



## SEM Capital Investment

### Market System Development Plan 2019-2021 – Post Consultation Report

#### **Abstract**

This document provides a synopsis and commentary to the responses received during the consultation of the Market Systems Development Plan 2019-2021.

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## Introduction

The 2019-2021 Market System Development Plan (MSDP) was produced by SONI and EirGrid, in their capacity as licenced Market Operators, to facilitate the development of the Single Electricity Market (SEM) Trading and Settlement Systems. The document outlines market system capital projects which have been delivered, or are being planned, by the Single Electricity Market Operator (SEMO) for the period from 1 October 2019 to 30 September 2021.

The 2019-2021 MSDP was published for consultation and comments were invited from interested parties during the period of 4 September 2020 to 15 October 2020. Four responses were received from industry stakeholders.

This document provides an overview of the changes made to the MSDP following the consultation and summarises the feedback received from SEMO's stakeholders during this process. As well as the summary of the feedback, all non-confidential responses can be found in Appendix 1 of this document.

## Changes to the 2019-2021 Market System Development Plan

In general terms, SEMO notes the industry's satisfaction with the efforts that are being made to enhance the systems architecture so as to improve market stability and reduce risks and financial exposures for participants. Following the consultation, no new projects have been added to the 2019-2021 MSDP. Two projects have, however, been removed from the original list of eleven, thus leaving a total of nine projects to be delivered during the period of 1 October 2019 to 30 September 2021.

### Projects Removed

#### Participant Urgent Communication

The intention of a Participant Urgent Messaging solution had been to provide a direct communications channel to Participants outside of the normal working day. SEMO acknowledged that, in the absence of such a service, participants would not be able to react to adverse market signals and events which could in turn could have a significant monetary impact on their business operations.

Following a competitive procurement process, SEMO has recently gone live with an enhanced out-of-hours service. As part of the roll-out of this, SEMO believes that the key deliverables of the Participant Urgent Communication Project have been met in a more comprehensive way. This service will allow SEMO to be alerted of significant events which occur outside of working hours and issue the necessary market messages.

Although the Participant Urgent Communication project will not be progressed at this stage, SEMO commits to continuing to engage with participants to ensure that the out-of-hours service remains fit for purpose and meets their needs as the market continues to evolve.

## **Market Monitoring Systems**

The Market Monitoring Systems project sought to implement a suite of system monitoring and reporting tools to provide an end-to-end service management solution that supports improved availability and performance across IT systems. With that in place, SEMO would achieve the benefits of automated monitoring, alerting and reporting and would be able to adopt a proactive approach to identifying and resolving issues that would help to maintain the market systems availability to the market participants.

The Market Monitoring Systems project has now been removed from the 2019-2021 MSDP. This follows a feasibility review, in which it was determined that it would not be possible to implement an automated system along with other operational improvements before September 2021. As such, this project has been deferred beyond the time period of the current price control. Until such time that an automated solution is implemented, SEMO will continue to employ the manual process that is currently in place.

## **Consultation Response Synopsis**

This section provides a summary of the responses received from stakeholders during the consultation period.

In addition to the general satisfaction at the efforts being made by SEMO to stabilise the market, following its go-live in October 2018, there were three key themes of feedback received from SEMO's stakeholders. These covered:

- Priority Dispatch & Redispatch – Articles 12 & 13 of Electricity Regulation (EU) 2019/943
- Secondary Capacity Trading
- Timing of the MSDP Consultation

These are each explored in turn in the subsections that follow.

General feedback was also provided on the structure of the document, with the detail on the business cases welcomed. Respondents noted they would have liked to have seen detail on the delivery progress of the projects against plan, as well as for SEMO to consider grouping infrastructure/hardware to highlight the scale of work needed. This feedback is welcomed and will be considered in the development of future versions of the MSDP.

