

# Future Arrangements for System Services

DS3 System Services Tariffs to  
FASS ('The Gap') Consultation  
Paper

January 2025



# Executive Summary

The current DS3 (Delivering a Secure, Sustainable Electricity System) System Services Regulated Arrangements were designed to facilitate new and existing technologies and participants to provide the system services<sup>1</sup> required to maintain a resilient power system with 40% average of electrical demand coming from renewable sources underpinned by 75% System Non-Synchronous Penetration (SNSP). The current DS3 System Services Regulated Arrangements (hereafter referred to as the ‘DS3 Regulated Arrangements’) became operational in 2016 and have been one of the key initiatives for facilitating the delivery of the 40% renewable target by 2020.

To ensure sufficient provision of the required operational services to deliver 2030 Renewable Energy Source (RES) targets and to align with EU requirements, the SEM Committee (SEMC) outlined in its High-Level Design Decision on the System Services Future Arrangements<sup>2</sup> the need to move to a day-ahead auction-based procurement of appropriate system services.

The DS3 Regulated Arrangements are set to expire on 30<sup>th</sup> April 2026, eight months before the planned go-live of the enduring Day Ahead System Services Auction (DASSA) and the future arrangements to procure non-reserve services<sup>3</sup> in December 2026. The TSOs require a mechanism to continue to procure the correct volume and quantity of services to ensure that the system can be securely managed with a high level of renewables during this period.

The TSOs note the SEMC’s position, as set out in the SSFA Phase III: Detailed Design & Implementation Decision paper (SEM-23-103)<sup>4</sup>, that a competitive procurement framework should be utilised to procure system services post the termination of DS3 Regulated Arrangements in April 2026. Over the course of the past two years, the TSOs have worked alongside the RAs to explore a broad number of candidate options to explore the feasibility of delivering an accelerated introduction of competitive arrangements ahead of April 2026.

Within this consultation paper, the TSOs set out four shortlisted options to address the period between the end of the current DS3 Regulated Arrangements and the go-live of the DASSA (including the TSOs’ recommended option) from the large number of options have been investigated to date:

1. **Layered Procurement Framework:** Introducing LPF arrangements to procure system services via a monthly or quarterly auction.
2. **Market-based Volume Capped Contracts (without an availability requirement):** Establishing fixed-term contracts with no availability obligations.
3. **Market-based Volume Capped Contracts (with an availability requirement):** Establishing fixed-term contracts with availability obligations.
4. **Extension of the DS3 Regulated Arrangements:** to extend tariffs on all products under DS3 Regulated Arrangements.

The TSOs have developed the critical path implementation timelines for each option to assess whether the arrangements could be delivered ahead of April 2026. The TSOs consider the implementation timelines to be the binding factor for delivery for ‘the gap’ solution, i.e. that to be considered viable the option chosen must be deliverable within the required timeframe without impact to the DASSA Go Live date.

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<sup>1</sup> System services are products, other than energy and capacity, that are required for the continuous, secure operation of the power system. System services are a subset of ancillary services as defined in the [Electricity Directive \(EU/2019/944\)](#).

<sup>2</sup> [SEM-22-012 - System Services Future Arrangements High Level Design Decision Paper.pdf \(semcommittee.com\)](#)

<sup>3</sup> The design of the future arrangements for non-reserve services will be subject to consultation in 2025.

<sup>4</sup> [SEM-23-103 - SSFA Phase III - Phased Implementation Roadmap - Decision Paper.pdf](#)

Having carefully reviewed all options, this investigation concluded that any form of competitive mechanism would require an effort similar to or larger to the LPF quarterly auctions envisaged under SEM-23-043<sup>5</sup> and could not be delivered without a material delay to the planned December 2026 Go Live date. A summary of these considerations can be found in the below table.

No.	Option	Impact to DASSA Go Live	Estimated Time to Implement	Additional IT Changes
1	Layered Procurement Framework	Yes	c. 21 Months	Yes
2	Market-based Volume Capped Contracts (without an availability requirement)	Yes	c. 26 Months	Yes
3	Market-based Volume Capped Contracts (with an availability requirement)	Yes	c. 28 Months	Yes
4	Extension of the DS3 Regulated Arrangements	No	c. 3 Months	No

Therefore, the TSOs’ recommended option is to extend the current DS3 Regulated Arrangements until such time that the DASSA and future non-reserve arrangements go live. The rationale for this proposal is set out within this consultation paper.

Further information on the above options, including estimated timelines and considerations for implementation, can be found in the relevant sections. Through this consultation, we are seeking stakeholders’ views on the TSOs’ proposal to extend the DS3 Regulated Arrangements. The feedback received will then be used to inform a recommendation paper that will be submitted to the SEMC for its consideration and decision.

Responses to the question set out in this paper should be submitted through either the EirGrid or SONI consultation portals before 25<sup>th</sup> March 2025.

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<sup>5</sup> [SEM-23-043 System Services Future Arrangements - Phase III: Detailed Design and Implementation - Phased Implementation Roadmap for the System Services High Level Design - Consultation Paper \(semcommittee.com\)](#)

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# 1 Introduction & Context

## 1.1 Background

EirGrid plc is the licenced electricity Transmission System Operator (TSO) in Ireland, and SONI Ltd is the licensed TSO in Northern Ireland. It is our job to manage the electricity supply and the flow of power from generators to consumers. Electricity is generated from gas, coal, and renewable sources (such as wind, solar and hydro power) at sites across the island. The high voltage transmission network then transports electricity to high demand centres, such as cities, towns, and industrial sites.

EirGrid and SONI have a responsibility to facilitate connections to the power system, including increased levels of renewable sources to generate on the power system, while continuing to ensure that the system operates securely and efficiently. The respective TSO licences include a requirement for the relevant TSO to contract for the provision of System Services.

The DS3 Regulated Arrangements were designed to facilitate new and existing technologies and participants to provide the System Services required to maintain a resilient power system up to 75% System Non-Synchronous Penetration (SNSP). As part of our Shaping Our Electricity Future Roadmap, the procurement of new system service capabilities from low carbon sources has been identified as an essential action to address the technical and operational challenges arising from the need to operate with SNSP levels up to 95% by 2030, which underpins achieving the renewable targets in Ireland and Northern Ireland.

## 1.2 System Services Future Arrangements

The System Services Future Arrangements (SSFA, or commonly known as ‘FASS’) Programme was officially launched by the SEMC in July 2020 with the publication of a Scoping Paper (SEM-20-044)<sup>6</sup> for public consultation.

As set out in the SEMC’s SSFA Decision Paper 1 (SEM-21-021)<sup>7</sup>, the objective of the programme is:

*“to deliver a competitive framework for the procurement of system services, that ensures secure operation of the electricity system with higher levels of non-synchronous generation.”*

In April 2022, the SEMC published the SSFA High-Level Design (HLD) Decision (SEM-22-012). The HLD set out a framework for the competitive procurement of System Services, consisting of the following:

1. **Daily Auction Framework** for the procurement of some of the System Services through a daily spot market.
2. **Layered Procurement Framework (LPF)** comprising contracts with a term of more than a day and up to 12 months.
3. The existing **Fixed Contract Framework** to continue to be used to remove barriers to entry for new technologies with the use of more long-term contracts and ensure sufficient volumes of System Services, as required.

