



2018
SEM PARAMETERS FOR THE DETERMINATION
OF REQUIRED CREDIT COVER

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Document History

Version	Date	Author	Comment
1.0	29 th August 2017	SEMO	Issued to Regulatory Authorities
2.0	1 st Sept 2017	SEMO	Issued to Regulatory Authorities update

1. BACKGROUND

1.1 INTRODUCTION

- **Purpose**

Under Section 6.174 of the Trading & Settlement Code (referred to as 'the Code'), the Market Operator (MO) is required to propose parameters used in the calculations of Required Credit Cover at least 4 months before the start of a Trading Year. This document provides the MO's proposals for these parameters for the Trading Year 2018.

- **Audience**

The target audience for this document is Market Participants and the Regulatory Authorities.

- **Scope**

This document provides proposals for the following parameters for the determination of Required Credit Cover for Trading Year 2018.

- Historical Assessment Period for Billing Period
- Historical Assessment Period for Capacity Period
- Analysis Percentile Parameter
- Credit Cover Adjustment Trigger
- Fixed Credit Requirement

- **Background**

The Trading & Settlement Code sets out the rules for the calculation of Required Credit Cover for Participants. The calculation recognises that the Required Credit Cover for each Participant is made up of known and unknown exposures. The known exposure is based on invoiced amounts and published settlement values. The unknown exposure, called the Undefined Exposure (UDE), is based on statistical analysis of known historical settlement values in the case of Standard Participants. For New or Adjusted Participants the Required Credit Cover is calculated using forecast volumes, as historical settlement values are not available or are not reflective of current levels of settlement.

In each of these calculations, and in the day to day credit risk assessment process, a number of parameters are used. These parameters are as follows:

- *Historical Assessment Period for Billing Period (HAPB)* – this sets the number of historical days over which the analysis of Trading Payments and Trading Charges will be carried out for credit purposes.
- *Historical Assessment Period for Capacity Period (HAPC)* – this sets the number of historical days over which the analysis of Capacity Payments and Capacity Charges will be carried out for credit purposes.
- *Analysis Percentile Parameter* – this sets the percentile confidence value in the statistical analysis used for New, Adjusted and Standard Participants.

- *Credit Cover Adjustment Trigger* – a Participant will be classed as an Adjusted Participant under the Code if the Participant’s trade volumes increase or decrease by a percentage greater than this value.
- *Fixed Credit Requirement* – this sets the value of Required Credit Cover that must be in place for each registered Supplier Unit or Generator Unit in the Single Electricity Market (SEM) in order to meet resettlement charges that may arise up to 13 months after the initial settlement.

Although these parameters are considered variable, under the Code, they will be set from year to year.

In light of approved Mod 54_08 and related changes to sections 6.174 and 6.181 of the Trading and Settlement Code, SEM-O will not be reporting on the maximum level of the Warning Limit anymore. The default limit of 75%, as set in section 6.181, will be maintained until a revision or a change to the Code is required.

1.2 OBJECTIVES

The objectives of this report are to:

- determine the proposed value for each parameter to be used in the day to day credit risk assessment process for 2018;
- verify the effectiveness of current parameters based on current & historical market analysis;
- Suggest any appropriate course of action as necessary.

2. SEMO 2018 RECOMMENDATIONS

SEMO consulted with the Regulatory Authorities regarding the requirement for detailed modelling and analysis of the SEM Parameters for the determination of Required Credit Cover for 2018.

Given the remaining life of the existing SEM and that the SEM Committee has already made its decision with respect to Credit Parameters that apply post May 23rd 2018, SEMO are proposing that the current 2017 Parameters be persisted for the intervening period of time without the requirement of further detailed analysis of 2017 data for the determination of Required Credit Cover for 2018.

In support of this approach, SEMO have analysed & compiled historical data used for the SEM Parameters from previous Trading Years, 2014 – 2017. SEMO have found that the recommendations provided to the Regulatory Authorities within these Trading Years have not deviated and all proposed values have been consulted, agreed and decision papers published based on SEMOs proposed values.

Please see below links to published SEM Parameter reports for the above analysed Trading Years. Table 2 details the approved SEM Parameter values.

2014

SEMO Proposals & Consultation paper

<https://www.semcommittee.com/news-centre/tsc-operational-parameters-2014-1>

RA Decision Paper

<https://www.semcommittee.com/news-centre/tsc-operational-parameters-2014>

2015

SEMO Proposals & Consultation paper

<https://www.semcommittee.com/news-centre/consulation-paper-tsc-operational-parameters-2015>

RA Decision Paper

<https://www.semcommittee.com/news-centre/2015-operational-parameters-decision>

2016

SEMO Proposals & Consultation paper

<https://www.semcommittee.com/publication/sem-15-070-tsc-operational-parameters-2015-consultation>

RA Decision Paper

<https://www.semcommittee.com/publication/sem-15-093-operational-parameters-decision-paper-2016>

2017

SEMO Proposals & Consultation paper

<https://www.semcommittee.com/news-centre/trading-settlement-code-annual-operational-parameters-2017-consultation-paper>

RA Decision Paper

<https://www.semcommittee.com/news-centre/trading-settlement-code-operational-parameters-decision-paper-2017>

Based on the previous Trading Year analysis, the credit parameters shown in Table 1 are proposed by the MO for use in Trading Year 2018.