## **Priority Dispatch & Redispatch – Articles 12 & 13 of Electricity Regulation (EU) 2019/943**

In response to new requirements derived from the Clean Energy Package, respondents highlighted the need for non-priority dispatch renewable generation to be able to actively bid and participate in the day-ahead and balancing markets. Participants feel this capability is crucial for units which want to react to the market signals and not generate during negative price hours,

renewable generators which have exited subsidy supports, and for all units which were successful in this summer's RESS auction.

### **SEMO Response**

Acknowledging the multifaceted and interlinked nature of the potential solutions to the change in priority dispatch and redispatch arrangements, SEMO, along with all SEM market participants, is currently awaiting the outcome of the decisions from the SEM Committee, following its recent consultation on the implementation of Articles 12 and 13 of Regulation (EU) 2019/943. More information on the SEM Committee consultation, and any further consultations that may be held on this topic, can be found on the SEM Committee website.

SEMO acknowledges the potential scale of the impact of the proposed changes to market participants. Once the relevant decisions have been taken by the SEM Regulatory Authorities on how best to apply the Electricity Regulation to the SEM, SEMO will work with stakeholders to identify the means through which requirements relating to priority dispatch and redispatch changes can be optimally addressed.

### **Secondary Capacity Trading System**

Respondents recommended that a business case for an enduring Secondary Capacity Trading system to allow the CMC Modification (CMC\_09\_19) to be addressed urgently and a plan to commence during 2021 communicated.

### **SEMO Response**

SEMO wishes to highlight that, while Secondary Capacity Trading System does not come under the scope of the SEMO Market System Development Plan, it is included in the [Market Development Roadmap](#). Furthermore, the revised secondary trading arrangements went live on 13 November 2020 following the implementation of two modifications to the Capacity Market Code – CMC\_09\_19 and CMC\_07\_20.

SEMO anticipates that these new arrangements will increase the flexibility of trading, enable greater value to be retained by participants and reduce risks to the market as a whole. Participants can now trade with other qualified units at an agreed price between the two parties. Furthermore, efforts have been made to improve the System Operators' processes to optimise the way in which market participants can take advantage of secondary trading opportunities (such as by significantly reducing the lead time for the trade to be notified to the System Operator). Nonetheless, SEMO will continue to work with participants to continually review, and improve, the services provided.

### **Timing of the MSDP**

Participants highlighted that the 2019-2021 MSDP was consulted upon, and will be published, one year into the period of its enactment with some projects underway. This was accompanied with a

request for future consultation to be conducted prior to projects entering their delivery phases. It was therefore suggested that the next MSDP consultation should take place in early 2021

### **SEMO Response**

This feedback is noted and will be considered in the development of the 2021-2023 MSDP. This will cover the period from 1 October 2021 to 30 September 2023 and, hence, SEMO expects to consult on the plan during the first half of 2021. This MSDP consultation will be considered alongside the work being done as part of Vision 2030 which will be consulted on in early 2021 and this will give market participants the opportunity to comment holistically on the full programme of work being undertaken to further enhance the market for both the short and longer term periods.

### **Next Steps**

Following the RAs' approval the Market System Development Plan 2019-21 a link can be found [here](#).

## Appendix – Non-Confidential Responses

### Irish Wind Energy Association (IWEA) and RenewableNI



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Osberstown, Naas,  
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RenewableNI,  
Arthur House,  
41 Arthur Street,  
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15 October 2020

Emailed to: [info@sem-o.com](mailto:info@sem-o.com)

RE: SEMO Market Systems Development Plan 2019 -2021 Consultation

Dear SEMO Market Development team,

The Irish Wind Energy Association (IWEA) and RenewableNI welcome the opportunity to engage with SEMO and respond to the consultation on the SEMO Market Systems Development Plan 2019 - 2021.

IWEA is the largest representative body for the Irish wind industry, working to promote wind energy as an essential, economical, and environmentally friendly part of our low-carbon energy future. RenewableNI is a collaboration between IWEA and RenewableUK and is the voice of the renewable electricity industry in Northern Ireland. Together we represent a large majority of the renewable industry supply chain on the island.