In December 2023, the SEMC published its SSFA Phase III: Detailed Design & Implementation Decision paper (SEM-23-103), in which it decided that the commercial arrangements as described in the HLD should be progressed by the TSOs.

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<sup>6</sup> [SEM-20-044 System services future arrangements scoping paper.pdf](#)

<sup>7</sup> [SEM-21-021 System Services Future Arrangements - Decision Paper 1.pdf](#)

## 1.3 Transition from DS3 System Services Tariffs to DASSA

The DS3 Regulated Arrangements comprise the procurement mechanisms, standard contractual provisions, system service schedules, and payments and incentives currently in place for 14 system services (12 of which are currently procured), and is commonly understood by the RAs, TSOs and service providers.

The SEM Committee (SEMC) published a Decision Paper (SEM-23-103) in December 2023 in which it decided to extend the DS3 Regulated Arrangements by a period of 24 months. The TSOs implemented the SEMC decision, meaning the revised expiration date for these contracts is currently 30th April 2026. The DASSA and the future arrangements for the procurement of non-reserve services are planned to go live in December 2026. This means that there is a gap of approximately eight-months between the end of the current arrangements and the go-live of the new arrangements. A solution is required to ensure that the correct volume and quality of system services will continue to be procured during this period, to ensure that the system can be securely managed with a high level of renewables.

This consultation paper presents the options investigated by the TSOs alongside the RAs for procuring system services during ‘the gap’ and the TSOs’ recommendation in light of this work. The TSOs welcome feedback from stakeholders on that recommendation. This paper builds upon prior work, including stakeholder consultations and regulatory submissions, to address the need for system services continuity.

The proposals in this paper draw from:

- The November 2022 DS3 System Services Tariffs Recommendations Paper<sup>8</sup>, which ultimately recommended maintaining DS3 tariff rates pending further review.
- The February 2023 SEMC decision letter<sup>9</sup>, which supported the TSOs' recommendation to maintain tariff rates.
- The December 2023 SEM-23-103: SSFA Phase III: Phased Implementation Roadmap for the System Services High-Level Design, which included a second fixed-term extension of the DS3 contracts until April 2026 and a tariff review to be held in 2024, as noted above.
- The TSOs’ July 2024 Layered Procurement Framework (LPF) Assessment, which assessed various approaches to system services procurement prior to DASSA go-live.
- The September 2024 SEM-24-065 System Services Tariff Review Decision Paper<sup>10</sup>, which requested that the TSOs reduce the Temporal Scarcity Scalar (TSS) starting in October 2024 and carry out a Risk Assessment on ceasing procurement of certain services beyond Gate 12<sup>11</sup>.
- Responses received to the Day-Ahead System Services Auction (DASSA) Design Consultation<sup>12</sup> and the DS3 System Services Tariffs Consultation<sup>13</sup> which called for an extension to the current DS3 Regulated Arrangements until the introduction of FASS.

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<sup>8</sup> [DS3-System-Services-Recommendations-Paper-website.pdf](#)

<sup>9</sup> [SEMC Decision Letter to TSOs relating to System Services Tariff Rate Review Decision.PDF](#)

<sup>10</sup> [SEM-24-065 DS3 System Services Tariff Review Decision Paper.pdf](#)

<sup>11</sup> In their [Recommendations Paper](#), the TSOs recommended that contracting for the fast-acting services (FFR - T02) should pause after Gate 11. However, the SEMC rejected this recommendation, instead requesting that the TSOs conduct a risk assessment around the option to close the procurement of these services after Gate 11. Further discussion on the risk assessment is contained in section 3.2.1.

<sup>12</sup> <https://consult.eirgrid.ie/en/node/3029/submissions> & [SOEF Markets - Future Arrangements for System Services - DASSA Consultation Paper - March 2024 - Submissions | SONI Consultation Portal](#)

<sup>13</sup> <https://cms.eirgrid.ie/sites/default/files/publications/DS3-System-Services-Tariffs-Consultation-27-March-2024.pdf> & [DS3-System-Services-Tariffs-Consultation-27-March-2024.pdf](#)

This consultation is seeking industry’s view on extending the DS3 System Services Regulated Arrangements between April 2026 and the implementation of FASS in line with the TSOs’ recommendation, which will be subject to approval by the SEMC.

## 1.4 Phased Implementation Roadmap

In SEM-23-103, the SEMC specified that the FASS Programme should progress by reference to workstreams set out in a Phased Implementation Roadmap (PIR). The latest version of this PIR was published by the TSOs in September 2024<sup>14</sup>, and Level 1 of the roadmap is reproduced in Figure 1, showing the workstreams and projected timelines for this project.

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<sup>14</sup> [FASS-TSOs-PIR-September-2024-EirGrid.pdf](#) & [SONI - FASS Programme PIR V2.0](#)



# Phased Implementation Roadmap - Level 1 V2.0

**Legend**

- TSOs Led Activity
- SEMC Decision
- DS3 Activity
- RAs Led Activity
- RA TSOs Activity
- New Activity

