

# DECISION No 05/2020 OF THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS

# of 30 January 2020

on all NEMOs' proposal for products that can be taken into account by nominated electricity market operators in intraday coupling process

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators<sup>1</sup>, and, in particular, Article 5(2)(b) thereof,

Having regard to Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management<sup>2</sup>, and, in particular, Article 53(1) thereof,

Having regard to the outcome of the consultation with regulatory authorities, nominated electricity market operators, transmission system operators and market participants,

Having regard to the favourable opinion of the Board of Regulators of 22 January 2020, delivered pursuant to Article 22(5) of Regulation (EU) 2019/942,

# Whereas:

# 1. INTRODUCTION

(1) Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (the 'CACM Regulation') laid down a range of requirements for cross-zonal capacity allocation and congestion management in the day-ahead and intraday markets in electricity. Chapter 6 of the

<sup>&</sup>lt;sup>1</sup> OJ L 158, 14.6.2019, p. 22.

<sup>&</sup>lt;sup>2</sup> OJ L 197, 25.7.2015, p. 24.



CACM Regulation specifies requirements for the single intraday coupling ('SIDC'), including products that can be taken into account in the SIDC.

- Pursuant to Articles 9(1), 9(6)(h) and 53(1) of the CACM Regulation, all nominated electricity market operators ('NEMOs') are required to propose products that can be taken into account in the SIDC ('ID product proposal'), which shall be subject to approval by all regulatory authorities.
- (3) Pursuant to Article 5(2) of the Regulation (EU) 2019/942, where proposals for common terms and conditions or methodologies or their amendments, as the case might be, require the approval of all regulatory authorities, those proposals shall be submitted to ACER for revision and approval.
- (4) Accordingly, on 31 July 2019, all NEMOs submitted to ACER a proposal for amendment to the products that can be taken into account in the SIDC ('SIDC products'). This ACER Decision is hereby made to revise and approve the proposal for amendment. Annex I to this Decision sets out the amended SIDC products.

# 2. PROCEDURE

# 2.1. Proceedings before the ACER

- On 3 June 2019, the NEMO Committee, on behalf of all NEMOs, published for a public consultation the proposed amendments to the SIDC products, in accordance with Article 9(13) and Article 12 of the CACM Regulation. The consultation finished on 2 July 2019.
- (6) By email of 31 July 2019, the NEMO Committee, on behalf of all NEMOs, submitted a proposal for amendment to the SIDC products ('proposal for amendment') to ACER for decision.
- (7) On 21 October 2019, ACER launched a public consultation on the proposal for amendment, inviting all market participants to submit their comments by 17 November 2019. In particular, ACER asked stakeholders to provide comments on the choice of products proposed by all NEMOs for the continuous trading and for intraday auctions ('IDAs').
- (8) During the decision-making process, ACER closely cooperated with all NEMOs, all regulatory authorities and all transmission system operators (TSOs) and extensively consulted them on the proposed amendment during numerous teleconferences and meetings and through exchanges of textual amendments via emails. In particular, the following procedural steps were taken in 2019:
  - a) 30 September: teleconference with NEMOs, TSOs and regulatory authorities;
  - b) 3 October: teleconference with NEMOs, TSOs and regulatory authorities;



- c) 7 November: discussion with the regulatory authorities during the CACM Task Force meeting<sup>3</sup>;
- d) 14 November: teleconference with NEMOs, TSOs and regulatory authorities;
- e) 19 November: discussion during the ACER Electricity Working Group<sup>4</sup> meeting with regulatory authorities;
- f) 25 November: teleconference with NEMOs, TSOs and regulatory authorities;
- g) 5 December: teleconference with NEMOs, TSOs and regulatory authorities;
- h) 9 December: teleconference with the regulatory authorities;
- i) 10 December: discussion during the Trilateral Coordination Group meeting with the NEMOs, TSOs, regulatory authorities and the representatives of the European Commission;
- j) 11 December: discussion with the regulatory authorities during the Board of Regulators<sup>5</sup>;
- k) 17 December: discussion with the regulatory authorities during the CACM Task Force meeting; and
- 1) 9 January 2020: discussion during the ACER Electricity Working Group meeting with regulatory authorities.

# 3. ACER'S COMPETENCE TO DECIDE ON THE PROPOSAL FOR AMENDMENT

- (9) According to Article 9(13) of the CACM Regulation, NEMOs responsible for developing a proposal for terms and conditions or methodologies may request amendments of these terms and conditions or methodologies, which shall be approved in accordance with the procedure set out in that Article.
- (10) According to Article 9(6)(h) of the CACM Regulation, proposals related to the SIDC products shall be subject to approval by all regulatory authorities.
- (11) According to Article 5(2)(a) of Regulation (EU) 2019/942, proposals for terms and conditions or methodologies, based on network codes and guidelines adopted before 4 July 2019 (i.e. the CACM Regulation), which require the approval of all regulatory authorities, shall be submitted to ACER for revision and approval.

