



SINGLE ELECTRICITY MARKET COMMITTEE

System Services Future Arrangements

Phase III: Detailed Design & Implementation

Phased Implementation Roadmap for the System Services High Level Design

Decision Paper

SEM-23-103

8 December 2023

EXECUTIVE SUMMARY

On 08 June 2023 the SEM Committee published a consultation paper¹ setting out proposals in relation to Phase III of the System Services Future Arrangements (SSFA). The consultation proposed the phased implementation of the various decisions set out in the High Level Design Decision paper². In summary, the consultation proposed the following:

- Extending the current tariff arrangements to April 2026 and a phased reduction of tariff rates;
- Accelerated delivery of competitive procurement for reserve services, through quarterly auctions using the Layered Procurement Framework;
- Full implementation of the HLD to be progressed in parallel, including delivery of the DASSA, by December 2026, with reference to the Phased Implementation Roadmap (PIR);
- Phased introduction of the governance arrangements as set out in the HLD, starting with those elements necessary to run the first Layered Procurement auction, including the introduction of a Code;
- Establishment of a consultative Project Panel, comprised of RAs, network companies, industry representatives and consumer interest representatives, to be reported to on progress of various project workstreams by reference to the PIR; and
- Direction to the TSOs to consult on the volumes methodology and reporting, carry out a product review, and consult on a locational methodology, in line with the HLD. It was proposed that the volumes deliverables be prioritised. The SEM Committee expected that the product review would be sufficiently advanced, ahead of the first auction, to enable informed progress.

Twenty responses were received to the consultation. In general respondents acknowledged the need to move to a competitive framework for the procurement of reserves. However, a significant number of respondents urged caution in terms of the accelerated delivery of the LPF, with some indicating a preference for focus to remain on delivery of the DASSA. Respondents also highlighted that secondary trading was necessary for the effective operation of any market.

¹ SEM-23-043 – <https://www.semcommittee.com/publications/sem-23-043-system-services-future-arrangements-phase-iii-detailed-design-and>

² SEM-22-012 – <https://www.semcommittee.com/publications/sem-22-012-system-services-future-arrangements-high-level-design-decision-paper>

Summary of decision

The SEM Committee acknowledges the concerns of stakeholders and notes the need to competitively procure System Services. Having considered the overall benefits of the full package of proposals, alongside industry feedback, the SEM Committee has decided the following:

- To proceed with the High Level Design as originally envisaged;
 - To proceed with the Day Ahead System Services Auction (DASSA), as proposed;
 - Not to accelerate or prescribe parameters for the usage of the Layered Procurement Framework, as previously proposed, at this time;
 - To require the TSOs to carry out an assessment of services to be procured through the LPF, as required, and at least annually;
- To extend the Regulated Arrangements to April 2026, with a tariff review in Q1 2024;
- To implement the Phased Implementation Roadmap; and
- To establish the consultative SSFA Project Panel.

Therefore, the TSOs should progress with the delivery of the High Level Design as originally envisaged in the SEM Committee's 2022 decision, by reference to the Phased Implementation Roadmap (PIR). The PIR, set out in detail in this document (Section 4), provides detailed workstreams and deliverables with associated timelines and will act as a foundation for focussed and transparent project management, to facilitate full delivery of the enduring SSFA.

The extension of the Regulated Arrangements is the final maximum extension permitted within current contracts. The TSOs are required to initiate a review of current tariff rates, in Q1 2024, in accordance with the PIR, in addition to monitoring the volumes and expenditure on an on-going basis.

Overall, the SEM Committee considers that the competitive procurement framework set out in the HLD Decision provides the TSOs with sufficient means to continue to procure System Services, following the termination of the Regulated Arrangements, in April 2026, and that there is adequate time to develop an appropriate combined use of the Fixed Contracts and LPF to ensure that providers continue to be incentivised to ensure sufficient volumes are available to maintain security of supply. Detailed quarterly reports on the Regulated Arrangements, along with the annual assessment of the LPF will provide a robust framework to determine the most economically efficient means of System Services procurement, in line with what is required under the Clean Energy Package³.

Based on the draft PIR, the TSOs will consult on and submit recommendation papers to the SEMC in 2024 covering the following areas:

³ Directive EU/2019/944 places responsibilities on the TSOs, to procure, and the RAs, to fix and approve the terms and conditions for the procurement of, ancillary services in the most economic manner possible and through market-based procedures wherever possible.

- Day Ahead System Services Auction (DASSA) Detailed Design
- First Annual Review of LPF⁴
- Volumes Methodology
- Products Review
- Locational Methodology
- System Services Supplier Charge
- Review of Regulated Tariff Rates

Work will also commence on development of the System Services Code, with the first draft to be prepared by the TSOs, by Q3 2024, ahead of industry engagement through the Panel, later in 2024. The details of the Code will inform development of the IT solution later in 2024/early 2025. Additionally, a workstream to identify and implement necessary Licence modifications, to give effect to the Code and any other associated requirements, will commence.

⁴ In accordance with the PIR, the TSOs are required to carry out an annual assessment on the usage for Layered Procurement and the SEMC will assess any recommendations proposed. Details of what this annual assessment should contain are provided in Section 7.

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1 INTRODUCTION

The System Services Regulated Arrangements were established in 2013 and went live in 2017, through engagement between the SEM Committee and the TSOs. These were designed to provide enhanced ancillary services to the system in order to support the delivery of the DS3 Programme and to enable 75% System Non-Synchronous Penetration on the system by 2020. The Regulated Arrangements put in place a suite of tariffs, and a budget cap set by reference to potential benefits to consumers in terms of reduced wholesale energy costs, as a result of increased renewable penetration.

These arrangements have been successful in helping us to reach our target of 75% SNSP, enabling a close out of the DS3 programme and the SEMC commends the TSOs work in this area. Nevertheless, new arrangements must now be put in place to help us reach a level of 95% SNSP and enable the realisation of our 2030 decarbonisation targets and beyond, while ensuring a just transition for consumers. System services will play a fundamental role in assisting us in reaching these targets, as the system requires greater levels of resilience as we move towards a low carbon economy.

The Electricity Balancing Guidelines and the Clean Energy Package put in place requirements to procure ancillary services through market-based methods on a short term basis to the extent possible and in the most economic manner possible. Additionally, these regulations require reserve ancillary services or balancing capacity to be procured no later than a day ahead. In the context of the need to establish an economically efficient framework to continue to procure ancillary services to support further enhancements to system operation, to facilitate decarbonisation targets and renewable ambitions, the System Services Future Arrangements (SSFA) project was formally launched by the SEM Committee in July 2020. The project was launched with the publication of a Scoping Paper (SEM-20-044) for public consultation. Following on from this the SEM Committee published the SSFA Decision Paper 1 (SEM-21-021), in March 2021. This closed the scoping phase (Phase I) and initiated the High Level Design Phase (Phase II).

The High Level Design Consultation paper (SEM-21-069) was issued in August 2021, with consultation on that paper closing on 21 October 2021. The SEM Committee subsequently published its decision on the High Level Design on 14 April 2022. The decision paper set out a range of decisions that form the SSFA High Level Design. It also closed Phase II of the project and commenced Phase III, Detailed Design and Implementation.

On 8 June 2023 the SEM Committee published its consultation on Phase III: Phased Implementation Roadmap. This paper provided an update to stakeholders on the implementation status of the System Services Future Arrangements (SSFA) High Level Design (HLD) decisions, and set out, and sought views on, a proposed Phased Implementation Roadmap and the design of a competitive framework to procure the necessary volumes of FFR, POR, SOR, TOR 1 and

TOR 2 through the Layered Procurement mechanism and to transition away from tariffs for these services in the short to medium term.