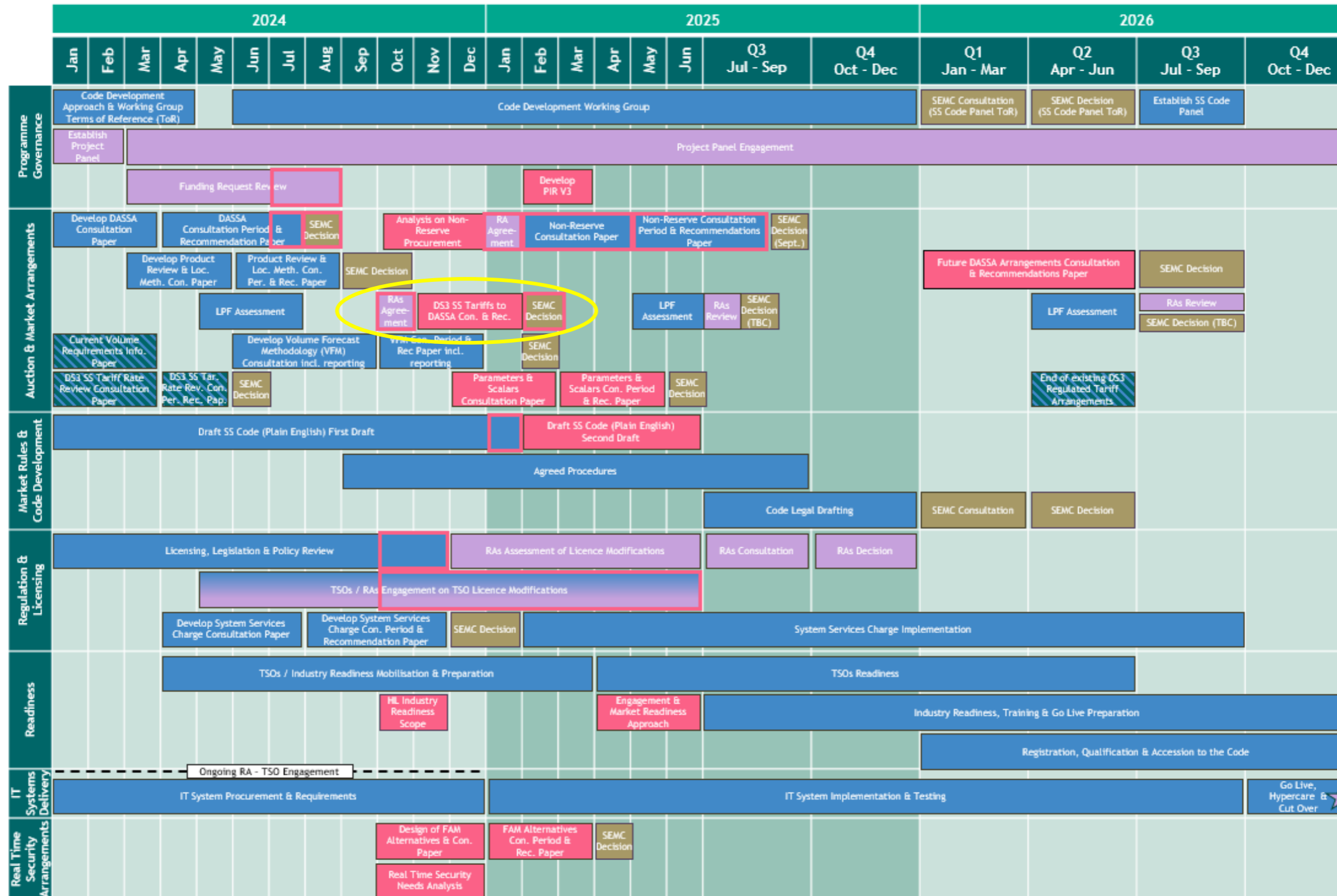


Figure 1: Phased Implementation Roadmap - Level 1

## 1.5 Structure of This Paper

This consultation paper is structured as follows: Chapter 2 describes the current procurement mechanisms for system services. A solution to ensure continued procurement of system services must be in place before the expiry of the existing procurement arrangements. The options which have been investigated for this are discussed in Chapter 3. In Chapter 4 we outline the Next Steps related to the proposal outlined in this consultation paper. Finally in Chapter 5 we note the specific question which is being consulted upon.

## 2 Current Procurement Mechanisms

Under the DS3 Regulated (also known as Volume Uncapped) Arrangements, service providers may tender and contract for the provision of System Services through a Qualification System. The Qualification System enables interested parties to submit a tender and subsequently qualify for award of a contract for the provision of services. Under the Qualification System, interested parties must demonstrate the capability to provide a service, via an established testing process, in order to be eligible to be contracted for the provision of the service.

A gate process associated with the Qualification System allows for prospective service providers to tender and contract for the provision of system services, or for existing providers to amend their contracted services or capabilities, at periodic intervals. To date, contracts have been awarded every six months since the Qualification System was established in May 2018, with one exception in 2021, Gate 4B<sup>15</sup>.

Under the DS3 Regulated Arrangements, service providers are paid based on their real time availability to provide a given service in each trading period. The payment rates for each service are set out in the DS3 System Services Statement of Payments.<sup>16</sup> A scaling factor, which is effectively a multiplier against the payment rate, is, depending on the service, comprised of one or more scalar types. Scalars include the Product Scalar, Locational Scalar, Temporal Scarcity Scalar (TSS), Continuous Scalar, Fast Response Scalar, Wattless Scalar and Performance Scalar. All scalars are defined in the system services Agreement. The methodology for calculating Performance Scalars is described in the DS3 Protocol<sup>17</sup>, together with the values of the TSS.

In addition to DS3 Regulated Arrangements (Volume Uncapped), there are also DS3 Volume Capped arrangements that were put in place to ensure the provision of high availability reserve services to the system<sup>18</sup>. At present, Volume Capped arrangements are in place for energy storage whose requirements are to be available for 97% of the time, calculated on a rolling basis looking at the previous 12 months availability data. The expenditure associated with these arrangements is only a small fraction of that associated with the Volume Uncapped Arrangements.

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<sup>15</sup> <https://www.eirgrid.ie/ds3-programme-delivering-secure-sustainable-electricity-system>

<sup>16</sup> [EirGrid-DS3-System-Services-Statement-of-Payments-December-2021.pdf](#) & [SONI-DS3-SS-Statement-of-Payments-2021-22.pdf](#)

<sup>17</sup> [DS3 System Services Protocol v4.1 - Regulated Arrangements | EirGrid & DS3-SS-Protocol-v4.1.pdf](#)

<sup>18</sup> [SEM-17-080 DS3 SS SEMC Decision Paper Regulated Arrangements Tariffs and Scalars Final version.pdf](#)

# 3 Procurement Options for ‘The Gap’

## 3.1 Assessment Criteria

To address the gap in procurement arrangements between the end of the DS3 Regulated Arrangements and the go-live of the future arrangements for system services, the TSOs have assessed multiple options, with four shortlisted options presented in this paper:

1. Other LPF Mechanism (i.e.: monthly / quarterly auction)
2. Market-based volume capped contracts (no availability requirement)
3. Market-based volume capped contracts (availability requirement)
4. Extension of the existing DS3 Regulated Arrangements

The assessment criteria used, and noted below, were jointly developed by the TSOs and RAs as part of the Real Time Security Arrangements Workstream<sup>19</sup>. The same framework has been applied in analysing these options for ‘the gap’, ensuring that the evaluation is comprehensive and aligned with the overarching objectives for system services. The assessment criteria are:

Criteria	Description
<b>Consumer</b>	The mechanism aims to deliver consumer value by keeping prices market-based and ensuring appropriate alignment between the markets in energy, capacity, and System Services, along with all other relevant revenue streams, to ensure an efficient overall outcome for consumers.
<b>System Needs</b>	The mechanism aims to operate in a manner that ensures that the needs of the system (including security of supply) are met.
<b>Compliance</b>	The mechanism aims to comply with relevant legislation, including the Directive on common rules for the internal market for electricity (EU/2019/944) <sup>20</sup> and the Regulation on the internal market for electricity (EU/2019/943) <sup>21</sup> as part of the Clean Energy Package (CEP) and Electricity Balancing Guideline (EBGL) Network Code 2017/2195 <sup>22</sup> .
<b>Enabling the Energy Transition</b>	The mechanism aims to be cognisant of policy decisions in Ireland, Northern Ireland and the UK, and will enable the energy transition in so far as possible.
<b>Deliverability</b>	The TSOs have confidence that the mechanism can be delivered ahead of April 2026.
<b>Investors</b>	The arrangements will be clear in terms of how auctions will operate, in order to give a reasonable degree of clarity to developers in terms of financing and shall be transparent in regard to making information accessible and simplistic to understand.

