

I-SEM Technical Specification (ITS)

VOLUME G: GLOSSARY **V5.0**

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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.

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2 INTRODUCTION

2.1 SCOPE OF THIS VOLUME

The I-SEM¹ Technical Specification (TS) 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.

The volumes of the I-SEM Technical Specification are outlined in *Table 1* below.

Volume	Document
A	I-SEM TS (Overarching Volume)
B	I-SEM TS (Technical Volume)
C	I-SEM TS (Balancing Market Volume)
D	I-SEM TS (SEMOpX Ex-Ante Markets Volume)
E	I-SEM TS (Capacity Market Volume)
F	Intentionally blank
G	I-SEM TS (Glossary)

Table 1: I-SEM Technical Specification Volumes

This volume provides a glossary of terms used in the various volumes of the I-SEM Technical Specification. It should be considered in conjunction with the Glossary definitions provided in the market rules (e.g. Trading and Settlement Code).

¹ 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).

3 GLOSSARY OF TERMS

Term	Acronym	Definition
Auction Trade Information Pack		means a document prepared by TSOs for the purpose of informing potential Capacity Auction Participants on the timing, requirements and conduct of Capacity Auction, there will also be a Secondary Trade Auction Information Pack available after Secondary Trade Auctions
Balancing Market Gate Closure		means the time following which Data Transactions may no longer be submitted and accepted for use in an Operational Schedule Run for the corresponding Trading Period, in respect of the Balancing Market
Balancing Market Gate Opening		means the time from which Data Transactions may be submitted and accepted for use in an Operational Schedule Run for the corresponding Trading Period, in respect of the Balancing Market
Balancing Market Interface		means a suite of participant interfacing systems, comprising the I-SEM Registration System and the I-SEM Balancing Market Trading Interface
Bidding Zone		means the largest geographical or transmission network area in which participants can purchase or sell energy or capacity without requiring capacity allocation through the single European market coupling platforms
Capacity Aggregation Unit	CAU	means an aggregation of Generator Units, registered to trade their combined capacity in the Capacity Market, as per the qualification criteria set out in the Capacity Market Code
Capacity Market Portal		means the interface used by Participants to view Capacity Market registration data, participate in qualification and auction processes, and access Capacity Market auction reports
Capacity Type		means the capacity type associated with a Unit, the only applicable vales are "New" & "Esisting"
Clearing Conditions		means the body of regulations set up by ECC governing the clearing process, as amended from time to time
Clearing Services		means all services provided by ECC acting as central counterparty for Spot Contracts on SEMO Trading Platform, with delivery including the handling, securing, settlement and delivery of such transactions
Clearing System		means the IT system, including all data lines and the Interface Software, operated by or on behalf of ECC to provide Clearing Services for SEMO
Capacity Market (CM) System		means the IT Systems (including without limitation the hardware, software and internal communication network) operated by the TSOs for the purpose of performing its functions under the Capacity Market Code
Commercial Offer Data - Complex	Complex COD	means a data submission containing Incremental and Decremental Price Quantity Pairs and certain fixed costs including Start-Up Costs, Shut-Down Cost and No-Load Cost as applicable
Commercial Offer Data – Simple	Simple COD	means a data submission containing Incremental and Decremental Price Quantity Pairs only
Coordinated Universal Time	UTC	means the primary time standard by which the world regulates clocks and time, being the method of referring to time used for all Type 3 communications with the Balancing Market Interface
Day-ahead Market	DAM	means the electricity market as part of the I-SEM arrangements which is a voluntary, financially firm and physically-binding forward energy market, whose Delivery Day is from 00:00 Central European Time (CET) to the following 00:00 CET
De-rated Capacity		means the MW quantity of Existing Capacity or New Capacity from a Capacity Market Unit that is Qualified to be offered into a Capacity Market Auction and which is also used as a parameter used to place limits on how a Capacity Market Unit can participate in Secondary Trade
Digital Certificate		means an electronic credential issued and digitally signed by a certificate authority (CA), used to represent the digital identity of an individual, business, or organizational public key. The

