

# I-SEM Technical Specification (ITS)

**RELEASE NOTES**  
**RELEASE 9.7 - 25 JULY 2024**

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# Table of Contents

|     |  |   |
|-----|--|---|
| 1   | Disclaimer and Content Information .....         | 3 |
| 2   | Introduction .....                               | 4 |
| 3   | Release 9.7 Contents .....                       | 4 |
| 3.1 | Volume A: Overarching .....                      | 6 |
| 3.2 | Volume B: Technical .....                        | 6 |
| 3.3 | Volume C: Balancing Market .....                 | 6 |
| 3.4 | Volume D: SEMOpx .....                           | 7 |
| 3.5 | Volume E: Capacity Market .....                  | 7 |
| 3.6 | Volume G: Glossary .....                         | 7 |
| 3.7 | Meter Data Provider Functional Description ..... | 7 |

## 1 DISCLAIMER AND CONTENT INFORMATION

This document has been prepared to provide participants with sufficient information in order to develop their own systems to interface with the I-SEM.

The following disclaimers relate to the content of this document and associated volumes and any use by participants of the information provided therein.

1. EirGrid and SONI accept no responsibility for decisions made or actions taken by participants as a result of the information presented in this document or associated documents. Furthermore, EirGrid and SONI do not indemnify any commercial or organisational decisions made by participants in relation to the information herein.
2. This document represents the most up-to-date information on the I-SEM Systems as they have been developed. With this in mind, it is not appropriate simply to compare the document against the market rules; instead, the document is aligned with a release of the I-SEM Systems.
3. The information provided in this document is based entirely on documentation and information provided by the software vendor. Although EirGrid and SONI have made all reasonable efforts to ensure that the information presented is correct, it cannot guarantee the information provided.
4. Further changes to the processes described or schema elements presented may result as new information comes to light during future phases of the market development. To mitigate the impact of such changes, EirGrid and SONI will be issuing planned updates to this document and associated documents (where appropriate).

## 2 INTRODUCTION

The I-SEM<sup>1</sup> Technical Specification (ITS) comprises a number of volumes which provide participants with the information necessary for them to develop their own systems to interface with the I-SEM central market systems.

This release of the ITS is a minor release of one volume (C: Balancing Market). It features limited changes to the information related to the systems and services to be used to interact with the Balancing Market, as set out in *Table 1*. A redlined and updated clean version is provided.

| Volume | Document                          | New / Updated / No change |
|--------|-----------------------------------|---------------------------|
| A      | Overarching Volume                | No Change                 |
| B      | Technical Volume                  | No Change                 |
| C      | Balancing Market Volume           | Updated                   |
| D      | SEMOpx Ex-Ante Markets Volume     | No Change                 |
| E      | Capacity Market Volume            | No Change                 |
| G      | Glossary                          | No Change                 |
| -      | MPR Schema and samples            | No Change                 |
| -      | MI Schema and samples             | Updated                   |
| -      | Settlement Schema and samples     | No Change                 |
| -      | Sample Report Files               | Updated                   |
| -      | Meter Data Provider Specification | No Change                 |

**Table 1: Changes to ITS Documentation in Release 9.5, By Volume**

SEMO is responsible for the maintenance and management of the ITS and welcomes feedback and suggestions in relation to this document at any time. During development of the document by the I-SEM Project prior to market go-live, any correspondence relating to the ITS should be submitted to the SEMO Front Office Team (info@sem-o.com), title prefixed with the word “ITS”.

## 3 RELEASE 9.7 CONTENTS

In addition to the six standard volumes of the I-SEM Technical Specification, an updated set of Balancing Market and SEMO Settlement report files are included with this Release. This release notes document is also provided.

*Table 2* below lists each of the documents provided in Release 9.5 of the ITS and its version number.

| # | Name                       | File Name                                 | Version | Date       |
|---|----------------------------|---|---------|------------|
| 1 | Volume A: Overarching      | ISEM_TS Volume A: Overarching V8.0        | 9.0     | 31.07.2018 |
| 2 | Volume B: Technical        | ISEM_TS Volume B – Technical Volume V9.1  | 9.1     | 13.12.2018 |
| 3 | Volume C: Balancing Market | ISEM_TS Volume C – Balancing Market V16.0 | 16.0    | 25.07.2024 |
| 4 | Volume D: SEMOpx           | ISEM_TS Volume D – SEMOpx V6.0            | 6.0     | 31.07.2018 |
| 5 | Volume E: Capacity Market  | ISEM_TS Volume E – Capacity Market V5.0   | 5.0     | 31.07.2018 |
| 6 | Volume G: Glossary         | ISEM_TS Volume G – Glossary V5.0          | 5.0     | 13.10.2017 |

<sup>1</sup> The market arrangements and associated delivery project are known as the I-SEM, but parties are asked to note that the legal name for the new arrangements will be the Single Electricity Market (SEM).

| # | Name                        | File Name                   | Version | Date       |
|---|-----------------------------|-----------------------------|---------|------------|
| 7 | ISEM ITS R9.7 Release Notes | ISEM ITS R9.7 Release Notes | 9.7     | 25.07.2024 |

Table 2: ITS Release 9.7 Content

### 3.1 VOLUME A: OVERARCHING

The overarching volume of the ITS contains an introduction to the I-SEM Technical Specification.