The TSOs developed timelines for each option and outlined the associated steps in the ‘Implementation Requirements’ sections below. These timelines are based on the TSOs’ experience in delivering fixed-term contracts, such as the DS3 Volume Capped and Low Carbon Inertia Services (LCIS), in addition to other major market development programmes.

<sup>19</sup> Added as a new workstream under [FASS-TSOs-PIR-September-2024-EirGrid.pdf](#) & [SONI - FASS Programme PIR V2.0](#)

<sup>20</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2019.158.01.0125.01.ENG&toc=OJ:L:2019:158:TOC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.158.01.0125.01.ENG&toc=OJ:L:2019:158:TOC)

<sup>21</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0943>

<sup>22</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2195>

Please note that there are several overarching assumptions applicable to the timelines set out for options 1, 2 and 3. It is assumed that the TSOs are fully resourced and as such they represent a ‘best-case’ scenario. However, in practice, each of these options would necessitate delays to the DASSA go live as key SMEs would need to be reassigned to the respective option’s workstream. Considering the scale of option 1 (LPF via monthly or quarterly auction), the timelines presented assume that the TSOs are 100% dedicated to the implementation of the transitional arrangements presented, with implementation of the DASSA to follow. Whereas for options 2 and 3, parallel delivery in so far as possible alongside the DASSA implementation period has been assumed, albeit still with delays to the planned DASSA Go Live.

The following sections provide a detailed analysis of each proposed option highlighting their key features, option analysis based on the criteria, implementation requirements and key considerations.

## 3.2 Option 1: Layered Procurement Framework (LPF)

The first option evaluated was the use of the LPF to form transitional arrangements for ‘the gap’ period. As per section 6.12 of the System Services Future Arrangements High Level Design Decision Paper (SEM-22-012), the intention of the LPF is to provide a means of procuring System Services ahead of the short-term energy and balancing capacity markets, as provided for under Regulation (EU) 2019/943. As per the HLD, the SEMC has noted that “this will facilitate additional revenue certainty for providers and volume certainty for the TSO. It will also ensure that services can be procured, where procuring a portion of the volume requirement ahead of the short-term markets or for a longer duration would improve economic efficiency or ensure security of supply.”

The LPF applies to the procurement of System Services for periods greater than one day ahead, up to 12 months ahead of provision of the capacity.<sup>23</sup> Beyond 12 months the Fixed Contract framework will apply, and the daily auction will apply to day-ahead procurement. This option investigates the introduction of the LPF via a monthly or quarterly auction.

The TSOs were first requested to investigate the implementation of the LPF by the RAs in January 2023. The TSOs subsequently assisted to the RAs to build out the LPF quarterly auction design (as presented in SEM-23-043) until the SEMC SSFA Phase III decision (SEM-23-103) decided “not to accelerate or prescribe parameters for the usage of the Layered Procurement Framework, as previously proposed, at this time”. The TSOs further conducted an Annual LPF Assessment in July 2024 at the request of the RAs. The analysis of this option draws from our experience of developing this quarterly auction design and the 2024 Annual LPF Assessment.

### 3.2.1 Assessment of Option 1

#### **Consumer**

- Based on previous investigations presented to the RAs in March 2023 and in September 2023, the estimated cost of implementing the LPF for the transitional arrangements would be high given the requirement of a robust IT auction and settlements solution. Moreover, assessments previously carried out by the TSOs noted quarterly contracts were determined as being the most regular/granular time period that would be feasible for the TSOs to implement within an expedited timeline but would result in high volumes of administrative overhead. Furthermore, quarterly auctions may also result in more conservative volume forecasts and over procurement of the services which would impose extra costs on consumers. The economic benefits of the DASSA would be delayed and service providers would need to develop robust IT systems to participate in these arrangements.

#### **System Needs**

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<sup>23</sup> This option is drafted under the assumption that monthly or quarterly auctions are the only viable mechanism i.e. weekly auctions would not be viable. It is important to note that any other competitive mechanism under the LPF would engender a similar, if not larger, effort.

- The introduction of transitional LPF arrangements risks operational disturbance and the procurement of insufficient system services to meet real-time system needs i.e. where the providers with LPF contracts are not in a position to provide reserves. Considering the draw on personnel and the introduction of new, unknown arrangements to the market and the TSOs, on top of the requirement to deliver the enduring DASSA Arrangements, the implementation of the LPF would introduce significant potential risk to system security relative to the existing arrangements.

### **Compliance**

- The compliance of this option involves several key considerations. First, alignment with Electricity Regulation (2019/943) and the Electricity Balancing Guideline (EBGL) is crucial. In previous LPF assessments undertaken by the TSOs, it was assumed balancing capacity would be procured, meaning this option would fall under the remit of these legislations. A comprehensive compliance exercise is therefore required, and this would necessitate the development of new proposal for terms, conditions, and methodologies in consultation with stakeholders and RAs, ensuring adherence to established guidelines. Should it be determined that the TSOs are procuring balancing capacity under this mechanism and for a period of greater than 6 months, a derogation would be needed per Regulation 2019/943.
- The proposal is consistent with SEM-23-103, as it provides a competitive framework for addressing system service gaps. Additionally, the framework is expected to comply with procurement law. Legal experts would need to be engaged throughout the development process to ensure that all contracts met the necessary regulatory and legal standards.
- It is noted that a design of transitional LPF Arrangements, about which participants (e.g. wind and DSU Units) raised concerns over their ability to participate, as procurement was not close to real time (for example, through quarterly auctions), raises compliance concerns as to whether the TSOs are providing a suitable route to the market for all participants.

### **Enabling the Energy Transition**

- The implementation of transitional LPF Arrangements would fail to support the energy transition effectively by restricting participation from certain technologies. As detailed above, some providers may not be able to participate as procurement is not close to real time, thereby restricting progress towards sustainability goals.

### **Deliverability**

- Any new arrangements must be designed to be sufficiently robust, which requires significant time and engagement internally, with industry, and the RAs to deliver; ultimately this option would have a substantial impact on the planned DASSA go-live date.

### **Investors**

- The TSOs note that some respondents to the SEMC's consultation on the LPF quarterly auction design (SEM-23-043) highlighted concerns with the proposals in terms of sending the right investment signals. To ensure the continued provision of system services, investors require clarity on the design and timelines of any future arrangements. By introducing new arrangements (ahead of the DASSA), this would increase uncertainty for investors until such a time that the design is finalised and timelines have been confirmed by the TSOs.
- The TSOs assess that it is likely that service providers would need IT systems to manage their participation in any LPF arrangements. This could deter service providers, particularly where they are required to manage stringent availability/commitment obligations.

### 3.2.2 Implementation Requirements

The TSOs engaged extensively with the RAs on the use of LPF throughout 2023, as we supported and advised on the quarterly auction development, and through delivery of our 2024 Annual LPF Assessment. Based on this assessment, the TSOs estimate that the implementation of transitional LPF arrangements would take a minimum of 21 months from the point that the design is agreed via a SEMC Decision Paper, following industry consultation, and would require significant effort from the TSOs, RAs and industry alike. Additionally, timelines assume all programme resources would be 100% dedicated to the implementation of transitional arrangements and not DASSA delivery in parallel, ultimately having a material impact on the current scheduled DASSA Go Live date.

