Single Electricity Market

INTRA-DAY TRADING: PLAIN ENGLISH DOCUMENT MODIFICATION MOD_11_YY:

TRANSITIONAL ARRANGEMENTS

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Document History

Version	Date	Author	Comment
1.0	3 November 2011	SEMO	Legally reviewed version for review by Participants (based on v.10 of the Code)

Distribution List

Name	Organisation

1   INTRODUCTION

During 2010, the RAs instigated the development of proposals in respect of Intra-Day Trading in the SEM. Through the Modifications Committee Working Groups, the High Level Design for Intra-Day Trading was developed and was recommended for approval by the Modifications Committee in Meeting 32.

The introduction of Intra-Day Trading in the SEM represents a major change in the market design. As a result, there will be a number of changes that will impact on the Trading and Settlement Code ("Code"), including:

- Bidding to multiple Gate Windows (EA1, EA2 and WD1) for the relevant Trading Day.
- Restriction of Interconnector Unit bidding in the EA1 Gate Window to Capacity Holders.
- Reallocation of unused Interconnector Capacity to any Interconnector Unit (with no requirement to be a Capacity Holder) in EA2 and WD1 MSP Software Runs.
- Different lengths of Trading Window for each Ex-Ante MSP Software Run:
  - EA1: entire Trading Day
  - EA2: entire Trading Day
  - WD1: second portion of the Trading Day
- Fixing of Interconnector Unit capacity allocations from EA1 MSP Software Run (MIUNs) in the EA2 MSP Software Run.
- Fixing of Interconnector Unit capacity allocations from EA1 MSP Software Run (MIUNs) and EA2 MSP Software Run (MIUNs) in the WD1 MSP Software Run.
- Changes to Credit Cover arrangements to ensure that the SEM remains as collateralised as possible.

This "Plain English Document" accompanies legal drafting for changes to the Code which relate solely to transitional arrangements. Such arrangements apply for a short period of time and are restricted to a new Section 9 which covers the transitional arrangements and associated definitions. They will form a separate Modification to that for the enduring SEM Intra-Day Trading provisions, which will come into effect prior to the IDT Start Date.

2   SCOPE OF THIS DOCUMENT

In order to facilitate consideration of the transitional arrangements required in the Code to facilitate SEM Intra-Day Trading, SEMO has developed a Plain English Document (PED) and associated legal drafting, which will be considered via the Modifications Committee Working Group process.

The transitional arrangements will be tabled as a separate Modification to that which will enact SEM Intra-Day Trading and will come into force prior to the start of SEM Intra-Day Trading (referred to as the IDT Start Date).

3   STRUCTURE OF THIS DOCUMENT

Each Plain English Document has the following key sections:

- **Key Definitions**

  Describes the new or amended definitions required for the relevant Functional Group.

- **Description of Changes**

  By section of the Code and for each proposed change, defines:

  - PED Reference (unique reference to aid review and discussion).

  - Change Type (New – N, Amend – A, Delete – D).

  - Code paragraph(s) (in respect of Version 10.0 of the Code).

  - Description (brief explanation of the proposed change).

  - Reference to relevant section(s) of the High Level Design for Intra-Day Trading (if any).

- **Appendices**

  Where required to support context and understanding of the Plain English Document, additional detail is included within appendices.

4   KEY DEFINITIONS

This section details the definitions of all key terms which have either been introduced or amended in the transitional arrangements for Intra-Day Trading detailed in new Section 9 of the Code.

All new variables and subscripts (if any) are also listed.

4.1   NEW DEFINITIONS

Note: All of the new terms defined below are identical to the same terms defined in the legal drafting for the Intra-Day Trading Modification. They are also defined in Section 9 of the Code because when the transitional arrangements in Section 9 are first switched on, this will be prior to the IDT Start Date and, as such, these terms will not yet be defined.