IWEA and RenewableNI members would like to make a submission with the following comments:

#### General Feedback

IWEA and RenewableNI welcome the general workplan for future market systems development and the identification of the eleven capital projects being progressed. We welcome that these proposed changes will improve market stability and reduce risks and financial exposures for participants. However, as noted in the consultation, many of these eleven projects are required for the market to fulfil its "core objectives" and relate to fixes for issues and defects which should not have materialised in I-SEM to begin with relating to system functionality and re-pricing and re-settlement functionality. IWEA and Renewable NI would again like to emphasise the need for the speedy implementation of a wider continuous market to improve market liquidity, optimise interconnector flows and reduce dispatch down on wind units. In addition to this, the development plan does not include fundamental changes which are required to the market for SEM systems to be compliant with the Clean Energy Package - namely Articles 12 and 13 of the Electricity Regulation.

Finally, we wished to register our confusion as to how these outlined costs, relate to the already declared K factor costs which have been recouped through the 2019-20 imperfections charges, which specifically indicated that system defects contributed to the increased K factor. Clarity on this point would be welcome.

#### Timing of the Publication

IWEA and RenewableNI wish to express concern that the publication of this two-year plan, which covers 1 October 2019 to 30 September 2021 was only published on the 4<sup>th</sup> September 2020 - almost a full year into the development plan.

While it is recognised that the introduction of the I-SEM and the subsequent fixes to market issues took up a significant level of resource time for the Market Operator, we do not believe it is acceptable for a two year plan to be published one year into its enactment.

As the current eleven capital projects are well into planning and development, it does not appear that this consultation could meaningfully change any of the existing development plan given how far progressed it is.

We strongly encourage SEMO to be more proactive on the publication of the development plan for the next two-year cycle, which presumably runs from 1 October 2021 to 30 September 2023, and to consult meaningfully with market participants in early 2021 on this plan. We can anticipate several system improvements or additions in the future, which would benefit from meaningful consultation and early signalling of the planned and necessary costs.

#### Compliance with Article 12 of the Electricity Regulation of the Clean Energy Package

IWEA and RenewableNI would like to highlight that one of the most important new items of functionality for market systems, which is urgently required in the near-term, is missing entirely from the Market Systems Development Plan - this is the ability of non-priority dispatch renewable generation to be able to actively bid and participate in the market.

Article 12 of the Electricity Regulation outlines that 'new' renewable generation will no longer have priority dispatch and that existing generators which have priority dispatch will now have the option to give it up. Any renewable generator which does not have priority dispatch will need the capability to bid into the day-ahead and balancing markets.

IWEA and RenewableNI have held workshops in the past six months with SEMO, EirGrid, SONI, the RAs and industry in relation to enabling this functionality. This capability is crucial for units which want to react to the market signals and not generate during negative price hours. This is important for renewable generators which have exited subsidy supports, and for all units which were successful in this summer's RESS auction, as well as the other RESS auctions



throughout the decade, as they do not receive any subsidy benefit during negative price hours and under current market systems are forced to generate during these hours at a loss.

IWEA and RenewableNI have been informed in these workshops that amending the market systems to allow this will require complex systems changes. However, IWEA and RenewableNI are strongly of the view that current system limitations should not be allowed to determine the direction of future policy. It is core to the Electricity Regulation that renewable generation, as an increasingly significant proportion of the generation market, be afforded full access to trade in the internal market.

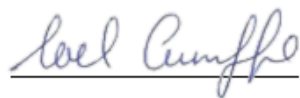
We believe substantial engagement is required amongst industry, the RAs, System Operators and SEMO to understand how non-priority dispatch renewables will participate in the market, how settlement will work, and what market systems will be utilised in order to dispatch these units. In particular:

- We strongly recommend the rules for bid-offer acceptance classification require further review, consultation, and impact assessment against different classes of generator, and ultimately appropriate governance of the rules.
- We also strongly recommend the rules for submission of Final Physical Notifications (FPNs) for all classes of generation require further consultation, and those rules are impact assessed against different classes of generation.