As part of the assessment, a project plan was drafted detailing relevant workstreams and key activities for the successful introduction of transitional LPF arrangements, available below. However, please note the plan is representative of an LPF implementation and dates are not aligned to the current day. In this example, the 21-month timeframe is from September 2023, upon receipt of a decision from the SEMC, to the LPF arrangements go-live date in June 2025.

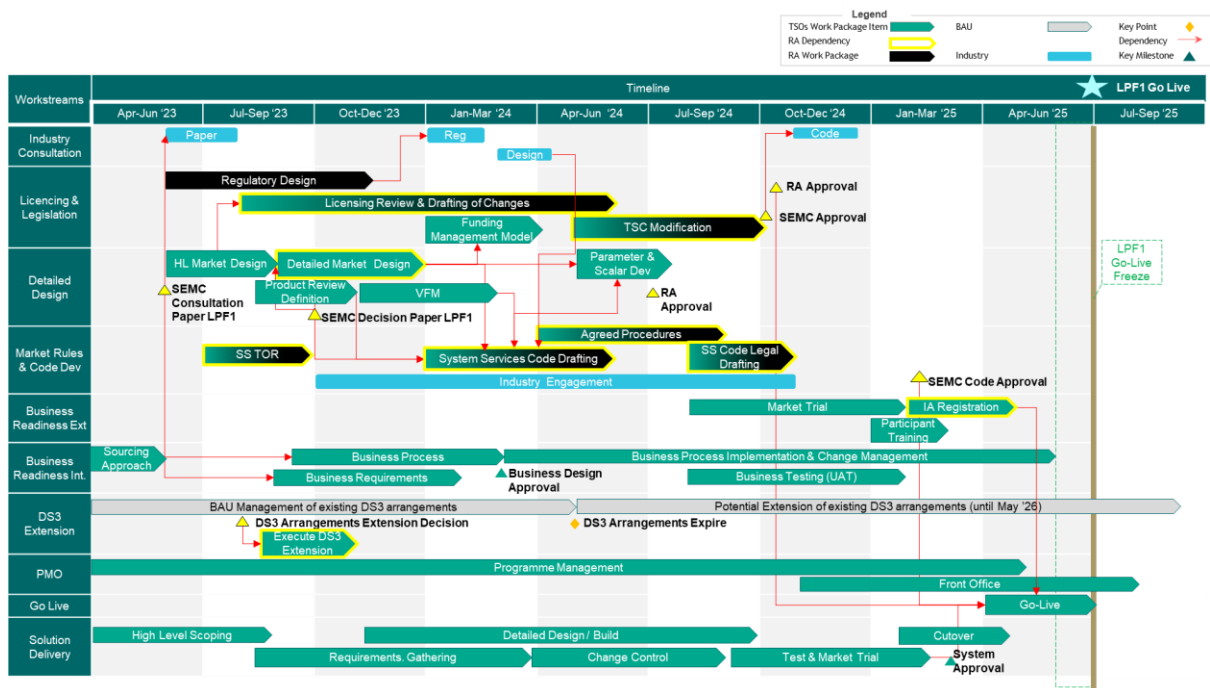


Figure 2: Proposed Project Plan for delivery of Transitional LPF Arrangements (quarterly auction)

## 3.3 Option 2: Market-based Volume Capped Contracts (No Availability Requirement)

The second option evaluated was a market-based approach for allocating system services through fixed contracts between the TSOs and service providers. The contracts would be volume-capped, with payments based on availability and providers would have no obligation to be available in any period of time in the procurement timeframe. This model aims to minimise distortions to the energy market by not holding services providers to an availability requirement. It would also ensure competitive participation in system services, but it comes with implementation complexities and regulatory challenges.

### 3.3.1 Assessment of Option 2

#### Consumer

- Without a requirement for service providers to be available to provide system services, it is expected that there would be no distortions to the energy market and the costs to procure system services would be lower than option 3. With a market-based approach and a volume cap, it is considered likely to result in greater consumer value than a form of tariff arrangements. However, this option would involve significant implementation costs for the TSOs and service providers, including the resources needed to establish an additional process and fund IT settlement system updates. Over-procurement may be necessary to ensure system needs are met, which could result in higher overall costs. It would also delay access to the economic benefits from the DASSA.

### **System Needs**

- The TSOs consider that this option would not fully support system security requirements given that there is no obligation on providers to maintain availability of system services. The introduction of any new arrangements presents risk. The volume limit would require careful analysis to ensure that the TSOs continue to access sufficient volumes of system services. The TSOs consider that a volume limit combined with the absence of an availability requirement could result in insufficient procurement of real-time system services, posing a risk to meeting critical system needs during operational periods.

### **Compliance**

- Assessment of the compliance of this option involves several key considerations. Firstly, alignment with Electricity Regulation (2019/943) and the Electricity Balancing Guideline (EBGL) is crucial. As this option does not require an availability commitment from service providers, the TSOs consider, based on an initial review, that balancing capacity is not being procured. However, a comprehensive compliance exercise would be required if these contracts were to be classified as balancing capacity. This would necessitate the development of a new proposal for terms, conditions, and methodologies in consultation with stakeholders and the RAs, ensuring adherence to established guidelines. Should it be determined that the TSOs are procuring balancing capacity under this mechanism and for a period of greater than 6 months, a derogation would be needed per Regulation 2019/943.
- The proposal is consistent with SEM-23-103, as it provides a competitive framework for addressing system service procurement gaps. Additionally, the framework is expected to comply with procurement law. Additional legal effort would also be required throughout the development process to ensure that all contracts meet the necessary regulatory and legal standards.

### **Enabling the Energy Transition**

- The framework would support the energy transition by enabling participation from all technologies, including renewables. This inclusivity ensures alignment with broader decarbonization goals and facilitates the continued evolution of the energy system.

### **Deliverability**

- This option presents significant challenges in meeting implementation timelines due to its complexity relative to the duration of the proposed arrangements. Implementation therefore would not be completed prior to the expiry of existing DS3 Regulated Arrangements and would result in significant delays to the planned DASSA Go Live.

### **Investors**

- This approach is considered to offer clear investment signals and some certainty for service providers. However, it would demand significant effort from participants to adapt to the new arrangements, which may challenge smaller providers and require additional support for a relatively brief period.



### 3.3.2 Implementation Requirements

The implementation of this contractual framework would be expected to take approximately c. 26 months, requiring extensive resources and agreement of providing units' contractual parameters with potentially up to 280 system service providers currently contracted under the DS3 Regulated Arrangements. The key implementation activities are outlined below; however, note these estimates represent activities that are on the high-level critical path. A detailed planning exercise would need to be undertaken to confirm the full implementation timeline.