Term	Definition
Available Credit Cover (ACC)	means in respect of a Participant, the amount by which the Posted Credit Cover exceeds the sum of the Required Credit Cover, Interconnector Unit Traded Exposure and Total Fixed Credit Requirement.
Capacity Traded Exposure (CTE)	means the credit risk exposure, adjusted for VAT, in respect of Capacity Payments for a Participant.
EA1 Gate Window	means a period of time during which Data Transactions may be submitted and Accepted for use in the associated MSP Software Run.
EA2 Gate Window	means a period of time during which Data Transactions may be submitted and Accepted for use in the associated MSP Software Run.
Energy Traded Exposure (ETE)	means the credit risk exposure, adjusted for VAT, in respect of Energy Payments for a Participant.
Estimated Capacity Price for Interconnectors (ECPI)	means the price determined by the Market Operator for use in the calculation of Interconnector Unit Capacity Offered Exposure and Interconnector Unit Capacity Traded Exposure for Interconnector Units.
High Limit Quantity (HLQ)	means in respect of an Interconnector Unit and for each Trading Period in the Trading Window for MSP Software Run m, the quantity as defined in paragraph 9.19.
IDT Start Date	means the Trading Day from which the SEM Intra-Day Trading arrangements apply, as determined by the Regulatory Authorities or other Competent Authority as appropriate.
Interconnector Unit Capacity Traded Exposure (IUCTE)	means the credit risk exposure, adjusted for VAT, in respect of Capacity Payments for an Interconnector Unit in accordance with paragraphs 9.24 and 9.25.
Interconnector Unit Energy Traded Exposure (IUETE)	means the credit risk exposure, adjusted for VAT, in respect of Energy Payments for an Interconnector Unit in accordance with paragraphs 9.20 and 9.21.
Interconnector Unit Traded Exposure (IUTE)	means the total credit risk exposure for a Participant in respect of its Interconnector Units, as calculated in accordance with paragraph 9.27.

Term	Definition
Low Limit Quantity (LLQ)	means in respect of an Interconnector Unit and for each Trading Period in the Trading Window for MSP Software Run m, the quantity as defined in paragraph 9.18.
MSP Software Run	means the operation of the MSP Software used by the Market Operator to determine Market Schedule Quantities for each Price Maker Generator Unit and to determine the System Marginal Price for each Trading Period as provided for in Appendix N.
Offered Modified Price	means the price associated with a specified Quantity within an Offered Modified Price Quantity Pair.
Offered Modified Price Quantity Pairs	means a set of Price Quantity Pairs for Interconnector Units as derived from Accepted Commercial Offer Data by the Market Operator.
Offered Modified Quantity	means the quantity of Output specified within an Offered Price Quantity Pair.
Price Axis Crossing Point	means a temporary Price Quantity Pair used in the calculation of traded credit exposure, reflecting the point at which the Accepted Price Quantity Pairs or Offered Modified Price Quantity Pairs cross the Price axis in accordance with paragraph 9.17.
Quantity Axis Crossing Point	means a temporary Price Quantity Pair used in the calculation of traded credit exposure, reflecting the point at which the Accepted Price Quantity Pairs or Offered Modified Price Quantity Pairs cross the Quantity axis in accordance with paragraph 9.16.
Traded Modified Price Quantity Pairs	means a set of Price Quantity Pairs for Interconnector Units, as determined in accordance with paragraphs 9.13 to 9.19.
WD1 Gate Window	means a period of time during which Data Transactions may be submitted and Accepted for use in the associated MSP Software Run.

4.2 AMENDED DEFINITIONS

As the transitional arrangements are self-contained and consistent with the existing Code, no amended definitions are required. All required definitions are either as per the current Code or are contained within the new section 9, which contains the transitional provisions.

4.3 NEW VARIABLES

Name	Term	Subscripts	Units	Description
Available Credit Cover	**ACC**	**pr**	**£ or €**	**The amount of Credit Cover for Participant p posted and available to cover potential credit exposure in respect of Interconnector Unit trading in the Pool.**