Term	Acronym	Definition
		international standard upon which most commercial certificates are based is the ITU-T X.509 certificate
European Commodity Clearing	ECC	means the central clearing house for energy and related products in the I-SEM, ensuring physical and financial settlement of power, natural gas and emission allowances
ECC Member Area		means the IT platform enabling participants to access ECC's settlement services
ECC Spot Market Settlement System	ECC SMSS	means the IT system used to settle Day-ahead Market and Intraday Market trading in the I-SEM
ETS API		means the Application Programming Interface which enables participants to send/receive messages to/from EPEX Trading System (ETS) in respect of trading in the Day-ahead Market and Intraday Auction Market.
ETS Client		means the front-end of the auction trading system in respect of the Day-ahead Market and Intraday Auction Market., enabling submission of orders to the Day-ahead Market and Intraday Auction Market; and the retrieval of market results
Extensible Mark-up Language	XML	means a mark-up language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
External Unit		means a unit registered to participate in the Capacity Market, which is not located in any Jurisdiction in the I-SEM
Full Administered Scarcity Price	FASP	The BM will include an Administered Scarcity Price (ASP), which will set a floor on the BM Price at times when available capacity is less than that required to cover electricity demand plus the associated reserve requirement. The inclusion of the ASP within the BM removes the need for any additional performance incentives within the I-SEM CM. The Level of the Full ASP was set out in CRM Detailed Design Decision Paper 2
Flexible Flag		means a boolean Yes / No flag defining whether or not the quantity portion of the price quantity pair of a Capacity Market offer can be fully or partially accepted by the CM system
Forecast Imbalance		means the calculated forecast of the imbalance between generation (through PNs and forecast output of units which are not obliged to submit PNs) and forecast demand
General Clearing Member	CM	means a financial institution holding either a general clearing licence or a direct clearing licence to provide clearing services
Interconnector Reference Program	ICRP	means the profile defining the schedule for an Interconnector, comprising MW setpoints and associated times associated with the transfer of energy across that Interconnector
Intraday Auction	IDA	means the electricity market as part of the I-SEM arrangements which occurs after the Day Ahead Market and applies to I-SEM and GB only, which is a voluntary, financially firm and physically-binding forward energy market for a specific Trading Day or portion of a Trading Day
Intraday Continuous Markets	IDC	means the continuous trading arrangements between participants registered in the I-SEM in the intraday timeframe opening after DAM gate closure (D-1 12:00 CET) and closing one hour prior to the relevant Imbalance Settlement Period
I-SEM Balancing Market Trading Interface		means the interface by which participants interact for the purposes of trading in the Balancing Market
I-SEM Systems		means the IT systems within the control of the Market Operator used to meet its obligations in respect of the I-SEM
I-SEM Registration System		means the system with which participants can communicate with the I-SEM Systems, specifically for the purposes of submitting new or amended registration data
Local Time		means the time in the I-SEM Jurisdictions
Long Day		means a day that contains 25 hours due to Daylight Savings
Long Notice Adjustment Factor	LNAF	means the calculated factor used to applies a weighting to the costs of off-line long notice Generator Units to reduce the propensity for taking early commitment actions in the System Operator scheduling process
Long Term Schedule Operational Schedule Run	LTS	means an indicative long term schedule providing medium to long term constrained unit commitment advisory Dispatch Instructions

Term	Acronym	Definition
		to the System Operator
Market Coupling Operator	MCO	means the organisation that matches anonymized orders submitted by NEMOs for all Bidding Zones in Europe in the day-ahead coupling process, taking into account cross-zonal capacity, and calculates prices based on matched orders in the relevant market algorithm
Market Management System	MMS	means a suite of market applications used to support the Balancing Market
Market Start Date		means the date of I-SEM go-live, as determined by the Regulatory Authorities or other Competent Authority as appropriate
Member Private		means data that is accessible via the I-SEM Balancing Market Trading Interface and for which access is restricted to a participant only in respect of that participant or its registered Units
Member Public		means data that is accessible via the I-SEM Balancing Market Trading Interface and for which access is accessible all participants
M7 API		means the Application Programming Interface which enables participants to send/receive messages to/from M7 trading system in respect of trading in the Intraday Markets
M7 Client		means the front-end of the trading system in respect of the Intraday Continuous Markets, enabling submission of orders to the Intraday Continuous Markets and the retrieval of market results
Net Transfer Capacity	NTC	Net Transfer Capacity is the maximum amount of power that can be exchanged with neighbouring bidding zones that is compatible with operational security standards applicable in both zones and compatible with the physical capability of the assets connecting those zones (taking into account uncertainties over future system conditions).
Nominated Electricity Market Operator	NEMO	means the market operator that has been designated to participate in the single day-ahead or single intraday coupling in respect of a Bidding Zone whereby such market operator receives commercial orders from Market participants in the Day-ahead Market and/or the Intraday Markets. Now referred to as SEMOpx.
Non-Clearing Member	NCM	means a participant in the clearing procedure who has concluded an NCM Agreement with a Clearing Member and is approved as a Trading participant for certain products by ECC
Pan-European Hybrid Electricity Market Integration Algorithm	EUPHEMIA	means the price coupling algorithm developed by the PCR initiative to help achieve market coupling in the day-ahead timeframe, performing daily market auctions for the DAM and providing prices, schedules and interconnector results
Party Administrative User (PAU)		means a user access administrator controls the user roles and user access rights of all other system users required by that Party
Physical Notification	PN	means a portion of a MW profile, representing a Participant's best estimate of its intended generation and/or consumption, excluding any accepted offers or bids in the balancing market
Bid Offer Price	PBO	means the price applicable to a bid or offer that is accepted by the System Operator in relation to the Balancing Market
Primary Auction		means the first auction in which Capacity Market Units can be awarded Capacity for a Capacity Period
Qualification		means the process run by the TSOs to qualify capacity as being eligible to participate in a Capacity Auction
Real Time Indicative Commitment Operational Schedule Run	RTIC	means an indicative short term schedule providing short term constrained unit commitment advisory Dispatch Instructions to the System Operator
Real Time Indicative Dispatch Operational Schedule Run	RTID	means an indicative real-time schedule providing close to real-time MW output related advisory Dispatch Instructions to the System Operator
Secondary Auctions		means the auctions as per defined by the TSOs in which further Capacity is awarded to Capacity Markets Units for a defined period within the Capacity Period
Secure Sockets Layer	SSL	means the industry-standard security technology for establishing an encrypted link between a web server and a browser, ensuring