<sup>&</sup>lt;sup>3</sup> ACER's platform for discussing all issues connected to the CACM Regulation with the regulatory authorities.

<sup>&</sup>lt;sup>4</sup> ACER's high level platform for discussing European regulatory issues with the regulatory authorities.

<sup>&</sup>lt;sup>5</sup> Board of Regulators is a decision making body defined in Articles 21 and 22 of the Regulation No 2019/942 of the European parliament and of the Council of 5 June 2019, establishing a European Union Agency for the Cooperation of Energy Regulators.



(12) Accordingly, on 31 July 2019, all NEMOs submitted the proposed SIDC products amendment to ACER for revision and approval, thereby making ACER competent to adopt a decision in that respect.

# 4. SUMMARY OF THE PROPOSAL FOR AMENDMENT

- (13) The proposal for amendment includes the following elements:
  - a) recitals;
  - b) general provisions, including the scope of application, definitions, publication and currency in Articles 1, 2 and 3;
  - c) products for continuous SIDC in Article 4;
  - d) products for IDAs in Article 5; and
  - e) provisions on the timescale for implementation and language in Articles 6 and 7.
- (14) The proposal for amendment therefore consists of the following amendments of SIDC products previously approved by all regulatory authorities:
  - a) addition of a paragraph to the Recitals referring to the IDAs;
  - b) addition of a paragraph in Article 1 referring to the IDAs;
  - c) addition of an Article setting out products that can be taken into account in IDAs; and
  - d) addition of a paragraph in Article 6 setting the timescale for implementation for the IDAs.

# 5. ASSESSMENT OF THE PROPOSAL FOR AMENDMENT

# 5.1. Legal framework

- (15) Article 53 of the CACM Regulation sets out specific requirements for all NEMOs' joint proposal concerning products that can be taken into account in the SIDC.
- (16) According to Article 53(1), NEMOs shall submit a joint proposal concerning products that can be taken into account in the single intraday coupling. Furthermore, NEMOs shall ensure that all orders resulting from these products submitted to enable the market coupling operator (MCO) functions to be performed in accordance with Article 7 of the CACM Regulation are expressed in euros and make reference to the market time and the market time unit.
- (17) According to Article 53(2), all NEMOs shall ensure that orders resulting from these products are compatible with the characteristics of cross-zonal capacity, allowing them to be matched simultaneously.



- (18) According to Article 53(3), all NEMOs shall ensure that the continuous trading matching algorithm is able to accommodate orders covering one market time unit and multiple market time units.
- (19) According to Article 53(4), by two years after the entry into force of this Regulation and in every second subsequent year, all NEMOs shall consult in accordance with Article 12 of the CACM Regulation:
  - (a) market participants, to ensure that available products reflect their needs;
  - (b) all TSOs, to ensure products take due account of operational security;
  - (c) all regulatory authorities, to ensure that the available products comply with the objectives of the CACM Regulation.
- (20) According to Article 53(5), all NEMOs shall amend the products if needed pursuant to the results of the consultation referred to in Article 53(4) above.
- As a general requirement, Article 9(9) of the CACM Regulation sets out that every proposal for terms and conditions or methodologies includes a proposed timescale for their implementation and a description of their expected impact on the objectives set out in Article 3 of the CACM Regulation.
- (22) In addition, ACER Decision No. 01/2019 of 24 January 2019, Annex I, provides for a Methodology for pricing intraday cross-zonal capacity, in accordance with Article 55 of the CACM Regulation. Articles 5 and 6 of Annex I to the ACER Decision set out the frequency of IDAs and require all TSOs to update and complement the common set of requirements for efficient capacity allocation to enable the development of the products and the algorithm for IDAs.

# 5.2. Assessment of the legal requirements of the CACM Regulation

- (23) The first sentence of Article 53(1) is not relevant for the current amendment process, because it refers to a procedure, which started 18 months after the entry into force of the CACM Regulation, when all NEMOs jointly proposed products that can be taken into account in SIDC to all regulatory authorities for approval. The procedure for amendment has been initiated in accordance with Article 9(13).
- The proposal for amendment partially fulfils the requirements of the second sentence of Article 53(1). While Article 3(2) of the proposal provides that all orders submitted to the continuous trading matching algorithm shall be expressed in euros and makes reference to the market time, it omits the reference to the market time unit. Therefore, ACER amended the text to include the reference to market time unit.
- (25) The proposal for amendment fulfils the requirements of Article 53(2) because the orders from the proposed products allow for simultaneous matching.
- (26) The proposal for amendment fulfils the requirements of Article 53(3) because it proposes orders covering one market time unit and multiple market time units.