Name	Term	Subscripts	Units	Description
Capacity Traded Exposure	**CTE**	**ph**	**£ or €**	**The credit risk exposure, adjusted for VAT, in respect of Capacity Payments for a Participant, as calculated following each MSP Software Run.**
Daily Average Capacity Payments Generation Price	**DACPGP**	**d**	**€/MWh**	**Arithmetic average of Capacity Payments Generation Prices in a given Settlement Day**
Estimated Capacity Price for Interconnectors	**ECPI**	**h**	**€/MWh**	**Estimated Capacity Price for Interconnectors.**
Energy Traded Exposure	**ETE**	**ph**	**£ or €**	**The credit risk exposure, adjusted for VAT, in respect of Energy Payments for a Participant, as calculated following each MSP Software Run.**
High Limit Quantity	**HLQ**	**uhm**	**MW**	**A value set as part of the calculation of Modified Price Quantity Pairs for Interconnector Units.**
Interconnector Unit Capacity Traded Exposure	**IUCTE**	**uhm**	**£ or €**	**The credit risk exposure, adjusted for VAT, in respect of Capacity Payments for an Interconnector Unit u as calculated following each MSP Software Run.**
Interconnector Unit Energy Traded Exposure	**IUETE**	**uhm**	**£ or €**	**The credit risk exposure, adjusted for VAT, in respect of Energy Payments for an Interconnector Unit u as calculated following each MSP Software Run.**
Interconnector Unit Traded Exposure	**IUTE**	**pr**	**£ or €**	**The credit risk exposure for a Participant in respect of its Interconnector Units, calculated following each MSP Software Run.**
Low Limit Quantity	**LLQ**	**uh**	**MW**	**In respect of an Interconnector Unit and for each Trading Period in the Trading Window for MSP Software Run m, the quantity as defined in paragraph 9.18.**
Modified Price	**P**	**uhi**	**€/MWh**	**A Quantity derived from Commercial Offer Data, determined in accordance with paragraph 9.13.**
Price Axis Crossing Point	**PACP**	**uhi**	**€/MWh**	**A temporary Price Quantity Pair used in the calculation of Offered Exposure or Traded Exposure, reflecting the point at which the Accepted Price Quantity Pairs or Offered Modified Price Quantity Pairs cross the Price axis.**

Name	Term	Subscripts	Units	Description
Posted Credit Cover	**PCC**	**pr**	**£ or €**	**Posted Credit Cover amount for Participant p in Settlement Risk Period r.**
Modified Quantity	**Q**	**uhi**	**MW**	**A Quantity derived from Commercial Offer Data, determined in accordance with paragraph 9.13.**
Quantity Axis Crossing Point	**QACP**	**uhi**	**€/MWh**	**A temporary Price Quantity Pair used in the calculation of Offered Exposure or Traded Exposure, reflecting the point at which the Accepted Price Quantity Pairs or Offered Modified Price Quantity Pairs cross the Quantity axis.**
Total Fixed Credit Requirement	**TFCR**	**pr**	**£ or €**	**The total Fixed Credit Requirement for Participant p in respect of its Generator Units u and Supplier Units v.**
VAT	**VAT**	**uh**		**The applicable VAT rate for Interconnector Unit u in Trading Period h.**

4.4 NEW SUBSCRIPTS

Subscript	Definition

5   DESCRIPTION OF CHANGES

5.1   SECTION 2

5.1.1   DESCRIPTION

The Intra-Day Trading transitional provisions add a new Section 9 to the Code. This section needs to be included within clause 2.8, defining the priority of section of the Code in the event of conflict or inconsistency.
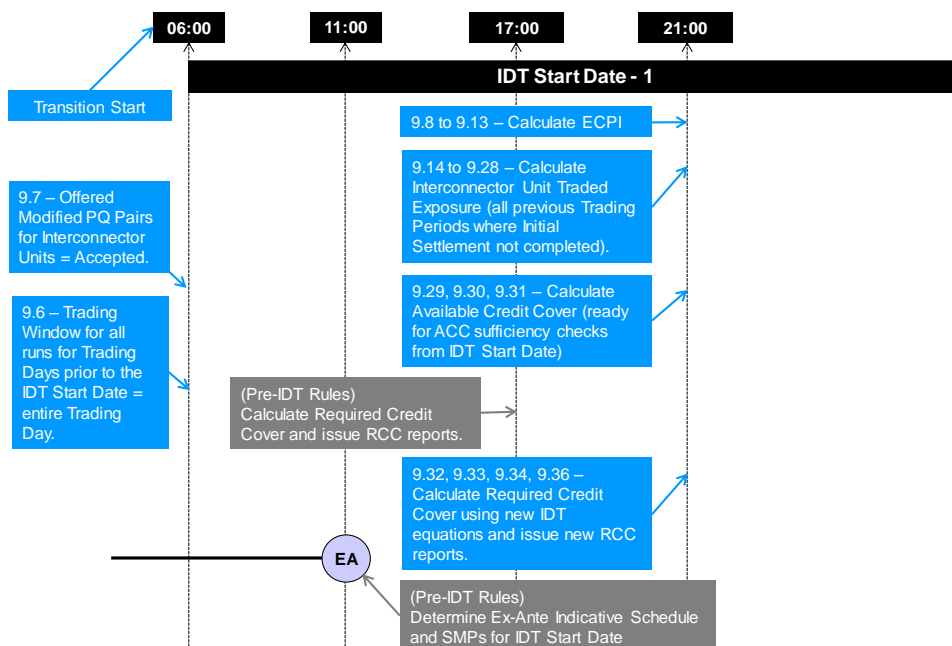
5.1.2   DETAILED CHANGES