Term	Acronym	Definition
		that all data passed between the web server and browser remains private and integral
Short Day		means a day that contains 23 hours due to Daylight Savings
Simple Object Access Protocol	SOAP	means a protocol specification for exchanging structured information in the implementation of web services in computer networks
SO Flag		means a boolean flag calculated as part of the Imbalance Price calculation process, used to identify non-energy actions taken by the System Operator
Solar Unit		means a Generator Unit whose primary fuel source is solar power
System Shortfall Imbalance Index	SSII	means a factor indicating the degree to which the day ahead market position is short of forecast demand, used as part of the calculation of the Long Notice Adjustment Factor for a Generator Unit
System Imbalance Flattening Factor	SIFF	means a factor used to flatten or steepen the LNAF curve based on the degree of forecast imbalance, used as part of the calculation of the Long Notice Adjustment Factor for a Generator Unit
Trading Period	TP	means the period of time relevant to the trading of energy in the Balancing Market, being a thirty minute period beginning on each hour or half-hour
Trading Window	TW	means the Trading Periods in a Trading Day in respect of which Generator Units may submit Commercial Offer Data, Technical Offer Data and Physical Notification data
Type 2 Communication Channel	Type 2	means interaction with the I-SEM Systems via a Graphical User Interface (GUI), as set out further in Appendix A of this document
Type 3 Communication Channel	Type 3	means interaction with the I-SEM Systems via direct system to system communication, as set out further in Appendix A of this document
Unit Under Test	UUT	means a unit that has granted the under test status accorded to certain Generator Units by the relevant System Operator
User		means a person provided with authorisation to access the I-SEM Systems
Web Service		means a defined method of communication between two electronic devices over a network
Web Service Definition Language	WSDL	means an XML-based interface definition language that is used for describing the functionality offered by a Web Service
Cross Border Intraday	XBID	means the market coupling initiative and solution currently under development for the intraday timeframe
Zero Marginal Cost		This is a flag set in registration by the Market Operator during the process of registering a Generator Unit, as it is needed for downstream applications. It will be set to 'True' for any Generator Unit that does not have any marginal generation costs

Table 2: Glossary of Terms

4 APPENDIX A SUPPORTING INFORMATION

4.1 TYPE 2

Assisted (human-to-computer) communication consists of an interface provided by the Market Operator for an end-user to interact with. The current implementation consists of a set of web forms that the end-user can interact with, along with a web form to facilitate interaction via XML request/response files for certain Data Transactions.

For Type 2 Channel communication, Web Forms may be used to:

- upload previously prepared Data Transactions (excluding report requests); or
- enter and submit data directly via specific Web Forms.

The Ex Ante Markets for Intraday and Day Ahead use a local client installed on the participants PC for Type 2 access. Details on these clients can be found in ITS Volume B (Technical Volume).

4.2 TYPE 3

Automated (computer-to-computer) communication is currently implemented via Web Services.

Each participant must designate and qualify for at least one of either Type 2 Channel or Type 3 Channel as described in the Agreed Procedure 3 “Communication Channel Qualification.” All participants shall be qualified to communicate via the Type 1 Channel.