Full details of industry's reasoning for requiring such systems quickly, and thoughts on how they could be implemented, can be found within the IWEA and RenewableNI's consultation response to the SEM Committee's consultation on the implementation of Article 12 and Article 13 of the Electricity Regulation<sup>1</sup>.

In conclusion we thank SEMO for the opportunity to make this submission and we look forward to engaging with you in future on the development of the market systems.

Kind Regards,



Noel Cuniffe  
Head of Policy, IWEA  
*On behalf of IWEA and RenewableNI*

<sup>1</sup> <https://iwea.com/images/files/20200619-iwea-and-nirig-response-to-semc-article-12-and-13-consultation-final.pdf>



127 Baggot Street Lower  
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**Date: 15/10/2020**

**EAI Response to the SEMO Market Systems Development Consultation**

By email to [info@sem-o.com](mailto:info@sem-o.com)

EAI would like to thank SEMO for the opportunity to respond to this consultation.

We welcome the approach whereby a number of prioritised projects have been identified, 11 in total, which will provide further market stability, as well as reducing the risks and financial exposure of market participants and consumers.

We are, however, somewhat surprised regarding the timing of this consultation, issued Summer 2020, in so far as it refers to projects which have been delivered or are being planned by the Single Electricity Market Operator (SEMO) for the period from 1<sup>st</sup> October 2019 to 30<sup>th</sup> September 2021, i.e., commencing one year ago, with some projects clearly already underway.

While this may not be a bad thing in this instance, we would expect that in the normal course of events, that consultation would occur in advance of the implementation and delivery phases, and would look for some reassurance that this will be the future approach towards other consultations, to make them meaningful.

Given this timing issue, in the case of this consultation it would perhaps have been of more use to the reader to be invited to comment on the current and anticipated progress of each project vs current and anticipated timelines and budgets.

The central point we wish to make in this submission is the absence of any reference to mechanisms which will facilitate the compliance of SEM market system design with the CEP requirements under Article 12 and 13 of Electricity Regulation 2019/943.

As you will be aware, Article 12 of the Regulation effectively removes priority dispatch for new renewable generators using renewable energy sources or high-efficiency cogeneration commissioned after 4 July 2019. Therefore, such non-priority renewable generation needs a market system to be able to bid and to participate into the day-ahead and balancing markets. It is crucial that this capability is in place for units to be able to react to market signals, not wanting to generate during periods of negative pricing, for which there is no support, and for which, under current arrangements, the units would generate electricity at a direct loss. Therefore, it is imperative that mechanisms be in place to allow non-dispatchable Units to financially manage their position in the Balancing Market.

Yet, there is no evidence of this in the Market Systems Design Plan; this is a clear omission, for which we call for a solution to be developed following substantial engagement between the relevant parties. This solution will need to cover means of participation, as well as market systems used in settlement, in scheduling and in dispatch.

This provision will be equally important for units successful in the series of RESS auctions, as well as for those which choose to exit subsidy supports.



While stressing the need for full and substantial engagement, we seek reassurance that the complexity of the potential solution be fully factored into required timelines with appropriate budgetary allocations.

A further potential omission worth noting is that of the system functionality to implement enduring Secondary Trading in the Capacity Market. The recent SEM Committee approval of a CMC Modification (CMC\_09\_19) was de-scoped on the basis of system functionality to deliver an enduring solution not being available for 12-18 months. Although project 1 (Market System Release Capital) identifies need cases including regulatory approved market modifications, it is not clear that this project will include the necessary system developments to implement enduring Secondary Trading and we recommend that this is addressed urgently.

Having set out the above, and to close, we do acknowledge that the 11 projects, as set out, will deliver a catch-up on where SEM mechanisms were meant to be from day one, in that they resolve high priority incident and defects, they implement important changes to improve system functionality and provide for the support required to enable the re-pricing, resettlement and M+4 and M+13 settlement activities to be carried out. The achievement of these objectives will be welcomed.

We look forward to ongoing engagement with SEMO and the Authorities in a collaborative manner to help deliver system security and value to the consumer.

