

Chapter 2: Market Governance, Administration and Operation

Industry Guide to the I-SEM



2. Market governance, administration and operation

2.1 I-SEM governance and administration

SEM Committee

The SEM Committee (SEMC) is the governing body for the I-SEM, established by law. It oversees the design and implementation of the I-SEM and makes decisions on licenses and market codes relevant to the implementation of the I-SEM. The mission of the SEMC is to protect the interests of consumers of electricity by promoting effective competition in the sale and purchase of electricity through the I-SEM. The SEMC comprises six representatives from the Regulatory Authorities (RAs), three representing Ireland and three representing Northern Ireland, and two independent members.

Regulatory Authorities

The RAs—the Commission for Energy Regulation (CER) in Ireland and the Utility Regulator (UR) in Northern Ireland—participate jointly in decisions on SEM matters through their membership of the SEMC. The RAs are also individually responsible for local issues relating to the implementation of the market codes and procedures, licensing of market operators and participants, setting market parameters, and monitoring the operation of the I-SEM and the conduct of its participants.

2. Market governance, administration and operation

2.2 Transmission system operation

The Transmission System Operators (TSOs), under license from the RAs, operate the transmission system. EirGrid is the TSO for Ireland, and SONI is the TSO for Northern Ireland. The TSOs are responsible for system security and balancing, operating transmission assets, managing grid connections, and forecasting and planning for the power system. The TSOs also have roles in operating the markets in their geographic regions, which are described later.

CORES0 (Coordination of Electricity System Operators), a European body, assists the TSOs with security of supply at a regional level and in defining capacities between regions.

2. Market governance, administration and operation

2.3 Market operation

Note: Unless otherwise stated, references to the Day-Ahead and Intraday Markets are specific to the I-SEM markets operated by SEMOpx.

Responsibilities for market operation, settlement and credit risk management are split between multiple entities, which are described separately for each market in Chapter 4.

2. Market governance, administration and operation

Table 1: Market operation responsibilities

| Market | Market Operation | Settlement and Credit Risk Management | Refer to |
|------------------|---------------------------------------------------------|----------------------------------------------------|--------------------------|
| Day-Ahead Market | SEMOp ⁵ (or another NEMO), MCO | SEMOp ⁵ (or another NEMO ⁶) | Chapter 4, Section 4.3.3 |
| Intraday Market | SEMOp ⁵ (or another NEMO ⁶), RCO | SEMOp ⁵ (or another NEMO ⁶) | Chapter 4, Section 4.4.3 |
| Balancing Market | System Operators (TSOs) ⁷ | SEMO | Chapter 4, Section 4.5.3 |
| Capacity Market | System Operators (TSOs) | SEMO/TSOs ⁸ | Chapter 4, Section 4.6.3 |
| Forwards Market | Under consideration | | Chapter 4, Section 4.7.3 |
| FTR auctions | JAO (on behalf of ICOs) | | Chapter 4, Section 4.8.3 |

| | |
|--------------------|---------------------------------------------------|
| MCO | Market Coupling Operator |
| RCO | Regional Coupling Operator |
| TSO | Transmission System Operator |
| SEMO | Single Electricity Market Operator |
| SEMOp ⁵ | Single Electricity Market Operator Power Exchange |
| NEMO | Nominated Electricity Market Operator |
| JAO | Joint Allocation Office |
| ICO | Interconnector Owner |

2. Market governance, administration and operation

2.4 European network administration

Governance of the IEM and administration of intermarket network codes falls under the EU Agency for Cooperation of Energy Regulators (ACER). ACER oversees the development of the IEM and the European Network of Transmission System Operators for Electricity (ENTSO-E) is responsible for developing the detailed technical and commercial requirements for market coupling.

2.5 Market codes and guidelines

The market codes authorise and define the functions of the TSOs, market operators, and participants, and the processes by which the markets and interconnectors operate. The codes fall into two categories: codes specific to the I-SEM^{9,10} and European network codes, guidelines, rules and agreements^{11,12,13} relevant to the operation of the SEM. The processes for amending codes and the responsible bodies are defined in and differ for each code.

2. Market governance, administration and operation

Table 2: Market codes, guidelines and agreements

| Code | Application |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-SEM codes and rules | |
| Grid Code | Defines TSO functions and interactions with the TSOs, including forecasting, demand control, information exchange, scheduling, and dispatch |
| Trading and Settlement Code (TSC) | Defines the rules for participant registration, balancing, calculation of payments and charges, credit cover, collateral requirements and financial settlement for the Balancing Market and Capacity Market. |
| Capacity Market Code (CMC) | Defines the rules for conducting auctions for capacity, including requirements for participation and qualification. |
| SEMOpX Rules ¹⁴ | Defines the rules for governance, administration and operation of the Day-Ahead Market and the Intraday Market operated by SEMOpX. |
| European network codes, guidelines, rules and agreements | |
| Connection Network Codes | Defines the rules for the connection of new power generating installations, new demand facilities, and new high-voltage direct current systems. |
| Emergency and Restoration | Defines the rules for management of the electricity transmission system in emergency, blackout and restoration states. |