- (27) Articles 53(4) and 53(5) set out consultation requirements with respect to already approved products and, as such, they are not within the scope of this proposal for amendment.
- (28) The proposal for amendment does not fully meet the criteria of Article 9(9) of the CACM Regulation. While, in ACER's view, Article 6 of the proposal for amendment sufficiently describes the proposed implementation timescale, the description of the impact on the objectives set out in Article 3 of the CACM Regulation lacks a more detailed analysis.
- (29) In particular, the proposal provides little description of potential impact on the objectives of the CACM Regulation regarding operational security (Article 3(c) of the CACM Regulation) and efficient long-term operation and development of the electricity transmission system and electricity sector in the Union (Article 3(g) of the CACM Regulation). In that respect, NEMOs consider that the requirement to regularly consult the relevant parties and amend the SIDC products based on the consultation results in accordance with paragraphs (4) and (5) of Article 53, is a sufficient guarantee that the above objectives of the CACM Regulation would be met. They do not, however, explain how the proposal itself impacts the above objectives.
- (30) In that regard, the proposal for amendment fails to address all the requirements of Article 9(9) of the CACM Regulation. Therefore, ACER has assessed the expected impacts of the proposal on the Article 3 objectives, and introduced changes to the proposal to describe the impact of the amended SIDC products on these additional objectives.

# 5.3. Assessment of Recitals

- (31) The Recitals are divided into two sections: (i) background and (ii) impact on the objectives of the CACM Regulation, which have separate numbering. For clarity, these sections will be referred to as 'background section' and 'objectives section' in this assessment.
- (32) ACER has reviewed and amended the Recitals in order to clarify the purpose of the methodology, as well as to reflect the changes in the Articles of the proposal for amendment.
- (33) In particular, ACER considers that it is not necessary to repeat the Recitals, which are already provided for in the CACM Regulation and deleted them from the proposal. In addition, ACER has deleted Recital (4) referring to the procedure which has been repealed by Regulation (EU) 2019/942.
- (34) ACER has deleted Recital (6) of the background section and Recitals (6), (7) and (8) of the objectives section, because the governance of the SDAC and SIDC algorithms is out of scope of this Decision.



### 5.4. Assessment of definitions

- (35) ACER has updated the definitions to reflect the recent legislative changes and added definitions used in other terms and conditions or methodologies approved in accordance with the CACM Regulation.
- (36) ACER has deleted the definitions of 'Request for Change', which is already defined in the methodology approved in accordance with Article 37 of the CACM Regulation, and of 'Scheduling Area', which is defined in the Regulation (EU) 2017/1485.

# 5.5. Assessment of the products taken into account in intraday auctions

- All NEMOs proposed in Article 5 the products that can be used in the IDAs by using a reference to the methodology determining products for the day-ahead timeframe, except for the PUN orders. In order to address the concerns related to the performance of the algorithm related to the accommodation of products, ACER explicitly listed all the products that can be accommodated by intraday auctions (i.e products from the SDAC, except for PUN orders), but separated them into two groups. The first group contains products, which are mandatory (i.e. all NEMOs must offer at least those products) and represent the minimum legal requirements set by Article 53 of the CACM Regulation. The second group lists the optional products, which can be used by the NEMOs in addition to the mandatory ones. This separation provides a clear direction to NEMOs that in case the algorithm for intraday auctions would be unable to accommodate all products due to performance issues, the NEMOs should prioritise the legally required products, whereas optional products can be accommodated only in case algorithm for intraday auctions does not experience performance problems.
- (38) Therefore, the products proposed by all NEMOs for intraday auctions remain the same as proposed by NEMOs and ACER only changed the structure and underlined the distinction between the legal and optional requirements regarding the SIDC products for intraday auctions.

# 6. CONCLUSION

- (39) For all the above reasons, ACER considers that the proposal for amendment is in line with the requirements of the CACM Regulation, provided that the amendments described in this Decision are integrated in the proposal for amendment, as presented in Annex I to this Decision.
- (40) Therefore, ACER approves the proposal for amendment subject to the necessary amendments and editorial changes, as required. To provide clarity, Annex I to this Decision sets out the proposal for amendment as amended and as approved by ACER,



### HAS ADOPTED THIS DECISION:

# Article 1

The products that can be taken into account in the single intraday coupling, developed pursuant to Article 53 of Regulation (EU) 2015/1222, are adopted as set out in Annex I to this Decision.

# Article 2

This Decision is addressed to:

- BSP Regionalna Energetska Borza d.o.o.
- CROPEX Ltd
- EirGrid plc
- EMCO AS
- EPEX Spot SE
- EXAA AG
- GME Spa
- HEnEx SA
- HUPX Zrt.
- Independent Bulgarian Power Exchange (IBEX)
- Nasdaq Oslo ASA
- Nord Pool AS
- OKTE a.s.
- OMIE S.A.
- OPCOM S.A.
- OTE a.s.
- SONI Ltd
- Towarowa Gielda Energii S.A.

Done at Ljubljana, on 30 January 2020.

