2018. The SEM Committee published their [decision paper](#) on the 8 June 2018.

The ruleset provides clarity on the determination of availability and therefore remuneration for contracted DS3 System Services Units under I-SEM. It should be noted that this Market Ruleset will become effective from the date of I-SEM go-live, with resettlement back to this date taking place no later than June 2019. Ahead of I-SEM go-live, remuneration will continue to be based on physical dispatch position only.

2.6 Qualification Trial Process (QtP)

In November, EirGrid and SONI published a report on the Outcomes and Learnings from the [DS3 System Services Qualification Trials Process](#). Overall, the DS3 System Services Qualification Trials 2016 – 2017 achieved the two core objectives set out. The TSOs have identified twenty six findings. These findings informed the TSOs' decisions relating to System Services product design, procurement and contractual arrangements, and other TSO systems and processes. It is a finding of the 2017 QtP that all technologies participating in the POR and FFR trials should be considered as proven technologies for these Services going forward. It is also a finding of the 2017 QTP that all technologies participating in the DRR and FPFAPR trials should not yet be considered as proven for the provision of these Services. However, the TSOs propose that alternative approaches will be undertaken to further understand the provision of DRR and FPFAPR in order to determine how various technologies can be deemed proven for these Services in advance of the Central Procurement Process.

The next steps following the trials will include:

1. Capturing the learnings from the trial and inputting them into DS3 System Services Procurement and Contractual arrangements for future procurement processes.

2. The design of the Qualification Trials for 2018 will commence based on the learnings and feedback obtained from 2017. Feed in of learnings to key work streams such as Procurement and Product Design.
3. New technology trials are being proposed for the 2018 QtP. The design process will commence in May 2018, following the completion of the DS3 System Services procurement.
4. A proposal for the regulator is currently being drafted and will be presented to the regulators in the coming weeks.

Performance Monitoring

A presentation on the process for Performance Monitoring of different DS3 system services was given at DS3 bidder's conference, in December 2017.

A number of participants expressed an interest in the working group for Phase 1 of the Enhanced Performance Monitoring System and this will commence in June for a period of 3-6 months depending on the number of events that occur.

SONI and EirGrid operating process has now been harmonised and a single tool will be used for performance assessments for POR, SOR and TOR1 products for conventional units and interconnectors. Each DS3 System Service Providers will also receive a report detailing the expected and achieved responses to each event.

Following queries raised by industry a review of the DS3 protocol document is underway, with a specific focus on the definition of a frequency event and how it impacts the performance assessment carried out for the different services.

Work has commenced on performance monitoring for FFR services in advance of 1st September 2018 deadline.