PED Reference	Type	Code Clause(s)	High Level Design Section(s)	Description of Change	Change because of introduction of Intra-Day Trading?
PED_TR_1	A	2.8	n/a	Adds section 9 to the list of sections, in order of priority when resolving conflict or inconsistency.	Yes

5.2   SECTION 9
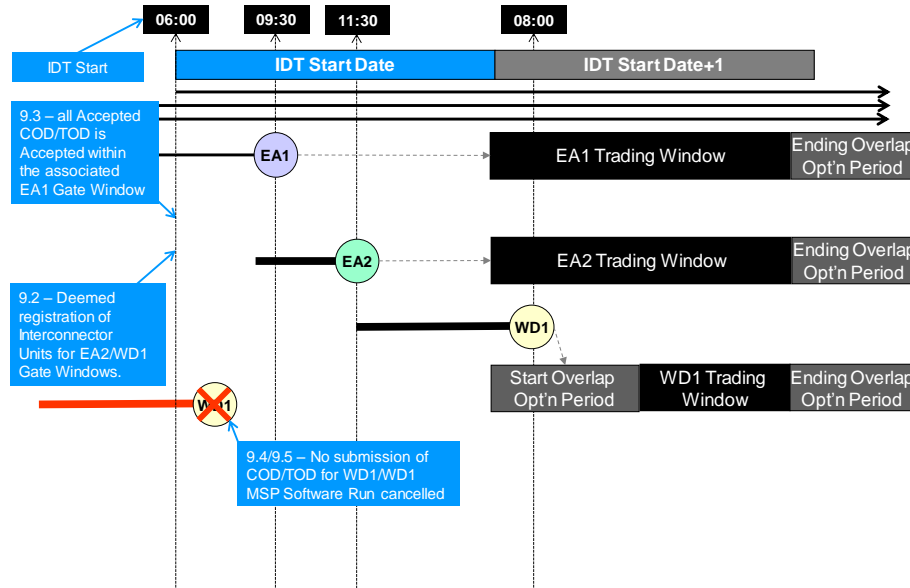
5.2.1   DESCRIPTION

The IDT transitional arrangements are summarised as follows:

Prior to the IDT Start Date

- For existing Interconnector Users, an additional two Interconnector Units will be deemed to be registered on the IDT Start Date for each existing Interconnector Unit.
- These additional two Interconnector Units will enable bidding within EA2 and WD1 Gate Windows from the IDT Start Date, and avoid the need to execute the formal Interconnector Unit registration process.
- For Interconnector Units, Offered Modified Price Quantity Pairs for Trading Days that are on or prior to the IDT Start Date shall be the same as those that are Accepted.
- Estimated Capacity Price for Interconnectors (ECPI) is required prior to the IDT Start Date, enabling calculation of Interconnector Unit Capacity Traded Exposure (IUCTE) and Capacity Traded Exposure (CTE) for Participants with registered Interconnector Units.
- Following the issue of Required Credit Cover reports on the day prior to the IDT Start Date, the Required Credit Cover for each Participant will be calculated using the equation that will apply from the IDT Start Date. Once calculated, the Required Credit Cover reports will be re-issued to Participants by 21:00 on the day prior to the IDT Start Date. This will include calculation of the following components:
  o Calculation of Traded Modified Price Quantity Pairs, which are temporarily generated to allow traded exposures to be calculated.
  o Calculation of Interconnector Unit Energy Traded Exposure (IUETE) and Energy Traded Exposure (ETE) for Participants with Interconnector Units will be calculated for all Trading Periods on or prior to the IDT Start Date and where Initial Capacity Settlement has not occurred.
  o Calculation of Interconnector Unit Capacity Traded Exposure (IUCTE) and Capacity Traded Exposure (CTE) for Participants with Interconnector Units will be calculated for all Trading Periods on or prior to the IDT Start Date and where Initial Capacity Settlement has not occurred.
  o Calculation of Interconnector Unit Traded Exposure for each Participant with registered Interconnector Units.
  o Calculation of Available Credit Cover.