This decision paper sets out the SEM Committee's decisions in relation to the topics consulted on in SEM-23-043 and provides an overview of next steps in terms of implementation.

1.1 Objective and Assessment Criteria

SEM-21-021 set out a final decision on the Objective of the project and Assessment Criteria. The objective of the project 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 order to better facilitate the achievement of this objective, the SEM Committee has developed a set of criteria for assessing the proposed framework:

- **Consumer Value:** The pricing of services will be market-based in so far as these secure competitive outcomes in order to deliver consumer value, while taking into account levels of market power for each service;
- **European Compliance:** The arrangements will comply with relevant legislation including the Clean Energy Package (CEP) and the Electricity Balancing Guideline (EBGL) Network Code;
- **System Need:** The framework will operate in a manner which ensures the needs of the system including security of supply are maintained;
- **Alignment:** The SEM Committee will seek to ensure 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;
- **Accuracy:** The volume of services procured should match the requirements of the system as accurately as possible;
- **Adaptability:** The framework should be sufficiently agile to meet any system changes caused by future policy developments;
- **Simplicity:** The framework should be sufficiently simple and transparent to be readily understood and accessible to all stakeholders;
- **Enable the Energy Transition:** The arrangements will be cognisant of policy decisions in Ireland, Northern Ireland and the UK, and will enable the energy transition in so far as possible;

- **Clarity for Investors:** 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
- **Transparency:** The framework will be transparent such that there will be no imbalance of information among market participants, and full sight of auction results and procurement requirements will be fully visible.

1.2 Paper Structure

The Paper is structured as follows:

- Summary of consultation responses
- Phased Implementation Roadmap
- SSFA Project Panel
- Extension of Regulated Arrangements
- Layered Procurement Framework
- Next Steps

2 SUMMARY OF CONSULTATION RESPONSES

This section sets out a summary of the consultation responses, non-confidential submissions are published alongside this paper, along with a response from the SEM Committee on each question. Firstly, an overview of general comments received is summarised, and the paper then provides a summary of responses to each question.

2.1 General Comments

Overall, respondents welcomed the updates provided in the paper in relation to the greater clarity provided by the introduction of the Phased Implementation Roadmap. However, a number of respondents felt there was a need for greater clarity on the delivery of the workstreams, and how the fully implemented SSFA framework would operate when the project is completed. Specifically, stakeholders want to understand how System Services will be predominantly procured through the mix of daily auctions, Layered Procurement auctions and fixed contracts.

Additionally, while the extension of the tariff arrangements was welcomed, respondents requested further clarity on the proposed ramp down and transition away from tariffs for products procured through the Layered Procurement Framework.

Respondents were generally supportive of the introduction of the Project Panel. Overall, respondents urged for more frequent meetings and as much involvement from stakeholders as possible in this forum.

The proposals to use the Layered Procurement Framework to deliver competition for reserve services in the short to medium term received a mixed response from stakeholders. In general respondents acknowledged the need to move towards competitive arrangements, and there was some support for the accelerated move to progress Layered Procurement. However, some respondents expressed concern regarding the nature of quarterly competitions, in terms of the ability of all technologies to participate, and also in terms of potentially drawing resources away from progression of the daily auction framework.

The majority of stakeholders highlighted the development of a secondary trading platform as being vital to the successful operation of the quarterly auctions, in ensuring units can move away from commitment obligations, and facilitating participation from technology types not suited to the nature of quarterly auctions. Concern was also expressed in terms of the level of compensation for constrained on units.

2.2 Question by Question Response

- 1. Recognising the need to deliver low carbon reserve services as early as possible in the decade are there variants or alternatives to the approaches set out in this paper that the SEM Committee should consider?**

In total 18 responses were received to question 1. Four respondents agreed with the proposed approaches in the consultation paper, indicating that the proposals were reasonable, accessible, clear and achievable.

Four respondents addressed concerns regarding clarity in relation to the enduring solution. One indicated that the LPF should not dictate how the enduring design and DASSA are delivered, another stated that the LPF should not hinder delivery of the DASSA. One of these respondents felt there should be greater clarity on how the DASSA, LPF and fixed contracts would coexist under the enduring solution.

Four respondents highlighted concerns with the proposals in terms of sending the right investment signals, with some indicating that the nature of quarterly auctions limits technology types, and others highlighting that the carbon scalar may be an exit signal if incorrectly applied.

Three respondents want greater engagement and transparency in changes to system services arrangement from the SEM Committee.

Three respondents indicated that tariff arrangements should be extended for BESS providers, with one commenting that they consider it vital to ensure revenue streams for BESS plants with the continued inability to participate in energy and capacity markets, and the growing need for reserve provision from BESS with the phasing out of conventionals.

The TSOs believe quarterly auctions alone are unlikely to deliver appropriate investment signals to low-carbon technologies. They see secondary trading as imperative and committed to working with the RAs to build secondary trading and continue to progress DASSA in a timely manner.

Additionally, there were a number of additional standalone comments in response to question 1. One that there needs to be a focus on ensuring the TSOs dispatch the system in a way that accounts for system services auction positions, insofar as possible. Another that inclusion of a locational methodology should be prioritised. Another respondent indicated that changes in how technologies are categorised in the Capacity Market Code, and prioritising system services auction participation, based on technology type, would be more efficient.

One respondent had significant concerns with the proposal and indicated that the accelerated introduction of LPF would be a mistake. They argued that there was a need for greater progress on volume reporting, product review and development of the SSFA Code, and that a simplistic IT light approach would lead to a flawed approach.

One respondent urged the SEM Committee not to unduly punish CCGT/OCGT plant that are working towards transitioning to green gases.

One respondent indicated that the LCIS should be used as a blueprint to ringfence reserve services from the SSFA for procurement through long term contracts.

Finally, one respondent indicated that the optimal design approach would be closer to real time than DASSA.

2. Respondents are invited to propose ways to de-risk the delivery of the project.

Six respondents highlighted the need for greater frequency of engagement and earlier notification of consultations and potential delays to decisions, with two indicating a need for more regular engagement through the project panel. Two respondents also highlighted issues with the governance of consultations, calling for greater transparency in the development of potential options that are then discounted ahead of publication of consultations. One respondent indicated that all options should still be on the table and presented in the first round of public consultation.

Three respondents highlighted the need for greater clarity and resourcing to project management, with one further respondent highlighting the tight timelines of the Phased Implementation Roadmap and potential for slippage. In general, a significant number of comments highlighted the need for clarity on a number of areas including on how the enduring arrangements would operate on the transition away from the Regulated Arrangements, and two responses on clarity regarding licence changes. Three respondents also highlighted the need for clarity around the introduction of IT solutions, with another one indicating that there should be overlap in the IT solutions for LPF and DASSA.

Additionally, three respondents raised points around the need for coordination with other market review projects, including Scheduling and Dispatch and European reintegration, with one highlighting the need to ensure that IT solutions are cognisant of the complexity of units bidding across multiple ex-ante markets.

Two respondents indicated that the most effective way to de-risk the project would be to focus on delivery of the enduring solution, and avoid complexity in the accelerated introduction of LPF, with one of these indicating a preference to maintaining the Regulated Arrangements until DASSA go-live. A further respondent indicated a preference to ring fence new low-carbon reserve providers through a fixed contract mechanism while maintaining the tariffs for existing providers. Three respondents highlighted the long lead time of a quarterly auction and requested competition closer to real time, in order to minimise exclusion of certain technology types, with one highlighting the need for secondary trading.

Several respondents raised points relating to simplicity, with two highlighting the need to keep the LPF as simple as possible, and another three indicating that changes to products and qualification requirements should be minimised. Other points raised included a combination of the points around early engagement and clarity, with a focus on having greater lead time for investment decisions; a need to better understand the full suite of revenue streams available to providers, particularly if BESS projects remain locked out of the energy market; and a need to be cognisant of security of supply risks with potential reduced revenue streams for conventional generation.