# - SIGNED -

For the Agency
The Director

C. ZINGLERSEN



# Annexes:

Annex I – Products that can be taken into account by NEMOs in intraday coupling process in accordance with Article 53 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

Annex Ia – Products that can be taken into account by NEMOs in intraday coupling process in accordance with Article 53 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (track-change version, for information only)

Annex II - Evaluation of responses to the compliance of the all NEMOs' proposal for Products that can be taken into account by NEMOs in intraday coupling process (for information only)

In accordance with Article 28 of Regulation (EU) 2019/942, the addressees may appeal against this Decision by filing an appeal, together with the statement of grounds, in writing at the Board of Appeal of the ACER within two months of the day of notification of this Decision.

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Products that can be taken into account by NEMOs in intraday coupling process in accordance with Article 53 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

30 January 2020

# Whereas

# Background

- (1) These terms and conditions determine the products that can be taken into account in the single intraday coupling ('terms and conditions on SIDC products'). They are established in accordance with Article 53 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management ('CACM Regulation').
- (2) These terms and conditions on SIDC products comply with the provisions of the Methodology for pricing intraday cross-zonal capacity as adopted in accordance with Article 55 of the CACM Regulation, which determines the implementation of intraday auctions (IDAs).
- (3) These terms and conditions on SIDC products take into account the general objectives of capacity allocation and congestion management cooperation described in Article 3 of the CACM Regulation, as set out in paragraphs (4) to (10).
- (4) The range of products that the NEMOs make available to the market participants as a part of SIDC promotes an effective competition in the generation, trading and supply of electricity (Article 3(a) of the CACM Regulation). To ensure that the terms and conditions on SIDC products continue to promote effective competition, the NEMOs shall consult market participants at least every two years to ensure that available products reflect their needs.
- (5) The orders resulting from the SIDC products are compatible with the characteristics of the cross-zonal capacity and these terms and conditions on SIDC products help to promote the optimal allocation of cross-zonal capacity and to ensure the optimal use of the transmission infrastructure (Article 3(b) of the CACM Regulation). As all orders resulting from the available products shall be able to access the available cross-zonal capacity via the ID MCO function, these terms and conditions on SIDC products provide for non-discriminatory access to cross-zonal capacity (Article 3(j) of the CACM Regulation).
- (6) These terms and conditions on SIDC products ensure operational security (Article 3(c) of the CACM Regulation), because the NEMOs can choose, which products will be supported in the SIDC and because all products allow for simultaneous allocation of energy and cross-zonal capacity. Moreover, if TSOs identify any challenge with respect to operational security they are entitled to request NEMOs to propose an amendment to these terms and conditions for ID products.
- (7) The products listed in these terms and conditions on SIDC products are available for all NEMOs to be offered to their respective market participants and are all compatible with SIDC. As a result, these terms and conditions on SIDC products ensure fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants and respects the need for a fair and orderly market and fair and orderly price formation (Articles 3(e) and 3(h) of the CACM Regulation). For each product type, the same attributes should be applied in all bidding zones. There will be no differentiation in order characteristics to ensure a fair market.

- (8) By requiring NEMOs to publish and maintain a detailed public description of the SIDC products, these terms and conditions on SIDC products shall ensure and enhance the transparency and reliability of information (Article 3(f) of the CACM Regulation). Moreover, the NEMOs should involve all stakeholders in any consultation necessary to manage changes to these terms and conditions on SIDC products or the available products.
- (9) These terms and conditions on SIDC products create a level playing field for all NEMOs (Article 3(i) of the CACM Regulation), because all products listed in these terms and conditions on SIDC products can be made available to all NEMOs, and any change to the available products should be governed by all NEMOs.
- (10) These terms and conditions on SIDC products contribute to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union (Article 3(g) of the CACM Regulation), because all the products allow for efficient implicit allocation of cross-zonal capacity.

# Subject matter and scope

These terms and conditions on SIDC products determine the products that can be taken into account in the SIDC in accordance with Article 53 of the CACM Regulation and include products that can be offered by NEMOs in the continuous SIDC as well as in the IDAs, in accordance with the Methodology for pricing intraday cross zonal capacity, as adopted in accordance with Article 55 of the CACM Regulation.

### Article 2

## **Definitions**

- 1. The terms used in these terms and conditions on SIDC products shall have the meaning given to them in Article 2 of Regulation (EU) 2019/943, Article 3 of the Regulation (EU) 2017/1485, in Article 2 of Regulation (EU) 543/2013 and Article 2 of Regulation (EU) 2015/1222.
- 2. In addition, the terms used in these terms and conditions on SIDC products shall have the meaning given to them in the Methodology for the price coupling algorithm, the continuous trading matching algorithm and the intraday auction algorithm, as adopted in accordance with Article 37 of the CACM Regulation; the MCO Plan, as approved in accordance with Article 7(3) of the CACM Regulation; and the Methodology for pricing intraday crosszonal capacity, as adopted in accordance with Article 55 of the CACM Regulation.
- 3. In addition, the following definitions shall apply:
  - a) Acceptance Ratio: means the minimum percentage on offered volume for which a block order can be accepted. It cannot be different for periods belonging to the same block.
  - b) **Maximum Payment Condition (MP)**: means economical condition that can be associated to complex buy orders aimed at ensuring that the payment related to the order in all periods must not exceed a fixed consumption cost, which is global for the whole set of periods, and a consumption costs per MWh.
  - c) Minimum Income Condition (MIC): means economical condition that can be associated to complex sell orders aimed at ensuring that the income related to the order in all periods must cover at least underlying production costs, quantified by

- considering the start-up cost of a power plant and operational costs per MWh of the same power plant.
- d) **Scheduled Stop**: means condition that can be added to a MIC and applies when the MIC order is deactivated. It only applies to the periods defined in the condition and treats the cheapest sub-order in these periods as a standard (aggregated) market time unit (MTU) order. The purpose of this condition is to avoid abrupt stop in power generation.