On or after the IDT Start Date

- Any COD or TOD that is Accepted within the existing Gate Window at the point at which SEM Intra-Day Trading is implemented shall be deemed to be Accepted within the EA1 Gate Window.
- No COD or TOD will be Accepted for the IDT Start Date in respect of the WD1 Gate Window.
- MSP Software Run Cancellation shall apply on the IDT Start Date for the WD MSP Software Run.
- For each run of the MSP Software that occurs for a Trading Day on or prior to the IDT Start Date, the Trading Window shall comprise the entire Trading Day.

5.2.2   DETAILED CHANGES

PED Reference	Type	Code Clause(s)	High Level Design Section(s)	Description of Change	Change because of introduction of Intra-Day Trading?
PED_TR_2	N	9.1	n/a	Describes the scope of Section 9, covering only the transitional arrangements in respect of the introduction of SEM Intra-Day Trading.	Yes
PED_TR_3	N	9.2	n/a	For all Participants with existing Interconnector Units registered prior to the IDT Start Date for a given Interconnector, two additional Interconnector Units will be deemed registered to those Participants for the same Interconnector.	Yes
PED_TR_4	N	9.3	n/a	All Commercial Offer Data and Technical Offer Data that is Accepted for Generator Units for Trading Days on or after the IDT Start Date shall be considered as Accepted within the EA1 Gate Window for the corresponding Trading Day. This is required as the current gate opens 29 days prior to the Trading Day.	Yes
PED_TR_5	N	9.4	n/a	No Commercial Offer Data or Technical Offer Data will be Accepted for the WD1 Gate Window relating to the IDT Start Date.	Yes
PED_TR_6	N	9.5	n/a	MSP Software Run Cancellation will apply for the WD1 MSP Software Run in respect of the IDT Start Date.	Yes
PED_TR_7	N	9.6	n/a	Confirming that for all MSP Software Runs on or after the IDT Start Date relating to days prior to the IDT Start Date (e.g. EP1, EP2), the Trading Window will be the entire Trading Day.	Yes
PED_TR_8	N	9.7	n/a	Setting Offered Modified Price Quantity Pairs equal to the Accepted Price Quantity Pairs for Interconnector Units for all Trading Periods prior to the end of the IDT Start Date. This enables the calculation of traded exposure following all subsequent MSP Software Runs relating to dates prior to the IDT Start Date.	Yes
PED_TR_9	N	9.8	n/a	Requires the Market Operator to calculate the Estimated Capacity Price for Interconnectors (ECPI) prior to the IDT Start Date.	Yes
PED_TR_10	N	9.9	n/a	Details the calculation of Daily Average Capacity Payments Generation Price (DACPGP), which is used to calculate the Estimated Capacity Price for Interconnectors. DACPGP is the arithmetic average of the CPGP values in the relevant Settlement Day.	Yes
PED_TR_11	N	9.10	n/a	Details the calculation of number of Settlement Days in Historical Assessment Period for Capacity Periods (ρ). This is the sample size for the statistical calculation of ECPI.	Yes
PED_TR_12	N	9.11	n/a	Details the calculation of mean value of Daily Average Capacity Payments Generation Prices (UMCPGP) for Historical Assessment Period for Capacity Periods (ρ). This is the mean value used for the statistical calculation of ECPI.	Yes

PED Reference	Type	Code Clause(s)	High Level Design Section(s)	Description of Change	Change because of introduction of Intra-Day Trading?
PED_TR_13	N	9.12	n/a	Details the calculation of standard deviation of Daily Average Capacity Payments Generation Prices, SDCPGP for Historical Assessment Period for Capacity Periods (ρ). This is the variance value used for the statistical calculation of ECPI.	Yes
PED_TR_14	N	9.13	n/a	Details the calculation of ECPI, a statistical calculation based on UMCPGP (mean value of Daily Average Capacity Payments Generation Prices) and SDCPGP (standard deviation of Daily Average Capacity Payments Generation Prices).	Yes
PED_TR_15	N	9.13	n/a	From the IDT Start Date, traded exposure will be calculated for Interconnector Units following each MSP Software Run (including ex-ante and ex-post MSP Software Runs). This calculation is based on Offered Modified PQ Pairs, which from the IDT Start Date will be calculated from the Accepted Commercial Offer Data and Available Credit Cover. For Trading Periods prior to or on the IDT Start Date, Offered Modified Price Quantity Pairs have not been calculated; as a result, the Accepted Commercial Offer Data will be used.	Yes
PED_TR_16	N	9.14 to 9.22	n/a	In order for the SEM to remain as collateralised as practical following the IDT Start Date, the traded exposure in respect of Energy Payments for Interconnector Units in all Trading Periods where Initial Energy Settlement has not occurred needs to be calculated. Exposure in respect of Energy Payments is calculated as a function of the Traded Modified Price Quantity Pairs (derived from the Offered Modified Price Quantity Pairs) and the MIUN (following ex-ante or EP1 runs) or MSQ (following EP2) values. These clauses describe the calculation of Energy Traded Exposure (ETE) for Interconnector Units. This calculation is comprised of values of Interconnector Unit Energy Traded Exposure (IUETE).	Yes