3. Do respondents have views on how the learnings from the early phases of the Phased Implementation can be optimised?

Five respondents indicated that learnings from the phased implementation would be limited as the simplified nature of the LPF combined with overly penal commitment obligations would not give an indication of market behaviours in the enduring solution as quarterly auctions reduced the

ability of wind, solar and DSUs to participate, leading them to limit bids to the lowest possible level that ensures commitment obligations can be met. One of these respondents also highlighted their view that the flat volume requirement limits potential learnings in terms of volume forecasting and requirements.

Two respondents raised learnings from past implementations and circumstances such as I-SEM Go-Live in 2018. It was highlighted that scoping the IT systems appropriately from the beginning of implementation is vital and limitations in IT systems should not dictate changes to the rules.

One respondent requested the publication of in-depth analysis data. They argued that this would help the industry adjust to changes and may support revisions in the operation in the LPF after go-live.

The TSOs advised that learnings will be captured for the forecasting and reporting of system services volumes requirements, allowing the development of an approach to the volumes reporting methodology. This was supported by another respondent. The TSOs also felt the interim arrangements may provide learnings on commercial incentives and their effectiveness.

4. Do you agree with the SEM Committee's proposal to extend the tariff arrangements by 24 months?

All respondents agreed with the extension of the tariff arrangements, however many wanted greater clarity on the transition period including how and when the tariffs will be reduced, along with how tariffs will interact with the LPF. Eight respondents highlighted the need to maintain investor certainty during the extension and called for an increased budget and no further reviews on tariff rates until the end of the contracts.

Five respondents requested greater clarity on what arrangements would apply for products not under the LPF beyond the extension to April 2026.

5. SEMC invites expressions of interest in participation on the consultative SSFA Project Panel.

IESA, Moyle, Lumclon Energy Limited, VPI, WEI, ESI, Renewable NI, RES, FERA, Energia, EPUKI, BGE, EIDAC, and DRAI all expressed interest in participating on the consultative SSFA Project Panel.

Six respondents are comfortable being represented by an industry or trade association group. Bord na Mona expressed interest in allowing members of Industry Associations to observe meetings virtually to increase transparency.

The TSOs are happy to participate in the SSFA Project Panel, however they require further clarity on scope of panel and schedule of meetings.

6. Do you have any comments on the draft Terms of Reference for the consultative SSFA Project Panel set out in Appendix 1.

Most respondents wanted more regular meetings, with some suggesting bi-monthly meetings. One respondent sought clarity on how the RAs would alternate the secretariat function.

Multiple respondents asked to widen the scope of the SSFA Project Panel to interacting projects like the Scheduling and Dispatch Project. EAI suggested the following topics:

- i. CRM redesign following state aid decision in 2028;
- ii. EBGL compliance;
- iii. EBGL balancing platforms;
- iv. CRM redesign for Celtic Interconnector;
- v. SEMOpX moved from 60 mins to 30mins in the DAM;
- vi. Introduction of PTRs across EWIC, Moyle, and Greenlink; and
- vii. Introduction of FTRs over Celtic Interconnector.

The TSOs clarified the panel is not a decision-making forum and will not replace public consultation. The TSOs requested more detail on the following:

- i. Objectives and scope of the panel and how this will be communicated;
- ii. Underlying assumptions and constraints;
- iii. Roles and responsibilities of the listed participants;
- iv. Deliverables, including a detailed list of activities and explanation of topics covered;
- v. Work breakdown structure mapped on a timeline; and
- vi. Proposed schedule of meetings.

7. Do you have any views on potential additional measures that may offer further incentives to the participation of low carbon sources of System Services through the SSFA.

Six respondents stated that the proposals did not enable certain low carbon technologies to participate through the nature of quarterly auction, overly penal commitment obligations and a lack of secondary trading. These respondents highlighted the need to implement secondary trading that is flexible and effective for the LPF quarterly auctions. If there was to be no secondary trading, respondents requested that the SEMC reconsider the level of commitment obligations.

Other measures suggested included allowing providers to revenue stack and to participate in multiple parallel markets with additional capacity. One respondent wanted more policy certainty around metering and connections. Another respondent stated market mechanisms should alleviate grid congestion by focusing on location in the procurement process.

The TSOs suggested fixed contract arrangements for certain services, long-term contracts and long-term hedging, and contractual arrangements for long duration energy storage.

8. Do you have any comments on a) the quarterly frequency of the competitions or b) the timing of the competition, one month ahead of the procurement period.

Ten respondents agreed with the auction frequency in principle, with many stating it should be reviewed after go-live. One respondent suggested it may be necessary to procure on 12-month contracts, 6-12 months in advance of a relevant year, while four other respondents indicated that the competition should be held closer to real time, with one month, or one week suggested. This is because quarterly auctions may exclude certain technologies. Because of this reason and

concern for inefficiencies in spendings, some respondents suggested the DASSA should take priority over the interim solution as there may be challenges with liquidity and technology participation in the LPF.

Three respondents highlighted potential issues with participation in LPF as a result of energy market hedging through forwards contracts tying up capacity. Additionally, two respondents also flagged interactions with the scheduling and dispatch project and the issues around batteries and charging times. There is a push for these to be resolved. A respondent also noted that there should be alignment between auction results and the dispatch of reserve.

Concerns were raised that the flat commitment obligation may limit participation and it was argued that it would be helpful if this could vary throughout the quarter.

The TSOs believe the daily auctions offer a greater incentive than quarterly auctions. They had the following concerns with the proposed quarterly auction:

- i. Barrier to zero-/low-carbon technologies participating in competitive arrangements;
- ii. Incompatibility of the quarterly-based flat volume requirements with real system requirements;
- iii. Increasing the cost of energy in the ex-ante market;
- iv. Lack of investment incentives; and
- v. Increasing the cost of procurement of System Services.

9. Do you agree with the SEM Committee's proposal to retain the existing reserve services, at least for the initial auctions?

The majority of respondents agreed with retaining the existing reserve services. Many recommended that if there was removal of existing products and introduction of new products, it should be subject to a commercial impact assessment and signalled to the market as soon as possible. Respondents expressed desire for a prioritisation of the product definition workstream and explanation on how retained reserve services will operate with LPF.

Multiple respondents requested additional information on how FFR will be procured (as there are currently individual product scalars).

The TSOs stated the determination of the type and volume of operating reserve required to operate the transmission system securely falls under their responsibility. A LPF product review will need to be a prerequisite for go-live as existing services may need to be adjusted or redefined.

Multiple participants mentioned the need to focus on the net-zero targets and one participant suggested procurement of net zero reserve services via a separate ring-fenced procurement framework and requested assurance that the quarterly framework meets EBGL requirements.

10. Regarding product definition, should the SEM Committee adopt option 1, a bundled reserve product, or option 2, individual reserve products?

Four respondents preferred bundled reserve product, with some stating it is consistent with previous auctions for the Volume Capped Contracts. Many in this group expressed there may

need to be multiple bundled products. There were thoughts on how this could help with simplicity of initial design but should not necessarily be the enduring solution.

Seven respondents preferred option 2, individual reserve products. Many of these respondents expressed concerns around bundling only benefitting certain technologies and catering quarterly auctions entirely to batteries. There were also thoughts that individual products will allow for more flexibility and utility. DRAI highlighted how the stackable nature of DS3 reserve product definitions has worked well and will only continue to work if products are procured separately.

