

# Single Electricity Market

SEM RELEASE "H" – NOVEMBER 2021

APPROVED RELEASE SCOPE – HIGH LEVEL IMPACT

ASSESSMENT

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# **Document History**

Version	Date	Author	Comment
1.0	23 August 2021	SEMO	Initial Approved Scope

## 1 INTRODUCTION

This document is intended to provide an overview of those approved changes for implementation in the November 2021 release (SEM Release "H") to the Central Market Systems (CMS). SEM Release H is due for deployment in November of 2021, subject to successful completion of testing.

The approved scope will not result in functional impact on interfaces between the CMS and Market Participant systems. Updates on Release H progress will be provided via the Market Operator User Group (MOUG) meetings.

## 2 FUNCTIONAL SCOPE APPROVED FOR THE NOVEMBER 2021 RELEASE - SEM RELEASE H

This section provides at a summary level details of those Central Market Systems' change requirements which will be implemented in SEM Release H. For each of the changes, SEMO has provided an assessment of the complexity for delivery of each change, based on the common understanding that existed between the systems vendor and SEMO at the end of the release design phase.

Change Request Reference	Summary	Business Case for Change	Interfacing Impact?
CR-192	Submission of Commercial Offer Data before effective date	The Market Participant Interface (MPI) currently prevents the Registration function and Participants from entering Commercial Offer Data (COD) in advance of the effective date of a unit, impacting both Generator and Demand Side Units (DSU).  Usually a unit is SUBMITTED in the MPI over a month in advance of it becoming effective, however only gets APPROVED in the MPI close to the designated effective date. Although the unit is SUBMITTED and APPROVED in advance, the unit ID does not appear in the Resource Name drop down list until the calendar date matches the unit effective date, meaning COD data may not be submitted for it in advance.  As per section D.2.1.1 of the <a href="Trading and Settlement Code">Trading and Settlement Code</a> (T&SC), Participants may enter their COD up to 19 Trading Days in advance of the effective date. This current functionality therefore breaches the T&SC as Participants cannot submit their data as per Code provisions. This Change Request will facilitate the provisions in the Code.	None
CR-223	Technical Offer Data Submission	When submitting Generator and Demand Technical Offer Data (TOD) in the Market Participant Interface (MPI), the Unit ID only appears in the Resource Name drop-down list when it has been set to a status of 'APPROVED' by the Registration team. This does not allow sufficient time for the VTOD submission to be reviewed and subsequently approved/denied by the TSO in accordance with the Trading and Settlement Code requirements.  This Change Request will enable the Market Operator and Participants (with appropriate privileges) select a Generator Unit or Demand Side Unit from the Resource Name drop-down list for Generator Technical Offer once the unit has been SUBMITTED, RECEIVED or APPROVED by a Market Operator User in the MPI.	None

Change Request Reference	Summary	Business Case for Change	Interfacing Impact?
CR-207	BREXIT VAT Arrangements	The system requires a one-to-one relationship between Place of Establishment and VAT region - for Example, all Registered Participant ID's with a POE of "United Kingdom" must have the same VAT Region - EU or Non-EU;  The system did not support multiple Participant ID's with the same POE having multiple VAT regions - for example:  • Participant ID 1 - POE = United Kingdom / VAT Region = EU  • Participant ID 2 - POE = United Kingdom / VAT Region = Non-EU  This meant that the VAT ratios were being incorrectly calculated  System changes are therefore required to cater for the following scenarios.  1. All Participants located in England / Scotland / Wales will be registered in the Market Participant Interface (MPI) with "Great Britain" as the Place of Establishment - a one to one POE / VAT Region relationship will be maintained, that is the VAT Region will remain the same for all Participants whose POE is "Great Britain" - in this scenario VAT region will most likely be Non-EU.  2. All Participants located in Northern Ireland will be registered in the Market Participant Interface (MPI) with "Northern Ireland" as the Place of Establishment - a one to one POE / VAT Region relationship will be maintained, that is the VAT region will remain the same for all Participants whose POE is "Northern Ireland".  NOTE - the VAT Region is dependent on the outcome of Brexit Trade negotiations. The Current NI protocol indicates this will most likely be EU and that EU VAT rules will apply to goods (energy and capacity)  3. All Participants located in Northern Ireland / England / Scotland / Wales will be registered in the Market Participant Interface (MPI) with "United Kingdom" as the Place of Establishment - a one to one POE / VAT Region relationship will be maintained, that is the VAT Region will remain the same for all Participants whose POE is "United Kingdom" - in this scenario VAT region will be Non-EU  NOTE - this scenario would be required to cater for a No Deal Brexit	None
CR-247	Correction of Incorrect Loss Factors on QAB for Interconnectors	CR092 - Loss Factor (LF) Application for Interconnectors in Settlement was deployed with Release F on 4th November 2020. After implementation, an issue relating to the application of loss factors for interconnector variables of a value < 0 was encountered.	None