There is no update in this Release.

### 3.2 VOLUME B: TECHNICAL

Volume B of the ITS covers the technical aspects of interfaces provided for participants to communicate with the I-SEM Systems in relation to communication via Type 2 or Type 3 Communication Channels, i.e. submission and retrieval of I-SEM Data Transactions via:

- Online transaction (Graphical User Interface); or
- Computer based mechanisms such as web services or API (Application Programming Interfaces).

There is no update in this Release.

### 3.3 VOLUME C: BALANCING MARKET

Volume C provides the information required to build systems to interact with the I-SEM Balancing Market systems.

| # | Section | Item Type, Item                                     | Description   |
|---|---------|---|---|
| 1 | 4.6.15  | Resource: Balancing Market Data                     | <ol style="list-style-type: none"> <li>1. Inclusion of new NPDR Flag data element which will be used by market systems to determine whether a unit is a non-priority dispatchable renewable (NPDR) based on existing registration data elements.</li> <li>2. Updates to validation rules for Battery_Storage units</li> <li>3. Clean up of grammatical errors and naming inconsistencies</li> </ol> |
| 2 | 5.5.5   | Commercial Offer Data, Generator Offers             | <ol style="list-style-type: none"> <li>1. Inclusion of Battery Storage Parameters (part of cod_complex_detail element)</li> <li>2. Updates to validation rules for several data elements for Battery Storage and NPDR units</li> <li>3. Clean up of grammatical errors and naming inconsistencies.</li> <li>4. Inclusion of sample XML for Battery Storage Generator Offer submissions</li> </ol>   |
| 3 | 5.6.2   | Validation Technical Offer Data, Generator VTOD Set | <ol style="list-style-type: none"> <li>1. Inclusion of esps storage_cycle_efficiency (part of energy_parameters element)</li> <li>2. Updates to validation rules for several data elements for Battery Storage and NPDR units</li> <li>3. Clean up of grammatical errors and naming inconsistencies</li> <li>4. Inclusion of sample XML for Battery Storage VTOD submissions</li> </ol>             |
| 4 | 5.7     | Physical Notifications                              | <ol style="list-style-type: none"> <li>1. Updates to validation rules for several data elements for Battery Storage and NPDR units</li> <li>2. Clean up of grammatical errors and naming inconsistencies</li> </ol>   |
| 5 | 6.7     | Trading Reports                                     | <ol style="list-style-type: none"> <li>1. REPT_042 – Forecast Imbalance Report               <ol style="list-style-type: none"> <li>i. Removal of TSO RENEWABLE FORECAST field</li> <li>ii. Addition of TSO RENEWABLE FORECAST (PRIORITY DISPATCH) field</li> </ol> </li> </ol>   |

| # | Section | Item Type, Item | Description  |
|---|---------|-----------------|--|
|   |         |                 | <ul style="list-style-type: none"> <li>iii. Addition of TSO RENEWABLE FORECAST (NPDR) field</li> <li>iv. Change to description of CALCULATED IMBALANCE field</li> <li>2. REPT_004 - RTID Merit Order List Schedule <ul style="list-style-type: none"> <li>i. Inclusion of new member private report detailing individual merit orders produces for generator and demand side units</li> </ul> </li> <li>3. REPT_011 - DAILY TECHNICAL OFFER DATA REPORT <ul style="list-style-type: none"> <li>i. Addition of ESPS STORAGE CYC EFY field</li> </ul> </li> <li>4. REPT_053 - COMMERCIAL OFFER DATA REPORT – MEMBER PRIVATE <ul style="list-style-type: none"> <li>i. Addition of OPERATIONAL MINIMUM STORAGE and OPERATIONAL MAXIMUM STORAGE fields</li> </ul> </li> <li>5. REPT_013 - COMMERCIAL OFFER DATA REPORT – MEMBER PUBLIC <ul style="list-style-type: none"> <li>i. Addition of OPERATIONAL MINIMUM STORAGE and OPERATIONAL MAXIMUM STORAGE fields</li> </ul> </li> </ul> |

Table 3: Volume C: Balancing Market updates

### 3.4 VOLUME D: SEMOPX

Volume D contains the information relating to the SEMOpX Ex-Ante Markets, supporting participants to build systems to connect to the I-SEM Systems in order to interact with the Ex-Ante Markets.

There is no update in this Release.

### 3.5 VOLUME E: CAPACITY MARKET

Volume E contains the information relating to the Capacity Market Interface, which is a portal interface used by Participants to access the Capacity Market systems, for the purpose of participating in qualification processes and Primary Auctions (including receiving corresponding reports).

There is no update in this Release.

### 3.6 VOLUME G: GLOSSARY

Volume G of the ITS contains acronyms, definitions and terms which provide information to support the understanding of the content presented in the volumes of the I-SEM Technical Specification.

There is no update in this Release.

*Important Note: the definitions presented in Volume G of the ITS are focused on assisting the understanding of the ITS content and are not legally robust definitions. Participants should refer to the relevant market rules and agreed/operating procedure for the legal definitions of defined terms.*

### 3.7 METER DATA PROVIDER FUNCTIONAL DESCRIPTION

The Meter Data Provider Functional Description contains information required by Meter Data Providers to build systems in relation to the provision of Meter Data to support I-SEM operations.

There is no update in this Release.