# General requirements for continuous single intraday coupling products

- 1. Each NEMO shall publish in its market rules the list of SIDC products that are available in its NEMO trading hub separately for continuous SIDC and IDAs.
- 2. All orders resulting from the products submitted to the SIDC shall be expressed in euros and make reference to the market time and the MTU in the continuous SIDC and to the market time in the IDAs. NEMOs are entitled to arrange that orders submitted by market participants are expressed and settled in local currencies or euros.

# Article 4

# Continuous single intraday coupling products

- 1. On the continuous SIDC, the transaction is taking place based on a set of characteristics which are defined in a contract. The contract refers to an instrument, which is used by the market participants to enter into agreement to sell/buy a certain amount of energy having a predefined time of delivery. A product defines the guidelines ruling the generation of the contracts. The product is a template which is used as the standard for generating contracts with behaviour as defined in the product template. The relationship between the products and the contracts is that each product shall have one or multiple contracts and each contract shall belong to only one product.
- 2. The continuous trading matching algorithm shall support the following products or their combination, in compliance with paragraph 7:
  - a) Hourly: the product supports trading in 24 power contracts, one for each hour of the calendar day. The system automatically generates these contracts and makes them available for trading one day before the delivery day at a specified time.
  - b) Half-hourly: the product supports trading in 48 power contracts, one for each half-hour of the calendar day. The system automatically generates these contracts and makes them available for trading one day before the delivery day at a specified time.
  - c) Quarter-hourly: the product supports trading in 96 power contracts, one for each 15-min slot of the calendar day. The system automatically generates these contracts and makes them available for trading one day before the delivery day at a specified time.
  - d) User defined blocks: these are on-demand combinations of hourly, half-hourly or quarter-hourly contracts defined by the market participant. The delivery period of user defined blocks must always be coverable by multiple regular market contracts of the product and with consecutive delivery times, which must be executed together. A userdefined block order cannot be an iceberg order.

- 3. The continuous trading matching algorithm shall support the following order execution restrictions:
  - a) NON An order submitted with the execution restriction NON (None) is either executed immediately or, if the order can't be matched right away, entered into the order book. Partial order executions are allowed and NON orders can be executed against multiple other orders and create multiple trades.
  - b) Fill or Kill (FOK) the order is either fully traded at one point immediately after the order is submitted with its full quantity or deleted without entry in the order book. FOK orders can be matched against multiple existing orders in the order book. FOK orders cannot have a validity restriction.
  - c) Immediate or Cancel (IOC) the order is either traded (in any amount) at one point immediately after the order is submitted or, if the order can't be matched, deleted without entry in the order book. Partial executions are allowed and IOC orders can be executed against multiple other orders and create multiple trades. An order with execution restriction IOC cannot have a validity restriction.
  - d) All or Nothing (AON) An order submitted with the execution restriction AON is either executed against exactly one other order with its full quantity or entered into the order book. Partial executions are not allowed. The execution restriction AON is only allowed for orders in the user-defined market.
- 4. The continuous trading matching algorithm shall support the following order validity restrictions:
  - a) Good for session (GFS) the time validity of the order is determined by the validity of the corresponding trading session of the order. The order is pulled out of the trading automatically the defined time validity of the corresponding trading session passes.
  - b) Good till date (GTD) the time validity of the order is defined by date and time. The order is pulled out of the trading automatically the defined time validity passes.
- 5. The continuous trading matching algorithm shall support the following order types:
  - a) Regular orders (also known as Limit orders): buy or sell orders with a specified quantity and price, where buy orders can be executed at that price or lower and sell orders can be executed at that price or higher. Regular orders for the predefined market can be entered with the execution restrictions NON, FOK or IOC. Regular orders for the user-defined market always have the execution restriction AON. All regular Orders can be entered with the validity restrictions GFS or GTD.
  - b) Linked Orders: in case linked order submission either all orders can be fully executed or no order will be executed. A group of orders can only be submitted with this submission restriction if it contains orders only with the execution restriction FOK and if all orders were entered for the same NEMO Trading hub.
  - c) Iceberg Orders are regular orders which are only visible with part of their total quantity in the market, while their full quantity is available to the market for matching. Part of the hidden quantity shall be disclosed for trading as soon as the part that had already been disclosed has been executed.
- 6. The system shall automatically generate tradable commodity contracts based on the product descriptions.
- 7. The switching of the daylight saving times (23 and 25 hours) shall be supported.