Yours sincerely,

A handwritten signature in blue ink, appearing to be 'John MacNamara', with a long horizontal line extending to the right.

Dr John MacNamara

Chair EAI Markets Committee



**Energia response to  
SEMO Consultation Paper**

*SEMO Market Systems Development Plan 2019 - 2021*

15 October 2020

## **1. Introduction**

Energia welcomes the opportunity to respond to the SEMO Consultation Paper on the Market Systems Development Plan 2019 - 2021 (the "Market Systems Development Plan"). Energia are a member of Irish Wind Energy Association (IWEA) and endorse the IWEA response. In doing so, we wish to highlight a number of points of emphasis with respect to the IWEA response.

### **General Comments and Timing of the Consultation Paper**

- We welcome the general workplan for future market systems development recognising that these proposed changes will improve market stability and reduce risks and financial exposures for participants.
- However, it is noted that many of the projects are required to fulfil "core objectives" to fix defects relating to system functionality, including re-pricing and re-settlement functionality, which should not have materialised in I-SEM to begin with.
- In addition, we are also concerned that the publication of the Market Systems Development Plan covering capital projects planned for the period 1 October 2019 to 30 September 2021 was only published on 4 September 2020 - almost a year into the development plan period.
- Given the current projects identified are well into planning and development, it does not appear that this consultation could meaningfully change any of the existing development plan.
- We therefore would also strongly encourage SEMO to be more proactive on the publication of the next Market System Development Plan and to consult meaningfully with market participants in early 2021 on this plan, before the development period commences.

### **Compliance with Article 12 of the Electricity Regulation of the Clean Energy Package**

- The Market Systems Development Plan does not include new items of functionality in market systems for the ability of non-priority dispatch renewable generation to be able to actively bid and participate in the market as required under Article 12 of the Electricity Regulation of the Clean Energy Package.
- Article 12 of the Electricity Regulation outlines that 'new' renewable generation will no longer have priority dispatch and that existing generators which have priority dispatch will have the option to give it up. Any renewable generator which does not have priority dispatch will need the capability to bid into the day-ahead and balancing markets.
- This capability is crucial for units which want to react to the market signals and not generate during negative price hours.
- This is important for renewable generators which have exited subsidy supports and units successful in RESS auctions, as they do not receive any subsidy benefit during negative price hours and under current market systems are forced to generate during these hours at a loss.

- Whilst amending the market systems to allow for this will require complex systems changes, current system limitations should not be allowed to determine future policy and it is core to the Electricity Regulation that renewable generation be afforded full access to trade in the internal market.
- In relation to facilitating this capability, we are supportive of the request for substantial engagement with all industry stakeholders to understand how non-priority dispatch renewables will participate in the market, how settlement will work, and what market systems will be utilised in order to dispatch these units.

**Additional considerations from Energia**

- In addition to the IWEA response, Energia note a further potential omission is that of the system functionality to implement enduring Secondary Trading in the Capacity Market.
- The recent SEM Committee approval of a CMC Modification (CMC\_09\_19) was de-scoped on the basis of system functionality to deliver an enduring solution not being available for 12-18 months. Although project 1 (Market System Release Capital) identifies need cases including regulatory approved market modifications, it is not clear that this project will include the necessary system developments to implement enduring Secondary Trading and we recommend that this is addressed urgently.



## Response to SEMO Market Systems Development Plan 2019- 2021

15<sup>th</sup> October 2020

### 1. Introduction

Bord Gáis Energy (BGE) has reviewed the Market Systems Development Plan 2019- 2021, and we welcome the opportunity offered by SEMO to provide feedback and comments on the document.