Eight respondents stated they were unsure which approach was best. Many in this group stated they did not have enough information to decide because they are missing information on the following:

- i. The restrictions that could apply to market participants in either option;
- ii. The possible TSOs' IT limitations;
- iii. If participants can offer more than one bundle;
- iv. The clearing mechanism; and
- v. Auction sequencing.

The TSOs reiterated that they will determine the type and volume of system services required. They highlighted that FFR would create an issue with bundling, as only some technology can provide this. They will further investigate these options.

11. Do you agree with the SEM Committee's proposals on the auction process?

Nine respondents supported the Pay-As-Clear approach for the auction process and supported the overall simple design. Many respondents do not support a bid cap and think there should be a price floor if the bid cap moves forward. There were concerns on the lack of locational aspects in bid assessment and it was argued that this will make the auctions inefficient as LPF won't procure services where they are required. Some respondents suggested the final bid that satisfies the volume requirement should be accepted and set the clearing price. Some respondents wanted partial acceptance of bids.

A strong issue was raised with the simple demand curve proposal as respondents think this will ensure the quarterly auctions always under-procure. Many noted the requirement for product bids to be divisible in line with EBGL ((Article 25(5)). The TSOs are investigating if this would be deliverable within the timeframe. Respondents see this issue exacerbated with constrained on payments, making a moral hazard for TSOs. Respondents wanted more justification and a CBA to show that under-procuring is more efficient than over-procuring. Many respondents saw this as a security of supply risk.

The TSOs responded that quarterly auctions need to be on a platform supported by a robust IT system that is fully auditable from bids through payments, has adequate reporting, meets TSO security requirements, and can be integrated with existing systems. The TSOs feel single bids may lead to over-procurement and combinatorial bidding has been descoped from DASSA design following stakeholder feedback. A concern raised is that bids straddling the volume requirement

may lead to need for buffer in volume forecasts which could further exacerbate over-procurement.

12. Do you agree with the SEM Committee's proposals on volume setting?

Thirteen respondents agreed with the proposals on volume setting. There were calls for this to be reassessed for the enduring SSFA, again reiterating that the accelerated auction should not be the template for enduring solutions. Multiple respondents said the demand curve proposed undermines setting the volume requirements at the level of maximum reserve requirements.

The TSOs agree with the flat volume requirement but raise concern that it will lead to economic inefficiencies with over-procurement.

13. What are your views on the proposed options for commitment obligations?

Overall, respondents did not view any of the proposed options favourably. Most respondents felt the options are overly punitive and unfair, and unreflective of the actual costs to the system of non-delivery of a service. These options further strengthened the need for secondary trading. Some respondents opposed the use of any scalar. It was raised that TSO caused outages should not incur a commitment obligation.

Alternatives were proposed by one respondent including a deficiency payment and deficiency scalar. One respondent suggested changes to the first two options: Option 1 charges to be capped at LPF contract payments and Option 2 based on actual costs of constraining the system to provide reserves.

The TSOs agreed with the concept of commitment obligations, however they consider that Option 1 and 2 risk excluding certain technology types and may be challenging to implement. Option 3 requires greater clarity and may lead to reduced participation in future auctions.

14. Do you have any comments on the use of scalars under the LPF?

Many respondents felt it is inappropriate to apply scalars to units that are unsuccessful in a LPF auction or technology that cannot participate and felt there was need for clarity on this. Many felt scalars created a double penalty with commitment obligations and the Grid Code. Some respondents supported performance scalars. Some respondents were concerned this approach protects the ability of the TSOs to 'free ride' on the back of the grid code requirements.

The TSOs believe scalars are important and valuable. Further consideration should be given to how scalars are adapted to competitive auctions in the proposed product review in Q1/Q2 2024 under the PIR.

15. Do you have any views on the use of a carbon scalar?

Nine respondents supported the carbon scalar, however two in the group wanted clarity that battery storage would be considered zero or low carbon. Five disagreed with the use of a carbon scalar. Eleven felt this needed more consideration, clarity, and consultation.

The TSOs feel the carbon scalar alone will not be sufficient in delivering on CAP actions. The scalar may need to be introduced later. The TSOs listed items to consider surrounding a carbon scalar:

- i. Definition of zero carbon vs low carbon technologies
- ii. Consequential procurement challenges
- iii. Interactions with other existing market arrangements

16. What are your views on the proposed options for payments for constrained on providers?

Overall, the industry respondents were opposed to all the options and felt developers should not pay a penalty for grid inadequacies. Most respondents want the value of providing system services in the Balancing Market recognised and think the SEMC should reconsider its proposals. A few respondents selected Option 2 as most favourable because it is simpler and encourages the most reasonable outcome. Some preferred Option 3 but were unsure if the TSOs would find it viable. One respondent suggested a fourth option to have a greater than one multiplier for constrained on units in Balancing Market. Overall, there is a desire for more engagement on this issue.

The TSOs think it is important to reward service providers which were required to be available to provide reserve. They favour an approach where auction losers are only rewarded when they provide needed reserve in real-time, and the reward is allocated based on merit order. The TSOs favour Option 3, but the platform to implement would be complicated.

17. What are your views on the proposals around secondary trading?

The majority of respondents support secondary trading and see it as beneficial to mitigating the risks from commitment obligations and argue we need secondary trading from LPF go-live. Some support the view that secondary trading should have minimal TSO involvement and trades should be accepted on the condition the TSOs are notified before the relevant trading interval. DRAI proposed an email could be sent to the TSOs up to the delivery hour to allow flexibility and it should not be the same as the CRM secondary trading arrangements that require notifications to be submitted 5 days ahead of time. ESB GT suggested 1 day notice period for LPF secondary trading.

Multiple respondents want a simple method to transfer obligations to another qualified provider and notify the TSOs quickly. There are concerns that the TSOs have not lowered the notice period to 2 hours in the Capacity Market Code and no impact assessment has been completed. WEI wants flexibility within the LPF auction period to allow different MWs to be bid throughout the quarter.

SSE, iPower, and FERA all believe secondary trading should not be introduced in the interim and argue more time should be spent to launch an enduring and functional secondary trading method. ESB GT also believes a fully operational trading platform is not possible by the go-live of the LPF auction.

The TSOs support secondary trading and consider the following requirements:

- i. Trades should be notified to the TSOs well in advance of real-time. Given that there are 48 Trading Periods in each day and up to 7 different services may be traded, an appropriate system would be needed to manage a potentially large amount of data;
- ii. The buyer of a commitment obligation will need to be able to provide the same quality of response as the seller (i.e.: speed of response, dynamic vs. static etc). This will, however, decrease the liquidity of secondary trading;
- iii. Any implementation of secondary trading must be such that the outcome does not result in a complex mixture of service providers holding commitment obligations that increases real-time operational risk for the national control centres in both jurisdictions;
- iv. The timing of secondary trading should be carefully considered to facilitate participation of service providers and to prevent instances of market abuse;
- v. The data outputs of secondary trading need to be robust and compatible with the settlement process;
- vi. Consideration should be given to congested areas to ensure that secondary trade outcomes do not exacerbate congestion issues;
- vii. Any payments/charges made under secondary trading must be capable of being audited transparently to the satisfaction of the relevant auditors; and
- viii. In the light of the preceding points, in the TSOs' view, some form of central platform will be necessary to implement secondary trading.

3 SEMC RESPONSE TO STAKEHOLDER COMMENTS

The SEM Committee welcomes the feedback of respondents. This section sets out the SEM Committee's response in terms of broad themes. The SEM Committee has grouped the general feedback from stakeholders into the following categories:

- How will System Services be procured upon full implementation of the HLD;
- Concerns with accelerated delivery of LPF to run quarterly auctions and general responses to the LPF Proposals;
- Need for greater clarity on the delivery of the project delivery; and
- Support for the extension of the Regulated Arrangements.