- 8. Products shall be made available for trading per scheduling area, thus relevant NEMOs shall define set of products tradable in each scheduling area.
- 9. All products shall support trading in EUR and MW.
- 10. The usage and parameterisation of any individual product is a decision of each individual NEMO, subject, to the extent it has an impact on the performance of the continuous trading matching algorithm, following the principles established in the Methodology for the price coupling algorithm, the continuous trading matching algorithm and the intraday auction algorithm as adopted in accordance with Article 37 of the CACM Regulation.

# General requirements for intraday auctions

- 1. Demand or supply aggregated MTU orders are offers from all market participants submitted in the same bidding zone and aggregated into a single curve referred to as aggregated demand or aggregated supply curve defined for each relevant period of the day. Orders are sorted by price:
  - a) demand orders are sorted from the highest price to the lowest; and
  - b) supply orders are sorted from the lowest to the highest price.
- 2. The aggregated MTU orders can be:
  - a) linear piecewise curves containing only interpolated orders (curves should be strictly monotonous i.e. two consecutive points of the same curve cannot have the same price, except for the first two points defined at the maximum / minimum prices of the bidding zone); or
  - b) stepwise curves containing only step orders (curves should be monotonous i.e. two consecutive points always have either the same price or the same quantity); or
  - c) hybrid curves containing both types of orders (composed by both linear and stepwise segments).
- 3. One demand (respectively, supply) MTU order is 'in-the-money' when the market clearing price is lower (respectively, higher) than the price of the MTU order. Any order in-the-money must be fully accepted.
- 4. One demand (respectively, supply) MTU order is 'out-of-the-money' when the market clearing price is higher (respectively, lower) than the price of the MTU order. Any order out-of-the-money must be rejected.
- 5. One demand or supply MTU order is 'at-the-money' when the price of the MTU order is equal to the market clearing price. Any order at-the-money can be either accepted (fully or partially) or rejected.

# Article 6

# Mandatory products for intraday auctions

- 1. The IDA algorithm shall support products covering one MTU:
  - a) Hourly: the product supports trading power contracts, one for each hour of the calendar day.
  - b) Half-hourly: the product supports trading power contracts, one for each half-hour of the calendar day.

- c) Quarter-hourly: the product supports trading power contracts, one for each quarter-hour of the calendar day.
- 2. The IDA algorithm shall support products covering multiple MTUs by combining products, pursuant to the previous paragraph 1, in the form of simple block orders:
  - a) a simple block order consists of a fixed price limit (minimum price for sales block and maximum price for purchase blocks), a minimum acceptance ratio and a volume for a number of MTUs. If volume is not the same for all periods, block is defined also as profile block;
  - simple block orders cannot be accepted for a volume less than their minimum acceptance ratio. Acceptance ratio must be the same for all MTUs belonging to the block;
  - c) For simple block orders one single price shall be calculated on the volume weighted average of the respective MTUs market clearing prices;
  - d) the condition of rejection for a simple block order depends on the block volumeweighted average marginal clearing prices over all periods;
    - i. sales simple block orders must be rejected if the block's volume-weighted average market clearing price is lower than the block order price;
    - ii. purchase simple block orders must be rejected if the block's volume-weighted average market clearing price is higher than the simple block order price; and
    - iii. a simple block order can be paradoxically rejected (not accepted in-the-money block), but not paradoxically accepted (accepted out-of-the-money block);

# Optional products for intraday auctions

- 1. The optional products can only be introduced to IDAs under the condition that the IDA algorithm is able to accommodate them together with all current and future requirements, while securing at least an adequate level of performance. Should the IDA algorithm's performance deteriorate below an adequate level and prevent the introduction of any requirements not yet in production or limit the usage of existing functionalities, all NEMOs shall cease the support for optional products in the IDA algorithm.
- 2. Optional products for intraday auctions are:
  - a) **Complex block orders** are the simple block orders as defined in Article 4(2) with the following additional characteristics:
    - i. linked block orders mean simple block orders in the same bidding zone can be linked together in a parent-child relation. A child block order cannot be accepted if the parent one is rejected. An out of money parent block order can be saved by one or more in-the-money children block orders (if the child's acceptance compensates, in terms of economic surplus, the loss associated to parent's acceptance);
    - ii. exclusive groups of block orders mean a set of simple block orders for which the sum of the acceptance ratios cannot exceed 1; and
    - iii. flexible MTU orders mean a simple block order with a duration of a single time period but for which the period is let free (not defined by the participant). The period, in which the flexible MTU order is accepted, is calculated by the algorithm and determined by the optimization criterion, which maximizes the economic surplus.
  - b) MIC orders (respectively, MP orders) are composed by:
    - i. 'N' set of MTU sub-orders (sell for MIC orders; buy for MP orders, whereas N is the number of MTUs included in a day), one set per MTU;

ii. an economic condition, which represents the minimum income (respectively, the maximum payment) expected by order's owner defined by a fix term in euros or a variable term in euros per accepted MWh.