Analysing the historical data and approved parameter values, SEMO's 2018 proposed values are considered to be the best combination to continue to ensure the appropriate levels of Credit Cover in the SEM.

SEMO recommend that the SEM Parameters for the determination of Required Credit Cover for 2018 (up to I-SEM go-Live) remain unchanged to those of 2017.

Credit Cover Parameter	2017 Approved Value	2018 Proposed Values by SEMO up to I-SEM Go-Live
Historical Assessment Period for Billing Period	100 days	100 days
Historical Assessment Period for Capacity Period	90 days	90 days
Analysis Percentile Parameter	1.96	1.96
Credit Cover Adjustment Trigger	30%	30%
Fixed Credit Requirement for Supplier Units based on rate of 8.77€/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000	Min. of€1,000 with max. of €15,000 ^{#1}	Min. of€1,000 with max. of €15,000
Fixed Credit Requirement for all Generator Units including Interconnector Units	€5,000	€5,000
Fixed Credit Requirement for Netting Generator Units	€1,000	€1,000

Table 1 - Proposed 2018 Credit Cover Parameters

2.1 SEM VERSUS I-SEM OPERATIONAL PARAMETERS FOR CREDIT COVER AND IMBALANCE SETTLEMENT

The Regulatory Authorities decision paper published on the 2nd June 2017 for the I-SEM Operational Parameters provide detailed modelling and analysis methodologies for the determination of the I-SEM Operational Parameters for Credit Cover and Imbalance Settlement.

As this detailed modelling and analysis has been determined and approved by the Regulatory Authorities and the SEM Committee has already made its decision with respect to Credit Parameters that apply post May 23rd 2018, SEMO have performed limited analysis for our 2018 recommendations.

The methodologies set out within the I-SEM analysis and published values do not differ greatly from those of the current SEM and the proposed 2018 values.

Please see below links to the I-SEM Operational Parameter papers.

I-SEM analysis & recommended values

<https://www.semcommittee.com/publication/tsc-i-sem-operational-parameters-credit-cover-and-imbalance-settlement>

I-SEM Operational Parameters for Credit Cover and Imbalance Settlement decision publication

<https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-034%20Tranche%201%20Parameters%20Decision.pdf>

2.2 HISTORICAL SEM PARAMETERS

As per table 2, the historical analysis illustrates that there was no deviation from the Annual SEM Parameters for the determination for Required Credit Cover from 2014-2017.

Credit Cover Parameter	2014 Approved Parameter Value	2015 Approved Parameter Value	2016 Approved Parameter Value	2017 Approved Parameter Value	2018 Proposed Parameter Value
Historical Assessment Period for Billing Period	100	100	100	100	100
Historical Assessment Period for Capacity Period	90	90	90	90	90

Analysis Percentile Parameter	1.96	1.96	1.96	1.96	1.96
Credit Cover Adjustment Trigger	30%	30%	30%	30%	30%
Fixed Credit Requirement for Supplier Units based on rate of 8.77€/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000	Min of €1,000 with max. of €15,000	Min of €1,000 with max. of €15,000	Min of €1,000 with max. of €15,000	Min of €1,000 with max. of €15,000	Min of €1,000 with max. of €15,000
Fixed Credit Requirement for all Generator Units including Interconnector Units	€5,000	€5,000	€5,000	€5,000	€5,000
Fixed Credit Requirement for Netting Generator Units	€1,000	€1,000	€1,000	€1,000	€1,000

Table 2 – 2014-2017 Approved Credit Cover Parameters

3. CONCLUSIONS

As detailed within this report, I-SEM Operational Parameters have been determined based on modelling and analysis provided to the Regulatory Authorities using current SEM data. For this reason, SEMO have proposed that the current 2017 SEM Parameter values be persisted for 2018 without the requirement of providing further detailed analysis for the determination of 2018 SEM Parameters.

The historical analysis of the SEM Operational Credit Cover Parameters shows that over a period of 4 years of the SEM, the extensive modelling and analysis have provided the best combination of parameters in the determination of Market Participants Required Credit Cover.

Therefore, SEMO are proposing the below values for the determination of Required Credit Cover for 2018.

Credit Cover Parameter	2018 Proposed Values by SEMO up to I-SEM Go-Live
Historical Assessment Period for Billing Period	100 days
Historical Assessment Period for Capacity Period	90 days
Analysis Percentile Parameter	1.96
Number of days in the Undefined Exposure Period for each Undefined Exposure Period, g, UEPBDg	16
Credit Cover Adjustment Trigger	30%
Fixed Credit Requirement for Supplier Units based on rate of 8.77€/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000	Min. of €1,000 with max. of €15,000
Fixed Credit Requirement for all Generator Units including Interconnector Units	€5,000
Fixed Credit Requirement for Netting Generator Units	€1,000

Table 3 – 2018 SEM proposed & I-SEM Approved Credit Cover Parameters