3.1 Procurement under fully implemented HLD

In terms of how the enduring approach will function, there are requirements under Article 6(9) of the Clean Energy Package Regulation (EU 2019/943) which states that *“at least 40 % of the standard balancing products and a minimum of 30 % of all products used for balancing capacity, shall be concluded for no more than one day before the provision of the balancing.”* This clearly indicates that daily auctions should account for at least 30% of all volumes for reserve products. It can therefore be interpreted that the DASSA will account for at least 30% of procurement for reserve services, while any remaining volumes requirement and other services can be procured through the additional frameworks available to the TSOs, being the LPF and Fixed Contract Arrangements.

Additionally, Article 40 of the Clean Energy Package Directive (EU 2019/944) sets out details on market-based procurement of ancillary services, with paragraph 4 reinforcing the market-based procurement of balancing services and stating that these should be procured subject to *“transparent, non-discriminatory and market-based procedures”*. Additionally, paragraph 5 sets out that *“Paragraph 4 shall apply to the provision of non-frequency ancillary services by transmission system operators, unless the regulatory authority has assessed that the market-based provision of non-frequency ancillary services is economically not efficient and has granted a derogation.”* The TSOs will have flexibility to assess appropriate means of procurement of these services, subject to regulatory approval, through whichever combination of the available SSFA procurement methods the TSOs deem most appropriate.

Overall, the SEM Committee expects that ancillary services will be primarily procured through the DASSA, however there may be situations where procuring for a longer time period is more suitable, including for some services in their entirety. The SEM Committee considers that all services should be procured through a market-based approach and in the most economically efficient manner feasible, and it will be for the TSO to propose how best to use the suite of procurement methods - the DASSA, LPF and Fixed Contracts – at their disposal.

3.2 Proposals to accelerate LPF

The SEM Committee welcomes the response from stakeholders that there is a need to move to competitive arrangements, and also acknowledges the concerns raised by stakeholders in relation to the accelerated introduction of LPF. Following consideration of the responses received and the objective and assessment criteria of the SSFA, the SEM Committee has decided not to prescribe the acceleration of nor the parameters for usage of the LPF at this time. The usage of the suite of procurement mechanisms requires further consideration through the mechanisms set out under the HLD Decision. In that context the TSOs will be responsible for assessing the utilisation and parameters of the LPF and the detailed design of the DASSA, by reference to the PIR.

In terms of the LPF, the TSOs will be required to submit assessments at least annually to the SEM Committee. These reports should contain an assessment of whether or not a layered procurement mechanism should be used to procure particular System Services. As described in the consultation paper, layered procurement covers the period between day ahead procurement and annual/multi-annual procurement. This assessment should contain, at a minimum, details on:

- How all system services are currently procured
- Whether these procurement methods are compliant with relevant legislation
- Plans on how to move those services, still on tariffs, to market based procurement methods and associated timelines for this transition.
- These plans should detail whether the TSO intends to make use of daily, layered or fixed contract arrangements, to transition away from tariffs, for each of the respective services/products and provide justification on the same.
- If the TSO intends to remain on tariffs, for any of the system services, justification will need to be provided to demonstrate that tariffs represent the best value for money for consumers and/or are necessary for security of supply reasons.

The SEM Committee continues to have concerns with the economic efficiency of the Regulated Arrangements, in terms of offering optimal payments to the providers who provide the highest quality of service when most required on the system, and in terms of continued issues related to over-procurement of some services, beyond the required volumes. Given the Regulated Arrangements are scheduled to end on 30 April 2026, the TSOs will need to consider how to bridge the gap between the Regulated Arrangements and the full implementation of the HLD. The SEM Committee considers that the HLD provides a sufficient framework to enable the TSOs to procure System Services upon the termination of the Regulated Arrangements.

The SEM Committee acknowledges the points raised related to secondary trading. While the decision is that the TSOs will determine how the Layered Procurement Framework will be used, there are some important learnings to take away from stakeholder feedback on the ability of various technologies to participate in competitive auctions, which is relevant to both the DASSA and LPF, and should be taken into consideration by the TSOs when carrying out both the DASSA detailed design and the LPF assessments.

3.3 Clarity on project delivery

The SEM Committee acknowledges the comments in terms of needing greater clarity on delivery of the project. The SEM Committee has sought to input greater detail into the Phased Implementation Roadmap following on from the points raised, and this will be used as a measure when engaging with participants through the SSFA Project Panel.

Largely the TSOs will lead the consultations on the various workstreams, and the PIR may act as a support for project management through RA/TSO governance channels and through updates to the SSFA Project Panel. The SEM Committee is also in the process of contracting PMO services to oversee delivery of the project. Additionally, following the feedback of stakeholders, the SEM Committee has decided to increase the frequency of Project Panel's meetings, beyond what was originally proposed, to every two months.

In totality the implementation of robust project management frameworks, regular engagement with industry representatives through the Project Panel and the suite of TSO and SEM Committee consultations and decisions to take place during 2024, under the PIR, should ensure sufficient clarity is provided to stakeholders and that the project continues to progress.

3.4 Extension of the Regulated Arrangements

The SEM Committee welcomes the support of the extension of the tariff arrangements. As stated above, in accordance with the PIR, the TSOs are required to consult on tariff rates in Q1 2024. This is necessary, given the continued overheating in reserve services (as advised by the TSOs) under the Regulated Arrangements and the cost burden this is placing on consumers. Expenditure on System Services needs to be more targeted and reflective of demand and supply market forces, to the benefit of both consumers and investors, hence the SEMCs desire to move to market arrangements in as timely a manner as possible. As previously mentioned, there are also obligations on the regulatory authorities, to fix or approve terms of reference for the procurement of ancillary services, and for the TSOs, to procure ancillary services, in as economic a manner as is possible.

The ability of layered procurement to mitigate the over-procurement of reserve services currently experienced in the SEM, should be a factor considered in the TSOs annual review of the services to be procured via the LPF. The introduction of volume regulation via layered procurement should reduce costs to consumers, while at the same time increasing investor clarity, by avoiding the need to continually review tariff rates. In their assessment of the need for layered procurement the TSOs should take these factors into account, while being cognisant of the timelines for other elements of the enduring SSFA, such as implementation of the DASSA and product suitability to each of the timeframes.

In terms of the treatment of products the tariff arrangements end in April 2026, the SEM Committee considers that there is adequate time and sufficient tools within the SSFA framework for the TSOs to procure the necessary level of ancillary services to safely operate the system for any interim period ahead of full implementation of the SSFA.

3.5 Additional points

The SEM Committee noted comments in relation to the potential risk of inflexibility in TSO IT solutions based on previous experience. The SEM Committee agrees that clarity on IT systems is vital, and that the IT systems should not limit the capability to deliver an optimal market solution which fully implements all elements of the SSFA High Level Design. In that context, when developing the IT design, the TSOs should assess the cost impact of delivering a package which enables the procurement of services for varying volumes and time horizons to take place for all products, as required to provide for the procurement of services prior to day-ahead and at the day-ahead stage.

In terms of the product review, the SEM Committee acknowledges the TSOs commentary regarding their responsibility to determine, subject to regulatory approval, the type and volume of operating reserve required to operate the system, and expects that determining the services to be included as products under competitive procurement will be carried out through the TSOs product review and volumes methodology review, with both workstreams to be progressed in the first half of 2024 as priority items.

The usage of scalars will be detailed in the TSOs product review. Based on the responses to the consultation, and the need to decarbonise the provision of system services, the SEM Committee considers that a detailed proposal for a carbon scalar should be developed by the TSOs in the Product Review. It is also noted that an objective of the Government of Ireland's Climate Action Plan is to procure all reserve from zero carbon sources by 2027.