If the economic condition is not fulfilled, the MIC (respectively, MP) order must be rejected. If the economic condition is fulfilled, the MIC (respectively, MP) order can be accepted. If the economic condition is fulfilled but the MIC (respectively, MP) order is rejected, the MIC (respectively, MP) order is then defined as paradoxically rejected.

Scheduled stop condition only applies to deactivated MIC orders and only in the periods declared as part of the scheduled stop interval by the MIC order. In case on which a MIC order is deactivated, the first MTU sub-order of the set of offers belonging to the deactivated MIC order in the MTU will remain activated and they will be accepted if they are in-the-money and could be accepted if they are at-the-money).

- c) Load gradient orders mean sell complex orders with a condition that limits the variation between the accepted volume of an order in a MTU and the accepted volume of the same order in the adjacent MTUs, according to an increase gradient and/or a decrease one and come with or without MIC condition. Between two consecutive MTUs, the accepted volume of a load gradients order cannot vary by more than the defined gradients.
- d) **Merit orders** are a 'stepwise' MTU orders per bidding zone that include a 'merit order number'. That number sets the acceptance priority between merit orders at the same price (pro-quota criteria are not applied for merit orders). Merit selling or buying orders are:
  - a) cleared at their own bidding zone clearing price;
  - b) must be accepted if in-the-money;
  - c) must be rejected if out-the-money;
  - d) can be accepted or rejected if at-the-money; and
  - e) cannot be paradoxically accepted or rejected.

# Article 8 **Timescale for implementation**

- 1. Upon approval of these terms and conditions on SIDC products, each NEMO shall publish them on the internet in accordance with Article 9(14) of CACM Regulation.
- 2. The NEMOs shall implement these terms and conditions on SIDC products immediately after their adoption, except for Articles 5 to 7 which shall be implemented in accordance with the implementation of IDAs as defined in the Methodology for the price coupling algorithm, the continuous trading matching algorithm and the intraday auction algorithm, as adopted in accordance with Article 37 of the CACM Regulation.

# Article 9 Language

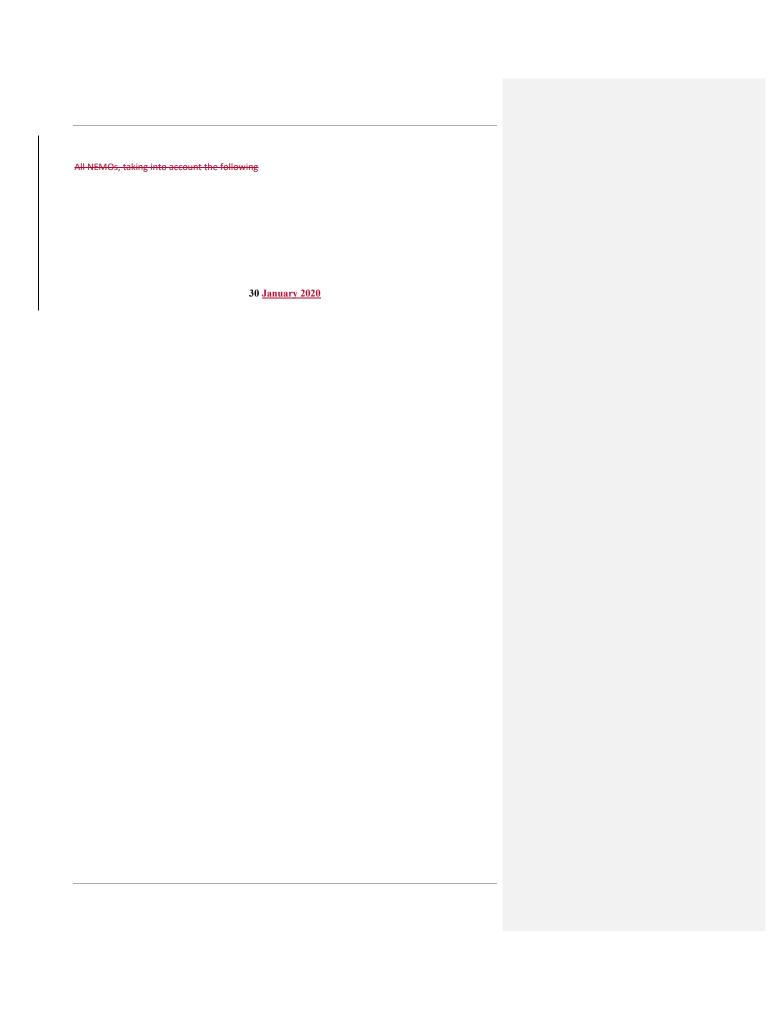
The reference language for these terms and conditions on SIDC products shall be English. For the avoidance of doubt, where NEMOs need to translate these terms and conditions on SIDC products into the national language(s) of a relevant national regulatory authority, in the event

of inconsistencies between the English version published by the NEMOs in accordance with Article 9(14) of the CACM Regulation and any version in another language, the relevant NEMOs shall be obliged to dispel any inconsistencies by providing a revised translation of these terms and conditions on SIDC products to the relevant national regulatory authorities.				