2. Market governance, administration and operation

| Code | Application |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Operation Guideline | Defines the rules for operation of the interconnected transmission system in real time. |
| Forward Capacity Allocation (FCA) | Provides a framework for the calculation and allocation of interconnection capacity and cross-border trading in forward markets (i.e. time frames longer than day-ahead) |
| Capacity Allocation and Congestion Management (CACM) | Governs the establishment of cross-border EU electricity markets in the day-ahead and intraday time frames, and the calculation of interconnection capacity. |
| Electricity Balancing (EB) | Defines cross-border operation of balancing markets. |
| Harmonised Allocation Rules (HAR) | Defines the harmonised arrangements between Ireland, Northern Ireland, and Great Britain, as required under the FCA. |
| Balancing and Ancillary Service Agreements | Define the provision of commercial ancillary services across interconnectors. |

2. Market governance, administration and operation

Where conflicts occur between regulations and codes, the following order of precedence applies:

- requirements under European Laws
- requirements under Irish Laws or Northern Ireland Laws
- any applicable requirement, direction, determination, decision, instruction or rule of any Competent Authority
- the applicable Licence
- the Grid Code
- the Metering Code
- the Capacity Market Code
- the Trading and Settlement Code

2. Market governance, administration and operation

2.6 Market monitoring and controls

Markets are monitored to identify any areas where the goals of the market are undermined by limitations of the design. The behaviour of market participants is subject to EU law¹⁵, which provides controls for market manipulation, anti-competitive behaviour, and insider trading. The SEMC is currently considering what mitigation measures will be needed to address the abuse of market power in the I-SEM.

2.7 Market information

Market information is provided through the market systems to individual participants. All public information is published on the various websites operated by the market administrators and market operators. Market information is also made available via the ENTSO-E transparency platform¹⁶. The types of information made available to each participant and to the public depends on its commercial sensitivity.

2. Market governance, administration and operation

2.8 Transitional Registration

Participant requirements and registration procedures for the I-SEM markets are defined in the respective market codes and administered by the relevant market operator.

Due to the introduction of new markets and new or revised market codes, market services, and market roles, transferring from the current arrangements to the I-SEM cannot be automatic for existing participants. However, every effort has been taken to reduce the effort by participants in transitioning to the new markets. Where possible, the existing SEM data will be used as the basis for the I-SEM. But participants will be required to confirm the accuracy of the data and, in some instances, to provide additional information.

A Transitional Registration Plan¹⁷ has been developed to assist and advise existing participants on how and when to register for each market. The enduring registration process for new participants is also explained in this plan. For details of participant requirements and submission deadlines, participants must refer to the published plan.

2. Market governance, administration and operation

Registration for the Balancing Market, Day-Ahead and Intraday Markets, and Capacity Market is centralised and coordinated through the I-SEM Registration Team. Participants in the Day-Ahead and Intraday Markets are also required to register with the European Clearing House. Registrations for the Forwards Market and FTR auctions are managed directly by the respective market operators.

Registration is a sequential process, with each step in the registration process building on the data previously submitted. The order of submission, detailed in the transition plan, is aligned with the timeline for the relevant market code approvals. Some registration activities cannot be completed until the relevant market codes come into force—for example, signing framework agreements.

The existing SEM registration data will be mapped to the new I-SEM entity model and provided to existing SEM participants for validation. Existing and new participants will then need to obtain and submit any additional data required for their core entity setup.

2. Market governance, administration and operation

Important: Participants are strongly encouraged to submit the data required for registration as early as possible. In particular, registration for the DAM and IDM involves meeting ECC requirements and, given the influx of I-SEM participants to these European markets, delays can be expected.

A registration lock-down period will be enforced, commencing towards the end of the Market Trial and ending sometime after Go-Live, during which new registrations will be prohibited and only minor changes will be permitted to existing registration data.

References

5. EirGrid and SONI, as designated Nominated Electricity Market Operator (NEMO) for the SEM, will operate as SEMOpx.
6. Participants can use other NEMOs, if designated or approved and available for the SEM, to trade in the DAM; however, each NEMO operates under their own set of rules and this guide is specific to SEMOpx.
7. The Transmission System Operators, EirGrid and SONI, are the licensed System Operators for the SEM, as referred to in the market codes. In this guide, the term Transmission System Operators includes references to the System Operators.
8. TSOs hold performance bonds for new entrant plant.
9. <http://www.sem-o.com/ISEM/>
10. <http://www.sem-o.com/MarketDevelopment/Pages/MarketRules.aspx>
11. <https://ec.europa.eu/energy/en/topics/wholesale-market/electricity-network-codes>
12. <http://www.eirgridgroup.com/site-files/library/EirGrid/Allocation-Rules-for-Forward-Capacity.pdf>
13. <http://www.entsoe.eu/major-projects/network-code-development/electricity-balancing/Pages/default.aspx>
14. SEMOpx Rules are currently under development.

References

15. Regulation on Wholesale Energy Market Integrity and Transparency (REMIT), <http://www.acer.europa.eu/en/remiteu/>
16. <https://transparency.entsoe.eu/>
17. EirGrid, October 2016, *Transitional Registration Plan*, available [http://www.sem-o.com/ISEM/General/Transitional Registration Plan.pdf](http://www.sem-o.com/ISEM/General/Transitional%20Registration%20Plan.pdf)