Change Request Reference	Summary	Business Case for Change	Interfacing Impact?
		CR092 resulted in the system always multiplying by the loss factor to create a loss factored version of a variable. As a result, all loss factored interconnector variables were created using the logic XXX * FCLAF. However, to calculate the correct loss factored version of the variable for interconnectors, a change is required to logic to examine the variable value itself. If the variable is < 0 then the variable should be divided by the loss factor, else it should be multiplied.	
		CR092 addressed and resolved this for QM from start of Market, however the logic was not included for other Interconnector variables; for example: the loss factor for QAB was still being multiplied instead of being divided since the QAB value is always < 0. This Change Request will resolve this issue.	
CR-096	Automatic Export of RD Merit Orders after LTS, RTC & RTD runs	In order to support operational analysis and audit requirements, a Change Request is required to enable the content and output from the Resource Dispatch display to be exported to csv files. Currently this data is overwritten following each scheduled operational run, meaning the data is not retained.	None
		This Change Request will enable the export of such files to a designated location each time the relevant display is refreshed (either automatically or as initiated ad hoc by a System Operations User) and store them accordingly for future analysis and audit requirements.	
CR 156	MA savecase filename change for approved	The SONI and EirGrid Transmission System Operator Licences Conditions 22 A.9 and 10 A.9 respectively require periodic audits of the operation and implementation of the scheduling and dispatch process.	None
	published runs	A recent external audit of the Scheduling and Dispatch processes required analysis of approved and published savecase files.	
		The current savecase filename format does not have an identifier to show which savecases are approved or otherwise. Without this information it is not possible to tell what information was being used for scheduling purposes in the Control Centre.	
		This Change Request will add an "_approved /_ unapproved" identifier to the filename for all savecases within the savecase directory management repository.	

## 3 TECHNICAL SCOPE FOR THE NOVEMBER 2021 RELEASE - SEM RELEASE H

This section provides at a summary level details of those Central Market Systems' Technical change requirements which will be implemented in SEM Release H. For each of the changes, SEMO has provided an assessment of the complexity for delivery of each change, based on the common understanding that existed between the systems vendor and SEMO at the end of the release design phase.

Change Request Reference	Summary	Business Case for Change	Interfacing Impact?
CR-256	Software Updates to Third Party Software components: ActiveMQ, Java8, Tomcat, Apache HTTPD, OpenLDAP.	The Market Systems is a suite of applications, some of which use embedded "Core Third-Party" Software components as part of the overall software solution. These software components are subject to evolutionary roadmaps and, over time, updates are made available, e.g. where bug fixes, performance, and security updates are required.  Consequently, it is therefore essential for SEMO and our software vendors to incorporate these updates to ensure the software and security protections are kept to a suitable recent and supported version level. This Change Request will ensure we remain on support versions of these Core Third-Party components.	None