1. Technical Needs and Procurement Studies (c. 2-3 months): Initial activities would involve designing the study approach, assessing technical needs, and defining procurement volumes. This phase would conclude with reporting and recommendations.
2. Consultation and SEMC Decisions on Procurement Approach (c. 8 months): A detailed procurement design would be developed and agreed upon with the RAs. This phase includes drafting and conducting a public consultation, preparing TSOs' recommendation papers, and securing SEMC decisions.
3. Consultation and SEMC Decisions on Contractual Arrangements (c. 8 months): The development of new contract terms and methodologies would be guided by previous consultation processes, ensuring compliance with regulatory requirements and alignment with stakeholder expectations.
4. Procurement Process (c. 9 months): The process would involve implementing the procurement approach post-SEMC decision, including prequalification questionnaires for potentially 280 service providers, a procurement period, tender evaluations, and the publication of results.
5. IT Implementation for Settlement Systems (c. 5 months): This phase would focus on drafting requirements, implementing vendor updates, and conducting system testing to ensure readiness for the new contractual framework.
6. Contract Award (c. 3 months): Contracts would be issued to service providers via DocuSign, with an estimated response time of approximately 1.5 months.
7. Operational Readiness: Significant internal and external operational readiness effort (but not shown on high level critical path) would also be required to successfully deliver on this option. The TSOs would need to manage this effort alongside the operation of the DS3 arrangements and DASSA delivery.

Below is an illustration of the key phases outlined above, assuming implementation would begin in January 2025. In this example, there is c. 17 months until the DS3 contracts' expiry in 2026 and the beginning of 'the gap', shorter than the estimated 26 months to introduce fixed-term contracts without availability obligations.

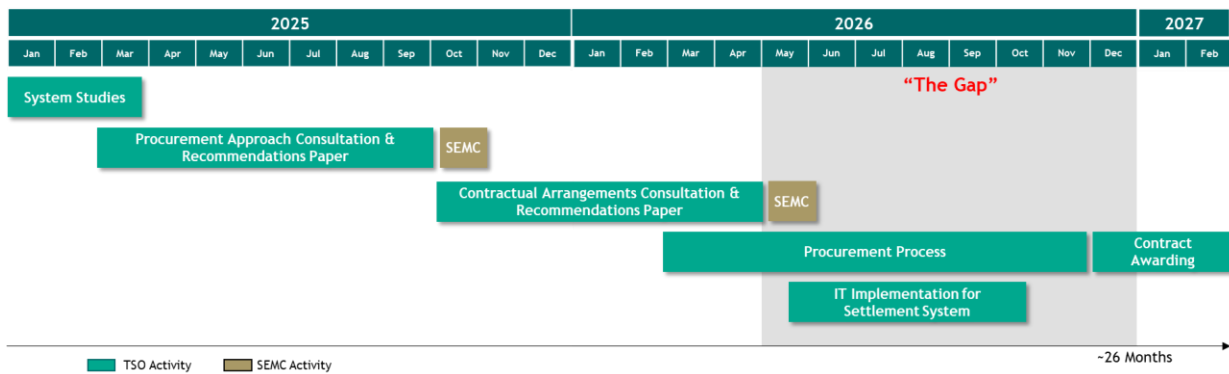


Figure 3: Proposed timeline for delivery for Option 2

### 3.4 Option 3: Market-based Volume Capped Contracts (Availability Requirement)

The third option evaluated is built on a market-based allocation framework, establishing fixed contractual agreements between the TSOs and awarded service providers. The contracts would be volume-capped, with payments linked to availability levels, which would be expected to meet a specified threshold (e.g., 97%, to receive a full payment). The inclusion of an availability requirement would ensure that service providers would commit to maintaining a baseline availability level, enhancing system reliability.

#### 3.4.1 Assessment of Option 3

##### Consumer

- By introducing an availability requirement, this option would deliver partial efficiency and alignment across energy and system service markets, albeit less than option 2. This option is also considered likely to result in greater consumer value than tariff-based arrangements. However, this option would also lead to further implementation and operational costs including resources needed for additional processes and IT settlement changes, which would be expected to exceed those of options 2 and 4 presented in this paper, given the increased complexity. Additionally, the availability requirement could result in higher procurement costs, further impacting consumer affordability. Customer access to the economic benefits of the DASSA would also be delayed.

##### System Need

- This option would be expected to deliver on system security requirements through contracted commitments and would mitigate the risk of insufficient reserve services. However, its effectiveness would depend on accurately procuring appropriate volumes, setting robust availability requirements, and designing effective incentives.

##### Compliance

- The compliance framework for this option would require substantial effort to ensure alignment with key regulations, including Electricity Regulation (2019/943) and the Electricity Balancing Guideline (EBGL). If these contracts are classified as balancing capacity, the TSOs must draft new terms, conditions, and methodologies, requiring stakeholder engagement and regulatory approval. Should it be determined that the TSOs are procuring balancing capacity under this mechanism and for a period of greater than 6 months, a derogation would be needed per Regulation 2019/943.

- Despite these challenges, the option aligns with SEMC Decision SEM-23-103, as it offers a competitive mechanism to address ‘the gap’. Procurement law compliance is also assumed achievable, given the involvement of legal support in drafting contracts. These measures ensure partial compliance while addressing system requirements.

### **Enabling the Energy Transition**

- This approach fails to enable energy transition effectively, as its fixed availability requirements would exclude participation from technologies like wind and DSUs that cannot reliably meet such requirements. This limitation would prevent full participation across all technologies with potential impacts to energy transition sustainability goals.

### **Deliverability**

- This option faces substantial deliverability risks due to its complexity and reliance on near-100% availability. Due to the requirements for a robust IT system and new contractual arrangements it would not be possible to meet the April 2026 deadline without significant impact to the introduction of the scheduled DASSA Go Live date.

### **Investors**

- While the fixed contracts provide clearer investment signals and some level of certainty for service providers, the option’s complexity and stringent availability requirements would increase the effort needed for participation and may result in IT uplift from service providers. These factors could deter service providers, particularly those facing challenges in meeting the availability obligations.

## **3.4.2 Implementation Requirements**

The implementation of market-based volume capped contracts with an availability requirement is estimated to be c. 28 months, involving detailed technical studies, consultations, procurement processes, IT upgrades, and contract awards. Again, the timeline below represents activities that are on the high-level critical path — a detailed planning exercise would be required to confirm a full implementation timeframe:

1. Studies to Identify Technical Need and Procurement Volumes (c. 4-5 months): The first step in the implementation would be to identify the technical requirements and procurement volumes. This phase would include designing the study approach, conducting technical needs assessments, and defining the volume requirements for procurement. The overall process would be expected to take 4 to 5 months.
2. Consultation, Recommendation, and SEMC Decision on Procurement Approach (c. 8 months): Once the procurement approach and volume requirements were designed, the TSOs would engage with the RAs to ensure alignment. The process would include drafting and conducting consultations, followed by the TSOs’ recommendation paper, culminating in SEMC decision-making. This phase would be expected to take 8 months.
3. Consultation, Recommendation, and SEMC Decision on Contractual Arrangements (9 months): In this stage, the TSOs would design the contract terms and protocols, draft consultation documents, and engage in a consultation period. A final decision paper would be submitted to SEMC for approval. This step would be anticipated to take around 9 months.
4. Procurement Process (c. 9 months): Following SEMC decisions, the TSOs would implement the procurement process, which includes prequalification questionnaires for all service providers, procurement periods, tender evaluations, and the publication of results. This entire process would be expected to take 9 months.