The SEM Committee acknowledges the concerns raised by respondents in terms of Scheduling and dispatch. The SEM Committee considers that ultimately, the TSOs Scheduling and Dispatch design should align all market positions, including System Services, with dispatch instructions, and variations from market outcomes should be minimised. It is also noted that the recent paper produced by DotEcon for the TSOs considered the issue of payments to out-of-market providers dispatched by the TSOs.

In evaluating the TSOs proposals, the SEM Committee will have regard to the HLD principles on this issue, that the design should ensure the primacy of the market auction and that only providers dispatched to meet the residual volume of services (i.e., the volume not provided by the auction winners) receive remuneration.

4 PHASED IMPLEMENTATION ROADMAP

In the HLD Decision Paper, SEM-22-012, the SEM Committee decided to have a phased implementation of the decisions and committed to developing an approach for this phased implementation. This section sets out the SEM Committee's decisions in this regard and is the result of ongoing engagement between the RAs and TSOs and the responses received from stakeholders.

In summary, this process began with the Regulatory Authorities writing to the TSOs in June 2022 ([SEM-22-039](#)) requesting that the TSOs commence work on a range of the HLD decisions, particularly those of fundamental importance to the overall operation of the arrangements and development of the system services markets, such as volumes. Following on from that, in the consultation paper the SEM Committee made proposals to progress on the foundational issues (volumes, product design, locational methodology) with urgency.

The SEM Committee has now decided to progress the project by reference to the Phased Implementation Roadmap (PIR). The PIR set out below is provided for information purposes, and the dates are indicative and subject to review by the TSOs. The SEM Committee acknowledges that this decision paper is a material change from the proposals set out under the consultation, and consequently the TSOs will need to assess the timing of the deliverables impacted by this decision. The draft PIR has been provisionally updated to reflect the change of approach to the LPF and has also been extended out to 2027 to give greater sight of the enduring solution. Additionally, a licence modification and locational methodology workstream has been added following comments from stakeholders.

The qualification and governance arrangements will be implemented on a phased basis, with an emphasis on those elements necessary to facilitate competitive procurement. In terms of the transition to the full market arrangements, the HLD set out three main procurement frameworks, Fixed Contracts, the LPF, and the Day-Ahead System Services Auction (the "DASSA"). The Fixed Contracts framework is already established and will also continue to operate. The LPF implementation will be determined by the annual TSO assessment. The enduring framework is intended to incorporate the operation of the DASSA, the LPF and the Fixed Contracts, therefore, when developing the IT design, the TSOs should assess the cost impact of delivering a package which enables the procurement of services for varying volumes and time horizons to take place for all products, as required to provide for the procurement of services prior to day-ahead and at the day-ahead stage.

The HLD also envisaged secondary trading although not for day one implementation and, potentially, forwards markets. In terms of the forwards markets, the SEM Committee does not intend to establish a workstream at this time, however the TSOs are invited to consider this issue further in the development of the detailed market design. Regarding secondary trading, there was a clear preference for the timely implementation of secondary trading, and accordingly this has been included in the PIR.

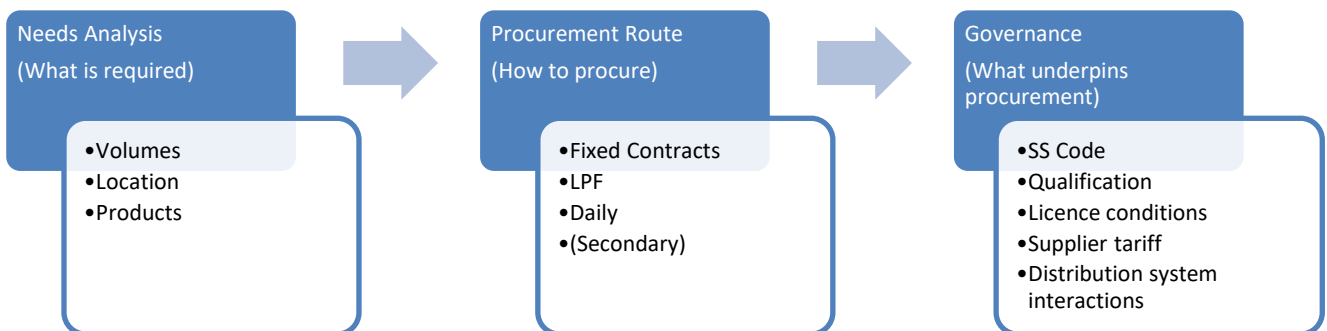
The SEM Committee considers that this approach will deliver benefits sooner, allow for further engagement between industry and the TSOs on detailed parameters, provide greater clarity for industry, and ensure a stable transition to the future arrangements for current providers.

Upon full implementation of the SSFA all three elements may be used together to procure sufficient System Services. The CEP requires that a minimum of 30% of balancing capacity (the reserve services) be procured through daily auctions, which will mean that the DASSA will be where a significant volume of System Services, at least the reserve services, are procured in the enduring design. While the remaining services are not subject to the same level of restrictions in terms of procurement methods, they are however required to be procured through a market-based approach where possible.

Therefore, the SEM Committee considers that there will be occasions, and specific system service products, that will require alternative means of procurement, and that the LPF may be required for this. For example, the TSOs may determine for system stability that it would be preferable to procure a fixed volume of a certain service in advance to ensure there is a guaranteed base volume of services, where certain technology types can provide that form of guaranteed provision.

4.1 Phased Implementation Roadmap

The SEM Committee has decided that the project should progress by reference to workstreams set out in the Phased Implementation Roadmap. A draft revision is set out below following feedback from stakeholders. The SEM Committee's approach in setting the draft timelines has been by reference to the below diagram, which provides an indicative view of what the SEM Committee considers to be the logical flow to implementing the HLD. As stated previously the deliverable timelines are indicative, however the SEM Committee expects that the final PIR will reflect the below diagram in terms of delivering the workstreams which the SEM Committee considers priorities.



A draft Phased Implementation Roadmap is set out below, and the SEM Committee now directs the TSOs to review and submit a final detailed PIR for SEM Committee approval. The final PIR should map across all workstreams and deliverables in the draft PIR, but there is scope to modify sequencing and delivery timelines subject to final SEM Committee approval. The SEM Committee considers that as noted in previous SEM Committee Decisions, it is important to determine the volumes methodology, and product review and locational methodology as a priority.

SEMC Decision: SSFA Project to progress along the workstreams set out in the Phased Implementation Roadmap, to be finalised by the TSOs and submitted to the SEM Committee for approval.