PED Reference	Type	Code Clause(s)	High Level Design Section(s)	Description of Change	Change because of introduction of Intra-Day Trading?
PED_TR_17	N	9.23 to 9.26	n/a	In order for the SEM to remain as collateralised as practical following the IDT Start Date, the traded exposure in respect of Capacity Payments for Interconnector Units in all Trading Periods where Initial Capacity Settlement has not occurred needs to be calculated. Exposure in respect of Capacity Payments is calculated as a function of the Estimated Capacity Price for Interconnectors (ECPI) and the MIUN (following ex-ante or EP1 runs) or MSQ (following EP2) values. These clauses describe the calculation of Capacity Traded Exposure (CTE) for Interconnector Units. This calculation is comprised of values of Interconnector Unit Capacity Traded Exposure (IUCTE).	Yes
PED_TR_18	N	9.27	n/a	Following calculation of Energy Traded Exposure (ETE) and Capacity Traded Exposure (CTE) for Interconnector Units, this clause describes the calculation of Interconnector Unit Traded Exposure (IUTE) for the entire Participant. This is used in the calculation of Available Credit Cover for each Participant.	Yes
PED_TR_19	N	9.28, 9.29	n/a	As part of the calculation of Available Credit Cover, the value of Total Fixed Credit Requirement (TFCR) for each Participant is required. This is calculated as the sum of two existing values: Fixed Credit Requirement for Supplier Units (FCRS) and Fixed Credit Requirement for Generator Units (FCRG). This is required in order to calculate the Required Credit Cover and Available Credit Cover for each Participant, as set out in paragraphs 9.30 and 9.35.	Yes
PED_TR_20	N	9.30, 9.31	n/a	Following the IDT Start Date, the Market Operator will calculate the Available Credit Cover for each Participant following each Gate Window Closure and following successful completion of each MSP Software Run. This indicates the maximum exposure that is available for Interconnector Unit trading. ACC will be calculated by 21:00 on the day prior to the IDT Start Date.	Yes
PED_TR_21	N	9.32	n/a	Requirement to calculate RCC using new calculations once the RCC reports on the day prior to the IDT Start Date have been issued.	Yes

PED Reference	Type	Code Clause(s)	High Level Design Section(s)	Description of Change	Change because of introduction of Intra-Day Trading?
PED_TR_22	N	9.33	n/a	From the IDT Start Date, the calculation of Actual Generator Exposure for Participants with Interconnector Units will be different to currently, as Interconnector Units will no longer have an Undefined Exposure. This paragraph details the equation used to calculate the Actual Generator Exposure on the day prior to the IDT Start Date. For non-Interconnector Units, the calculation of DAYPU covers all days where Invoicing has not occurred in respect of Energy Payments. This includes where Indicative Settlement has been performed. For Interconnector Units, the calculation of DAYPU applies only in the period where Invoicing has not occurred and where Initial Settlement has been performed. For days where Initial Settlement has not been performed, credit exposure is included within the calculation of Interconnector Unit Traded Exposure (IUTE).	Yes
PED_TR_23	N	9.34	n/a	Confirming that Interconnector Units shall not be included in the calculation of Undefined Exposure when calculating the Required Credit Cover to apply from the beginning of the IDT Start Date. If this is not excluded, credit cover for Interconnector Units could be double counted (i.e. included in the traded exposure calculations and the Undefined Exposure calculation).	Yes
PED_TR_24	N	9.35	n/a	From the IDT Start Date, the calculation of Required Credit Cover for Participants with Interconnector Units will be different to currently, as Interconnector Unit traded exposure will form part of the calculation. This paragraph details the equation used to calculate the Required Credit Cover on the day prior to the IDT Start Date.	Yes
PED_TR_25	N	9.36	n/a	Following the calculation of the Required Credit Cover for each Participant on the evening of the IDT Start Date, the Market Operator will issue revised RCC reports. This will provide an updated position for Interconnector User (the position for Participants without registered Interconnector Units) will not change.	Yes