5. IT Implementation for Settlement System (c. 6 months): This phase would involve drafting the IT requirements, updating vendor systems, and conducting system testing to accommodate the availability requirements. The IT implementation would take approximately 6 months to complete.
6. Contract Award (3 months): After procurement is complete, the TSOs would award contracts to service providers via DocuSign. Service providers would then have c. 1.5 months to respond and confirm their acceptance of the terms. This process would take about c. 3 months.
7. Operational Readiness: Significant internal and external operational readiness effort (but not shown on high level critical path) would also be required to successfully deliver on this option. The TSOs would need to manage this effort alongside operation of DS3 arrangements and DASSA delivery.

Below is an illustration of the key phases outlined above, assuming implementation were to begin in January 2025. In this example, there is circa 17 months until the DS3 contracts' expiry in 2026 and the beginning of 'the gap', shorter than the estimated 28 months to introduce fixed-term contracts with availability obligations.

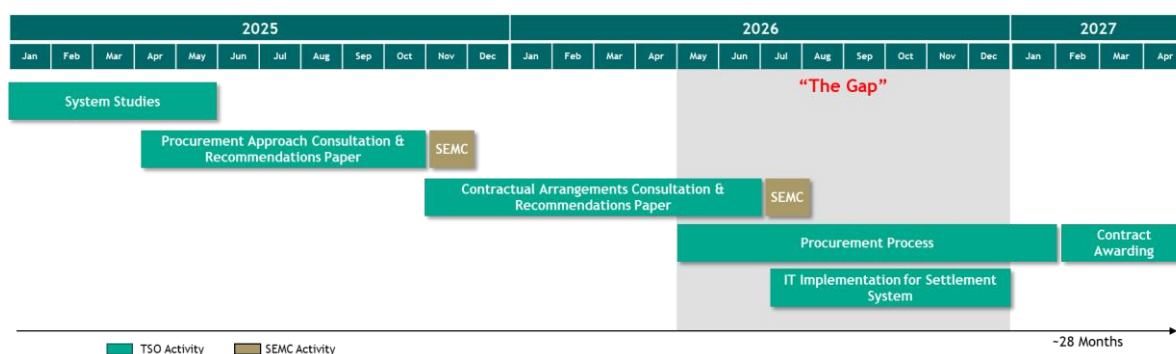


Figure 4: Proposed timeline for delivery for Option 3

### 3.5 Option 4: Extension of DS3 Regulated Arrangements

The fourth option evaluated proposes an extension of the DS3 Regulated Arrangements to cover the gap between the DS3 contracts' expiry date (30<sup>th</sup> April 2026) and the Go Live of the DASSA Arrangements and the future arrangements for the procurement of non-reserve services expected in December 2026. The TSOs note the SEMC's concerns "with the economic efficiency of the Regulated Arrangements" as set out in SEM-23-043. In the Consumer assessment, the TSOs have proposed how expenditure would be managed to ensure economic efficiency. As discussed below, this approach can leverage the existing framework, thereby reducing implementation complexity relative to the earlier options presented in this paper.

#### 3.5.1 Assessment of Option 4

##### Consumer

- This option would deliver the economic benefits from the DASSA quicker than the alternatives as it will not result in a delay to the DASSA go live date. As such, the extended DS3 Regulated Arrangements would be expected to be needed for a shorter time than the alternative options set out in this paper.
- The cost of procurement of system services through this option, once operational may be higher than volume-limited arrangements, however the impact of the reduction to the TSS on expenditure is yet to be realised. The TSOs would continue to monitor costs through

monthly and quarterly expenditure reports, and high expenditure could be mitigated by further adjustments to the rates/ scalars if the SEMC deemed that necessary. Additionally, as requested by SEM-24-065, the TSOs conducted a risk assessment around the option to close the procurement of FFR-TOR2 from Gate 12 onwards<sup>24</sup> which, dependent on a decision taken by the SEMC, would limit further tariff expenditure. Therefore, overall value to customers can be secured by the use of the mitigations built into DS3 contracts and the faster delivery of the DASSA. The costs associated with developing a new short-term procurement arrangement are also avoided for both the TSOs and service providers.

### **System Needs**

- An extension of the DS3 Regulated Arrangements would ensure the procurement of sufficient system services to meet system needs.

### **Compliance**

- The TSOs appreciate that there are strict procurement rules that apply to the Regulated Arrangements. To this end, the TSOs sought legal advice on whether it is permissible under procurement law to further extend the Regulated Arrangements to bridge ‘the gap’. Following said advice, we are satisfied that there are exceptions under the relevant procurement legislation that can be robustly relied on to justify the extension of the Regulated Arrangements to bridge ‘the gap’. Such exceptions were the subject of rigorous analysis, and we are satisfied that each limb of the relevant legislative tests was addressed, thus justifying use of the exceptions. An extension to the DS3 Regulated Arrangements is legally permissible subject to the written approval of the RAs and service providers.
- Following a detailed review of the European Balancing Guideline, the TSOs are satisfied that the DS3 Regulated Arrangements, including any extension, are compliant with European legislation<sup>25</sup>.

### **Deliverability**

- This option would be deliverable within the required timeframe and would not cause a delay to DASSA go-live date. Also, there would be no additional procurement exercise required outside of contract review and awarding to successful bidders.

### **Energy Transition**

- An extension of the Regulated Arrangements would continue to support participation of all technologies and renewables.

### **Investors**

- An extension of DS3 Regulated Arrangements would provide a clear path to FASS for investors in new technology, allowing participants to develop long-term business cases and focus on preparing for DASSA Go Live, rather than diverting resources towards an alternative transitional solution. Supplier IT systems are compatible with these arrangements, avoiding time and cost for these parties also.

## **3.5.2 Implementation Requirements**

The contractual end date of the DS3 Regulated Arrangements is defined within individual contracts and can only be amended by mutual consent of contract holders and the relevant TSO. There are approximately 280 such contracts. The extension of the arrangements requires that a ‘side letter’ to this effect be issued for each agreement and be signed electronically by both the relevant TSO and

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<sup>24</sup> The risk assessment was issued to the RAs on the 11<sup>th</sup> of October.

<sup>25</sup> [Analysis of EBGL Compliance for the SEM \(semcommittee.com\)](https://www.semcommittee.com/analysis-of-ebgl-compliance-for-the-sem)

individual contract holder. This process would take approximately 3 months: this estimate is based on the TSOs' experience of previous extensions to DS3 arrangements. There is minimal IT uplift.