Section	Deliverable	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	
Needs Analysis	Volumes	Volumes Methodology Consultation	TSO Recommendation to SEMC SEMC Decision	Volumes forecasting and reporting in place	Review and iteration for any changes to products						Review and iteration for any changes to products			
	Products	First product review consultation	Recommendations to SEMC	SEMC Decision			Second product review consultation - including locational assessment	Recommendations to SEMC	SEMC Decision					
	Locational Methodology	TSOs to develop locational methodology alongside product review												
Procurement Method	Daily Auction	First consultation on DASSA	Consultation on auction and procurement design TSOs submit Recommendation Paper	SEMC Decision	Implementation of DASSA plus scope for further TSO consultations - including forwards markets etc.							DASSA Go-Live December 2026		
	Layered Procurement			TSOs to carry out assessment of need for Layered Procurement	RAs to review assess recommendations SEMC Decision			TSOs to carry out assessment of need for Layered Procurement	RAs to review assess recommendations SEMC Decision			TSOs to carry out assessment of need for Layered Procurement	RAs to review assess recommendations SEMC Decision	
		Window for implementation of LPF as required												
	Secondary Trading	TSOs to include development of secondary trading platform as part of DASSA detailed design		SEMC Decision	Window for more focussed consultation specifically on secondary trading if required							DASSA Go-Live December 2026		
	Regulated Arrangements	TSOs initiate review of tariff rates TSO consultation	TSO Recommendation to SEMC Implementation of changes SEMC Decision	Ongoing monitoring of Regulated Arrangements volumes and expenditure. Review of tariff rates as required							End of Regulated Arrangement - 30 April 2026			
Governance	Code	Bilateral development of first draft of System Services Code (TSO led)				Review and iteration with Project Panel - incorporating or updating for SEMC Decisions		SEMC Consultation	SEMC Decision	First Code in place for Go-Live	Period for accession to the Code			
	Licence Changes	Licencing Gap Analysis (Led by TSOs with input from RAs)			RAs carry out an assessment on the necessity of licence changes, including legal review			RA consultations on Licence changes	RA Decisions	First Licence changes in place for Go-Live				
	Standalone Charge		Proposals for implementation to be developed		TSO Consultation	TSO Recommendation to SEMC SEMC Decision	Implementation				Standalone charge ready for Go-Live			
	Panel	Establish Project Panel								SEMC Consultation on Code Panel ToR	SEMC Decision	Establish SS Code Panel		
IT	IT				TSOs recommend options for IT solution including costs SEMC decision on IT solution	Implementation of IT to ensure capability of full compliance with HLD decisions						Go-Live of IT		

TSOs

RAs

Decisions

4.2 Volumes

The SEM Committee considers that having an accurate forecast of the volumes of system services required across timeframes, and having accurate historical data on the volumes available and required by the TSOs is critically important both for industry to make informed investment decisions and to enable the Regulatory Authorities to assess the effectiveness of market arrangements and inform policy decisions. In accordance with the HLD the TSOs are required to publish forecast and historic System Services volume requirements by service, and where relevant, by location.

The TSOs deliverables are to:

- Develop and consult on a methodology for determining system services volume requirements and the volumes to be procured across all timeframes;
- Annually publish a ten-year forecast of system service requirements by relevant location, and shall invite comments from stakeholders on the form of this report at least annually;
- Regularly publish short-term forecasts and volume information following public consultation on the form, frequency, and granularity of these reports; and
- Publish the volumes to be procured by auction on a daily basis.

The SEM Committee directs the TSOs to progress the volumes deliverables as a matter of priority as per the PIR.

SEMC Decision: TSOs to progress the volumes deliverables as a matter of priority in line with the Phased Implementation Roadmap.

4.3 Products

The HLD set out that there was to be ongoing monitoring of the suite of system services products, with the TSOs carrying out periodic reviews of the services and proposing changes to existing services, the introduction of new services, and/or the discontinuation of existing services. The first product review will be carried out in early 2024, and should assess:

- The current operational constraints on the system and products that might address them;
- the design of different products for a competitive process, in particular any service where there is an over-procurement;
- The locational variations in the necessity of the services, and the need for locational-specific products;
- Application of Scalars in a competitive landscape;

- Any other issues the TSOs consider appropriate in the context of maintaining system stability and security.

Any proposed changes to products or scalars as a result of the review will be subject to SEM Committee approval, in line with the regulatory responsibility to approve any changes to terms and conditions relating to the procurement of ancillary services under EU/2019/944.

4.4 Locational Methodology

The HLD provided for the TSOs to develop a locational methodology, which would allow for the procurement of services in locations where there was a specific need for that service(s). The application of this methodology, within the procurement frameworks, will be considered separately in the development of the enduring arrangements for LPF, and the DASSA.

However, a clear understanding of the locational needs of the system will be an important element in the market design for the DASSA, product design for LPF, the Regulatory Authorities' assessment of market power issues, and to allow investors to make informed decisions. Therefore, the SEM Committee directs the TSOs to progress the development of the locational methodology, which was requested in the letter of June 2022.

The Phased Implementation Roadmap sets out that the Locational methodology should be a factor in the product review. The product review should assess the need for different products on system-wide and locational basis. Ahead of, or as part of, the first product review, proposals in relation to the defining of locations should be set out by the TSOs. It is the responsibility of the TSO to develop a locational methodology that facilitates transparency and predictability in the TSOs' development of products and assessment of volume requirements.

4.5 Qualification

The HLD set out a formalised process for the Qualification Trials Process (QTP). The SEMC approved the TSOs' proposed approach to the QTP in Dec 2022. Therefore, this is no longer a project deliverable, and it has moved to business as usual. However, the TSOs should note the key dates for the QTP in the Phased Implementation Roadmap as a reference for industry.

The HLD also set out that a qualification process, consistent with European and UK legislation, should be established by the TSOs and that the TSOs should endeavour to complete all applications within 90 days of receipt of a valid application. The TSOs should develop and consult on a single qualification process to apply to all registrations.

4.6 Governance

The HLD set out the governance arrangements that will apply to System Services. However, it is noted that the implementation of governance arrangements can require detailed legal work, in

addition to long lead times for things such as licence changes. The HLD acknowledged this, provided for the phased introduction of a System Services Code, and tasked the TSOs with developing a transition plan for the governance arrangements. The Phased Implementation Roadmap sets out timelines for the delivery of the System Services Code. As noted above, the TSOs and some industry responses proposed a working group be set up to facilitate the drafting of the code. The SEM Committee invites the TSOs to establish such a working group with appropriate industry membership.

The TSOs were also requested to place all relevant system services documents in a single place on their respective websites by the end of 2022. The TSOs have indicated that there currently is a library of documents related to System Services, and a brief description of System Services under the DS3 page. For clarity, the SEM Committee considers there to be a need for a new page to be established exclusively related to System Services. This page should clearly sign post links to primary documents which include, but are not limited to the below list, so stakeholders can easily access key System Services documents without the need to search through an extensive document library:

- product descriptions;
- how to tender for services;
- the protocol document;
- the market ruleset;
- a sample Regulated Arrangements contract; and
- an up to date list of providers.

The SEM Committee directs the TSOs to update their respective websites to reflect this requirement and comprehensively address the previous direction under the HLD.

The HLD sets out that a System Services Code Review Panel is to be established. The terms of reference for this panel will be developed and consulted upon in line with the Phased Implementation Roadmap. This decision paper also confirms the establishment of a System Services Project Panel, which is distinct from the Code Review Panel, and will be a consultative group to be engaged with on the progress of the project against the workstreams and timelines set out in the PIR. It is noted that, consistent with the HLD, the TSOs can use contractual arrangements, as a transitional measure where they consider it appropriate (e.g., where the Code is not yet in place).

4.7 Licence Modifications

A licence modifications workstream has been included to address comments made by the TSOs, and subsequent engagement. It is expected that where licence changes are necessary for the full implementation of the arrangements these will be progressed in parallel to the TSOs work on the

code. The Regulatory Authorities will prioritise changes to the respective TSO licences ahead of changes to the licences of other market participants.

4.8 System Services Cost Recovery

The HLD provided for the implementation of a System Services Charge, to be payable by Suppliers. The HLD set out that this would begin as an annually set charge and as market behaviours become better understood and the relationship between energy costs and system services costs becomes clearer the SEM Committee may move to more granular timeframes, up to a trading period basis. The balance between forecasting risks of the TSOs and suppliers are noted and informed the rationale of the SEM Committee's decision to phase in the granularity of the charge over time. Initially, therefore the TSOs should propose and progress an annual €/MWh charge to recover the costs of system services payments to providers. The Phased Implementation Roadmap sets out a timeline for development of the standalone charge.