### 2. Considerations and feedback

The plan as outlined, and the detail of the 11 Business Cases it includes, are sensible to address the status of the market systems post SEM go-live in October 2018 particularly given the on-going repricing and resettlement activities and the need to clear the known issues report. We propose that the plan would benefit from a further level of detail specific to each Business Case including information on the delivery and spend to date, and the grouping of topics common across the identified Business Cases (e.g. environments/ infrastructure/ hardware requirements). The extra information and analysis together can give readers an informed snapshot of the budgets, spends and savings/ overruns both by Business Case and common topics. Customers can use the data to better establish the value being delivered by the SEMO project activity/ Business Cases, and if the costs will remain within the controls that are set or if customers will be expected to cover increasing cost requirements.

Our further comments and considerations of the plan details are as follows:

#### a. Items of specific interest

Our review of the plan did not identify reference to work on the enduring Secondary Capacity Trading system, as an example of a specific deliverable. We appreciate that the work on this project may be rolled into the requirements for one of the other projects such as Business Case 1 (Market Capital Release Capital), but we did not see the detailed reference to the project. Specific reference to the enduring Secondary Capacity Trading system and what Business Case it relates to is necessary to reassure participants that it will at least be commenced during 2021 and we ask for this confirmation in the final Plan.

#### b. Reporting on Delivered v Remaining

We note that the plan covers the period 2019 -2021, and this publication in September 2020 is about half-way through the period. We would have expected that SEMO would have taken the opportunity to include in the publication an update as to the scale of delivery to date against this plan, and what remains to be delivered including an estimation of the delivery timelines for the remainder of the plan. This update should also advise of the spend to date against the notified budgets for each Business Case, what remains of the budget to be spent, and note any delays or over/ underspends that are to be expected. This update could be in the form of an Addendum to the plan specifying the date of the snapshot for the update. While some of this information may be available elsewhere, we would see it as helpful to stakeholders and participants to present all of the relevant information of the plan and update together. This data can help customers understand if areas of the plan have fallen behind in delivery so potentially impacting further system plans, and if they are receiving the value in the service for which they are paying. The biannual release model has experienced delays in 2020. If the issues were reported as proposed then it could help customers understand any potential knock-on effects that may result and establish if delays are impacting costs.

#### c. Standard Business Case detail

We see in Business Case 5 (Additional Market Environments) that the separate environments to be procured and implemented are identified. This is helpful but also highlights a gap in other Business Cases such as 4 (Market System Data Archiving), 6, (Market Monitoring Systems), 7 (MMS Performance Enhancements), 10 (Website Development) that could better identify all the other

environments/hardware etc. that are required to be purchased/implemented to support the projects as outlined in the respective Business Cases. We suggest an increased level of standardisation of the details reported under each Business Case to the standard of that seen under Business Case 5.

d. Grouping of topics common across Business Cases

Continuing with the topic of environments and hardware requirements across Business Cases, we believe it would be helpful to readers of the plan to have an additional section in the plan that groups all of the infrastructure/ hardware requirements into one place to demonstrate the scale of requirement for these items across all of the relevant Business Cases. Reporting in this format can demonstrate the budgets associated with these items by Business Case, how spend is progressing against the budgets, and help readers understand if issues in this topic are being managed within the set price controls or if project developments will result in an under/ overspend against the topic. It is expected that each of the relevant Business Cases do already include the spend for the required infrastructure/hardware to support the Business Cases. By grouping this common spend however, it would help stakeholders and participants to analyse the budget and spend across the Business Cases and establish where identified synergies are being maximised to lower project spend and improve customer value. In the final report we would welcome more clarity on how SEMO is maximising synergies across all Business Cases to get the most cost-effective spend on projects, with a view to increasing project value to customers. Where synergies are being used in business cases, the value of these should also be called out in each business case summary.

3. Beyond 2019-2021

BGE appreciates the opportunity to provide feedback on the SEMO Market Systems Development Plan 2019- 2021 but this is occurring in September/ October 2020 which as we have noted in point b. above is about half-way through the plan period and so very late for comments that can have a meaningful impact on the plan. We request that the next MSDP covering 2021 -2023 is made available to interested parties in Q1 2021 to allow for SEMO to incorporate items from the responses received and adjust the plan priorities before publishing the final plan before October 1<sup>st</sup>, 2021.