### 3.6 Outcomes of Options Analysis and TSOs' Proposal

The DS3 Programme was designed to ensure that the TSOs can securely operate the power system with increasing amounts of variable non-synchronous renewable generation. The procurement of sufficient system services was a key pillar of the programme, and this must be reflected in the transitional arrangements prior to the planned Go Live of the DASSA and non-reserve arrangements.

The TSOs are conscious that it is the preference of the RAs not to further extend DS3 Regulated Arrangements. However, having examined a number of options, it is the position of the TSOs that the implementation of any alternative arrangements would significantly delay the delivery of DASSA and would not represent value to the consumer due to the increase in implementation costs. As outlined in the options above, where the TSOs procure balancing capacity, this procurement must be compliant with detailed requirements in the relevant European legislation. In the case that the design and implementation of new LPF arrangements was rushed, there is a risk that the arrangements may not be compliant with all aspects of the legislations. Various additional risks are introduced with an expedited implementation which may result in losses in the system services capability that has been developed through the DS3 Regulated Arrangements and may expose the system to more security and stability risks with the current level of SNSP.

As such, the TSOs propose that the procurement mechanism for all system services for the duration of 'the gap' be through the extension of the DS3 Regulated Arrangements. This proposal does not apply to or affect existing fixed contract (Volume Capped) arrangements.

It is intended that the implementation of the DASSA and the execution of procurement mechanisms for non-reserve services would align i.e. the TSOs are aiming for December 2026 for the commencement of future arrangements for both reserve and non-reserve services. However, it is prudent for the TSOs to allow for the possibility that diverse arrangements will have different effective commencement dates. In addition, the TSOs would need to be satisfied that any future arrangements have been implemented successfully, and as designed, before terminating the DS3 Regulated Arrangements.

- The TSOs propose that the termination of the DS3 Regulated Arrangements would be triggered by the earlier of (i) a new long-stop date or (ii) "FASS Go-Live".

"FASS Go-Live" will be a contractual term which shall be carefully defined over the course of legal drafting and would be triggered by certain pre-defined events applicable to each individual service (for both reserve and non-reserve services). This would be necessary to ensure that (i) the DASSA and (ii) the future commercial arrangements for non-reserve services, have been implemented successfully prior to termination of the DS3 Regulated Arrangements.

These triggers for termination would be clearly defined in the side letter to the agreements. The TSOs welcome feedback from stakeholders on considerations for the triggers. The TSOs propose that settlement mechanisms would be implemented to ensure that payments under the DS3 Regulated Arrangements would not be made to service providers that have been procured for the same service volume under the future arrangements i.e. there would be no double payment.

In line with SEMC decisions SEM-23-103 and SEM-24-065, the TSOs would continue to monitor expenditure under the DS3 Regulated Arrangements. Through the quarterly expenditure reports, the TSOs would continue to monitor expenditure and may consider a further tariff review or amending of TSS values, if necessary, up to the commencement of the future arrangements for system services.

As noted in the TSOs' DASSA Design decision paper, the TSOs will engage further with industry, via the industry readiness workstream, on the mechanics of the migration to the DASSA arrangements, including considerations of service volume and auction frequency.

For the avoidance of doubt, the TSOs do not intend to procure the DRR and FPFAPR services prior to the go live of the future arrangements for system services.

The TSOs recognise that an extension of the DS3 Regulated Arrangements would not deliver a volume regulated competitive framework for procuring system services and would require the DS3 expenditure to continue beyond April 2026. However, this proposal would enable the delivery of the enduring DASSA arrangements in the quickest possible timeframe and result in the lowest impact on the overall FASS delivery. Based on guidance received from the TSOs' external partners which illustrates the value DASSA will provide to the consumer, it is the intention of the TSOs to continue to work to deliver the enduring DASSA solution in the earliest possible timeframe.

**TSOs' Proposal:**

It is the proposal of the TSOs to extend the DS3 System Services Regulated Arrangements to cover the gap between the DS3 contracts' expiry date (30<sup>th</sup> April 2026) and the Go Live of the DASSA Arrangements and the future arrangements for the procurement of non-reserve services (planned for December 2026).

The TSOs propose that the termination of the DS3 Regulated Arrangements would be triggered by the earlier of (i) a long stop date or (ii) the go-live date of new procurement arrangements for system services (FASS go-live), which would be triggered by certain pre-defined events applicable to each individual service, for both reserve and non-reserve services). The TSOs will continue to submit quarterly expenditure reports to the RAs on the DS3 Regulated Arrangements to monitor ongoing expenditure. Further tariff reviews may be required prior to the commencement of the future arrangements for system services.

**Question 1.** Do you agree with the TSOs' proposal, to extend the DS3 System Services Regulated Arrangements until the earlier of (i) a long stop date or (ii) the go-live date of new procurement arrangements for system services (FASS go-live), which would be triggered by certain pre-defined events applicable to each individual service, for both reserve and non-reserve services, as presented in this chapter? Please provide a detailed rationale if you consider alternative arrangements need to be considered.

## 4 Next Steps

This consultation paper outlines the TSOs' considerations for the procurement of system services between the expiry of the DS3 Regulated Arrangements (April 2026) and the DASSA go-live (December 2026). This consultation paper will be open for 6 weeks following publication and the responses received will inform the final TSO recommendation on the procurement of system services for 'the gap' that will be proposed to the SEMC for approval.

As outlined in the document this paper presents four shortlisted options (including the TSOs recommended option) for these transitional arrangements during the "Gap" which would be in place for approximately eight-months.

### 4.1 Consultation Responses

EirGrid and SONI welcome industry feedback on the question posed within this paper.

Responses to the question set out in this paper should be submitted through either the EirGrid<sup>26</sup> or SONI<sup>27</sup> consultation portals by 25<sup>th</sup> March 2025. We request that answers include justification and explanation and be submitted within the questionnaire template provided with publication of this consultation.

It would be helpful if responses are not confidential. If you require your response to remain confidential, you should clearly state this on the coversheet of the response. We intend to publish all non-confidential responses.

### 4.2 Consultation Information Session

An information session will be facilitated through a dedicated session, the details of which will be communicated shortly. The purpose of this session will be to run through the key areas of this consultation paper and to allow time for questions and clarifications.

An email will be sent from the FASS programme mailboxes<sup>28</sup> detailing further information of the webinar. If you would like to register for the information session, please respond to the email.

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<sup>26</sup> [EirGrid consultation portal](#).

<sup>27</sup> [SONI consultation portal](#).

<sup>28</sup> [FASS@Eirgrid.com](mailto:FASS@Eirgrid.com) or [FASSProgramme@soni.ltd.uk](mailto:FASSProgramme@soni.ltd.uk)



# 5 Consultation Questions

Chapter	Questions
Chapter 3 Alternative Arrangements for the “Gap”	<b>Question 1.</b> Do you agree with our proposal, to extend the DS3 System Services Regulated Arrangements until DASSA Go Live and the future arrangements for the procurement of non-reserve services, as presented in this chapter? Please provide a detailed rationale if you consider alternative arrangements need to be considered.