4.9 Distribution System Interactions

The SEM Committee decided that distribution system interactions will be agreed by the relevant TSOs and distribution operators in accordance with the principles set out below:

- The process will be TSO-led, in relation to the qualification of providers and the procurement of services from those providers;
- The TSOs will ensure that any limitations on a distribution-connected provider considered necessary by the relevant distribution operator for the secure and safe operation of its system are adequately reflected in the TSOs' operation of the system services arrangements; and
- All network operators should work co-operatively to safely maximise access to the system services arrangements by distribution connected providers.

Updates on engagement between the TSO and DSO will be included as a standing agenda item at System Services Project Panel meetings. Additionally, the TSO and DSO were previously directed to furnish a progress report by the end of 2023 and the SEM Committee understands that this deliverable is on track.

4.10 Market Arrangements

The market arrangements set out in the HLD consist of three main frameworks.

- The Fixed Contract Framework for multi-year contracts where targeted investment is needed by the system;

- the LPF for the procurement of products in the medium timeframe (anytime, up to one year, before day-ahead) where procurement before day-ahead can provide additional certainty for the TSOs or providers before day-ahead, to address specific locational needs or where a specific product is more appropriately procured in the LPF;
- and the DASSA which is the daily auction, where services suitable for short-term procurement will be procured.

Under the enduring framework it is expected that the majority of volumes for standard products will be procured in the DASSA with a smaller volume procured through the LPF or Fixed Contracts. The Fixed Contracts Framework is currently in place and available for targeted multi-year procurement. Implementation of the LPF will depend on the outcome of the annual TSO reviews. The TSOs have indicated that the DASSA will go-live in December 2026.

Additionally, following feedback from the consultation, the SEM Committee considers that secondary trading will be an important feature of the market. As such, the TSOs should seek to deliver a day-one secondary trading solution for go-live of any market-based arrangements insofar as possible. A central trading platform is likely to be the optimal solution, however bilateral trading should also be facilitated.

5 EXTENSION OF REGULATED ARRANGEMENTS

The SEM Committee has decided to extend the Regulated Arrangements until 30 April 2026. The SEM Committee expects the TSOs to continuously review the appropriateness of the tariff rates. In line with the review process set out under Section 8.1 of SEM-17-080, reviews will be instigated where it has been identified that there is a risk of one of the following;

- the TSO expects the expenditure cap being breached;
- the quantity of service which is procured exceeds that which the TSO requires to operate the system at 75% SNSP;
- the TSO has not procured the level of service necessary to maintain stability of the system at 75% SNSP; or,
- unintended consequences of tariff design emerging post go-live of contracts.

The SEM Committee directs the TSO to submit quarterly reports detailing the volumes procured and expenditure on system services. This report should also note whether the TSOs consider that a tariff review is necessary with regard to the above criteria.

The Quarterly Report should demonstrate that the current tariff rates and scalars, or proposed revised rates and scalars, are economically efficient. Taking into consideration whether there is over or under procurement of a service, and whether zero-carbon providers providing services at times of high renewable output are appropriately incentivised relative to other providers.

In particular, with regard to the reserve services, the TSOs have advised that the quantity of service procured currently exceeds that which is required to operate the system. The SEM Committee would therefore expect the TSOs to develop a workable solution, which appropriately incentivises units which are available at times of most need but maintains economic value for consumers.

For clarity, the SEM Committee notes that a tariff review can be commenced at any point throughout the year, and tariff rates can be changed at any time subject to consultation and SEM Committee approval. As noted in the PIR, the SEMC requires that the TSOs initiate a tariff review in Q1 2024.

SEMC Decision: Regulated Arrangements extended to 30 April 2026. TSOs to carry out an ongoing review of the appropriateness of the tariff rates and report quarterly to the SEM Committee. TSOs to initiate a tariff review in Q1 2024.

6 SSFA PROJECT PANEL

Taking account of stakeholder feedback, the SEM Committee has decided to introduce a SSFA Project Panel. The Panel will meet every two months and will be made up of representatives from industry associations, consumers interest groups, EirGrid, SONI, ESB Networks, and NIE Networks will be invited to nominate representatives. This will be a consultative forum which will compliment standard public consultation processes. Ultimately responsibility for consultation and recommendation of detailed design issues will remain with the TSOs and decision making on all elements will be a SEM Committee responsibility.

The SEM Committee will invite representative nominations in the coming weeks, and will look to schedule six meetings in 2024, with the first meeting taking place in late January/early February.

SEMC Decision: The SEM Committee has decided to establish the SSFA Project Panel, with regular meetings to commence in 2024.

7 USE OF LAYERED PROCUREMENT

The SEM Committee acknowledges the concerns raised by stakeholders in the consultation, and also welcomes some respondents' agreement on the approach proposed. Under legislation, the principal objective of the SEM Committee is to protect the interests of consumers of electricity wherever appropriate by promoting effective competition. Therefore, in relation to System Services, the SEM Committee must ensure that ancillary services are procured in as economic a manner as possible, by the TSOs. Following consideration of the responses received, the SEM Committee has decided not to prescribe the parameters for usage of the LPF at this time.

The usage of the suite of procurement mechanisms requires further consideration through the mechanisms set out under the HLD Decision. In that context the TSOs will be responsible for assessing the utilisation and parameters of the LPF and the detailed design of the DASSA, by reference to the PIR.

The HLD sets out a requirement for the TSOs to carry out assessments of the services to be procured via LPF and report on this at least annually to the SEM Committee. The SEM Committee now directs the TSOs to commence the first such assessment as soon as is reasonably practical. The SEM Committee would expect the work done to date in 2023 on exploring LPF options, including the SEM Committee's proposals in this area, and the TSO's counterproposals in their response, as being of use in this assessment. The TSOs should be cognisant that the SEM Committee's position is that Regulated Arrangements cannot be extended beyond 30 April 2026, and the SEM Committee's preference is for a competitive solution to bridge the gap between Regulated Arrangements and the enduring SSFA.

The HLD set out that the TSOs will prepare, on their own initiative or at the request of the SEM Committee, a proposal for the approval of the SEM Committee where:

- Such procurement is appropriate in the context of ensuring security of supply;
- Such procurement will improve economic efficiency including:
 - Minimising non-market actions by the TSO;
 - Reducing dispatch balancing costs;
 - Improving competitive conditions in the daily auctions; or
 - The full volume requirement for a system service is not being procured in the daily auctions.

The TSOs proposal for products to be procured will cover the following:

- The maximum duration of the contracts for this product;
- The maximum period in advance of provision of capacity the product will be contacted;
- The technical definition of the product, which will be technology neutral to the extent possible;
- The procurement process for the product; and
- Other parameters the TSOs consider appropriate.

The SEM Committee requires that the TSO's carry out an assessment of services to be procured through the LPF. This assessment should include:

- How all system services are currently procured
- Whether these procurement methods are compliant with relevant legislation
- Plans on how to move those services, still on tariffs, to market based procurement methods and associated timelines for this transition.
- These plans should detail whether the TSO intends to make use of daily, layered or fixed contract arrangements, to transition away from tariffs, for each of the respective services/products and provide justification on the same.
- If the TSO intends to remain on tariffs, for any of the system services, justification will need to be provided to demonstrate that tariffs represent the best value for money for consumers and/or are necessary for security of supply reasons.

In evaluating the TSOs' assessment, and any procurement proposals, the SEM Committee will take into consideration the assessment criteria set out in section 1 in addition to its principal objective to protect the interest of consumers by promoting effective competition.

SEMC Decision: TSOs to carry out a review of the need of the LPF at least annually, in line with the HLD.

8 NEXT STEPS

The TSOs will review the draft PIR and subsequently publish a final version following SEM Committee approval. Work will also commence on the workstreams set out in the PIR, with the volumes methodology and product review being the priority deliverables. The SEM Committee will invite industry associations to nominate a representative to the System Services Project Panel and will publish a terms of reference and schedule of meetings for the Panel for 2024 in the coming weeks.