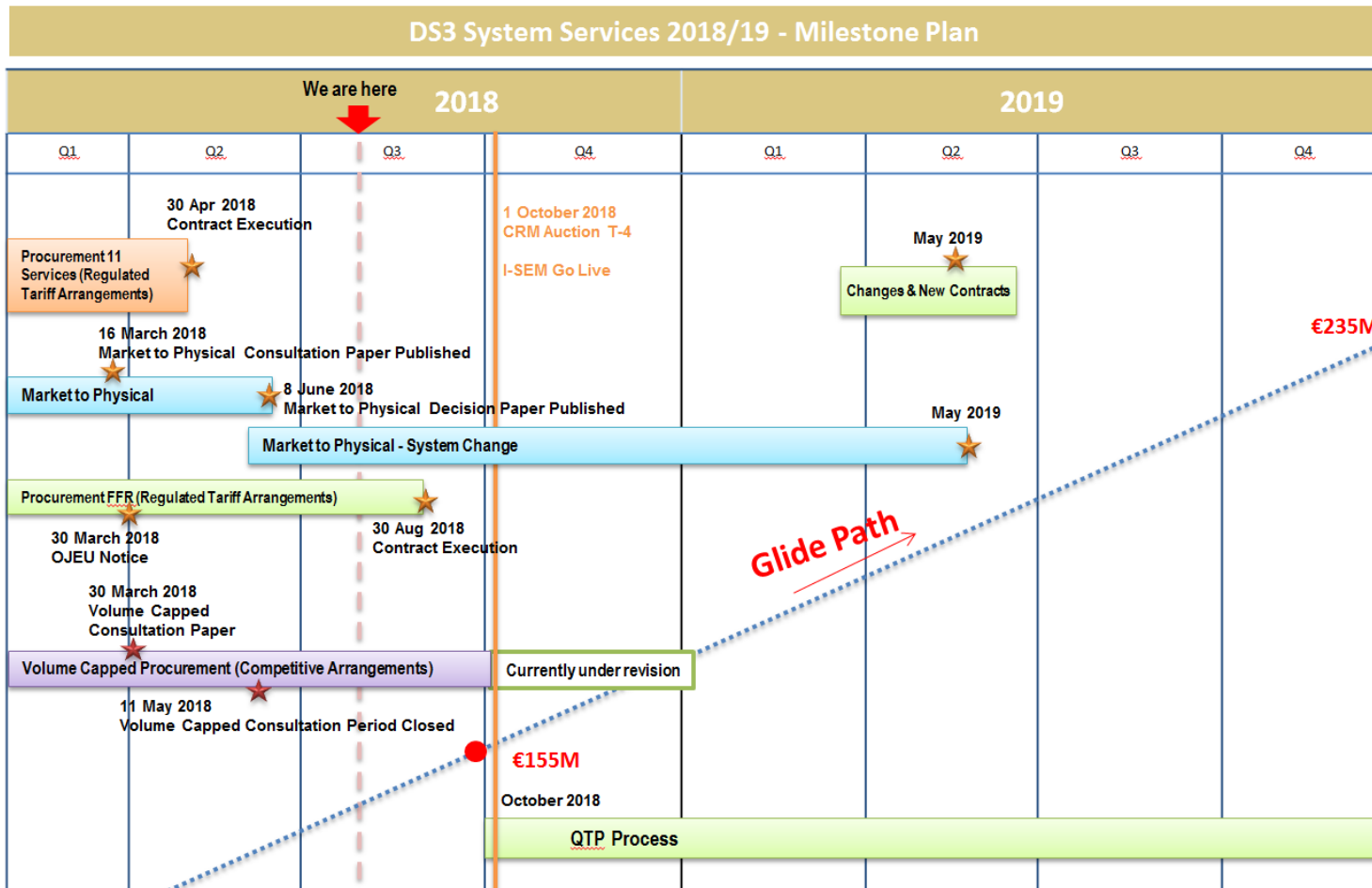
3. Stakeholder Engagement / Key Dates

Date	Item
8 February 2018	Regulated Arrangements Procurement (11 Services) tender Submission deadline.
15 March 2018	Publication of the Market Ruleset consultation paper.
29 March 2018	Publication of the Volume Capped Procurement (Competitive Arrangements) Consultation Paper.
5 April 2018	Published Regulated Arrangements Procurement (1 New Services) Contracts and OJEU Notice.
11 April 2018	Market Ruleset Consultation Closed.
18 April 2018	Bidders Conference for Regulated Arrangements Procurement (1 New Services) and Volume Uncapped Phase 2 Contracts.
25 April 2018	Stakeholder event on the Volume Capped Consultation.
30 April 2018	Contract Execution for Regulated Arrangements Procurement (11 Services).
11 May 2018	Volume Capped Procurement (Competitive Arrangements) Consultation Closed.
25 May 2018	Deadline for signing and returning Regulated Arrangements Procurement (11 Services) contracts.
29 May 2018	Volume Uncapped Phase 2 Contracts Tender closes for RFP.
31 May 2018	Publication of Market Ruleset recommendation paper.
31 August 2018	Contract Execution for Regulated Arrangements Procurement (1 New Services).
TBC	Publication of Volume Capped Procurement decision paper.
TBC	Publication OJEU for Volume Capped Procurement (Competitive Arrangements).
TBC	Submission of tender deadline for Volume Capped Procurement (Competitive Arrangements).

4. Published Documents

Date	Item
26 September 2017	<u>DS3 System Services Regulated Arrangements Contract Consultation Paper</u>
26 September 2017	<u>Draft Ireland Regulated Arrangement Agreement</u>
26 September 2017	<u>Draft Northern Ireland Regulated Arrangement Agreement</u>
12 October 2017	<u>DS3 System Services Industry Workshop (Dundalk)</u>
23 October 2017	<u>DS3 System Services Tariffs for Regulated Arrangements Recommendations Paper</u>
23 October 2017	<u>DS3 System Services Scalar Design Recommendations Paper</u>
24 October 2017	<u>DS3 System Services Tariffs and Scalars – SEMC Committee Decision</u>
6 November 2017	<u>DS3 System Services Qualification Trials Process Outcomes and Learnings 2017</u>
12 December 2017	<u>DS3 System Services Regulated Arrangement Contracts Recommendations Paper</u>
12 December 2017	<u>Ireland DS3 System Services Regulated Arrangement Contract</u>
12 December 2017	<u>DS3 System Services Agreement (Northern Ireland)</u>
12 December 2017	<u>DS3 System Services Agreement (Northern Ireland – Intermediary version)</u>
12 December 2017	<u>DS3 System Services Protocol document</u>
12 December 2017	<u>DS3 System Services Proven Technologies List</u>
12 December 2017	<u>DS3 Performance Measurement Device Standards for Fast Acting Services</u>
12 December 2017	<u>Testing and Compliance documents.</u>
17 January 2018	<u>SONI – Marked Up DS3 System Services Agreement (Regulated Arrangements)</u>
17 January 2018	<u>EirGrid – Marked Up DS3 System Services Agreement (Regulated Arrangements)</u>
15 March 2018	<u>DS3 System Services Market Ruleset Consultation</u>
29 March 2018	<u>DS3 System Services Volume Capped Procurement Process Consultation</u>
31 May 2018	<u>DS3 System Services Market-Ruleset Recommendations Paper</u>

5. Revised DS3 System Services Project Plan



6. Next Steps

The Regulatory Authorities initial investigative work on enduring competitive procurement arrangements for system services started in Q1 2017 with the detailed design phase anticipated to start in Q3 2018.