All NEMOs' proposal for products Products that can be taken into account by NEMOs in intraday coupling process in accordance with Article\_53 of the Commission Regulation (EU) 2015/1222 of 24\_July 2015 establishing a guideline on capacity allocation and congestion management

ACER Decision on ID products: Annex I

31 May 2019



#### Whereas

#### Background

- (1) This document is a common proposal developed by all Nominated Electricity Market Operators (hereafter referred to as "NEMOs") for These terms and conditions determine the products that can be taken into account in the single intraday coupling (hereafter referred to as the "ID Products Proposal") ('terms and conditions on SIDC products').

  They are established in accordance with Article 53 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (hereafter referred to as the "CACM Regulation"). ('CACM Regulation').
- (2) In accordance with Article 53 of the CACM Regulation "No later than 18 months after entry into force of this Regulation NEMOs shall submit a joint proposal concerning products that can be taken into account in the single intraday coupling. NEMOs shall ensure that all orders resulting from these products enable the MCO functions to be performed in accordance with Article 7 are expressed in euros and make reference to the market time and the market time unit. All NEMOs shall ensure that orders resulting from these products are compatible with the characteristics of cross-zonal capacity, allowing them to be matched simultaneously. All NEMOs shall ensure that the continuous trading matching algorithm is able to accommodate orders covering one market time unit and multiple market time units"
- (3) In accordance with Article 53 Paragraph 4 of the CACM Regulation "By two years after the entry into force of this Regulation and every second subsequent year, all NEMOs shall consult in accordance with Article 12: (a) market participants to ensure that available products reflect their needs; (b) all TSOs, to ensure that the available products take into account operational security; (c) all regulatory authorities, to ensure that the available products comply with the objectives of this Regulation." All NEMOs shall amend the products if needed pursuant to the results of the consultation.
- (4) The All NEMOs' proposal for the ID Products Proposal shall be submitted to all regulatory authorities for approval by 18 months after the entry into force of the CACM Regulation—i.e. 14 February 2017. There is no obligation in the CACM Regulation for NEMOs to consult on the ID Products Proposal prior to submitting it to all regulatory authorities. However, NEMOs value stakeholder feedback on the proposals and have decided to consult.
- (5) In accordance with the Whereas (14) of the CACM Regulation "For efficiency reasons and in order to implement single day ahead and intraday coupling as soon as possible, single day ahead and intraday coupling should make use of existing market operators and already implemented solutions where appropriate, without precluding competition from new operators." the products proposed in the ID Products Proposal are based on the current coupling solutions, either implemented or under development and updated or amended where seen appropriate.
- (6) NEMOs shall establish, consistent with the Market Coupling Operator (MCO) plan, through a NEMO Cooperation Agreement entered into by all NEMOs, a NEMO Committee and associated governance arrangements compliant with the CACM Regulation. Joint NEMO decisions and responsibilities regarding this ID Products Proposal shall be undertaken via the NEMO Committee and associated governance arrangements. As the introduction of any new or modified products may require an amendment to the continuous trading matching algorithm, any change shall be subject to the Change Management Principles established under the All NEMOs' proposal for the price coupling algorithm and for the continuous trading matching algorithm (hereafter referred to as the "Algorithm Proposal").
- (7) This document includes provisions to support the ACER decision 1/2019 on establishing a single methodology for pricing Intraday Cross Zonal Capacity as set out in Article 55 of the CACM regulation. This ACER decision implies the implementation of intraday auctions (IDAs)

and this ID Product Proposal provides a reference to which products may be supported in these intraday auctions.

#### **Impact on the objectives of CACM Regulation**

- (2) The proposed ID Products Proposal takes These terms and conditions on SIDC products comply with the provisions of the Methodology for pricing intraday cross-zonal capacity as adopted in accordance with Article 55 of the CACM Regulation, which determines the implementation of intraday auctions (IDAs).
- (8)(3) These terms and conditions on SIDC products take into account the general objectives of capacity allocation and congestion management cooperation described in Article 3 of the CACM Regulation—, as set out in paragraphs (4) to (10).
- (9)(4) By mandating the availability of a wide The range of products that the NEMOs are able to make available to the market participants as a part of SIDC, the ID Products Proposal promotes an effective competition in the generation, trading and supply of electricity- (Article 3(a) of the CACM Regulation). To ensure that the ID Products Proposal continues terms and conditions on SIDC products continue to promote effective competition, the NEMOs shall consult market participants at least every two years to ensure that available products reflect their needs.
- (10)(5) As the The orders resulting from the SIDC products are compatible with the characteristics of the cross-zonal capacity, the ID Products Proposal helps and these terms and conditions on SIDC products help to promote the optimal allocation of cross-zonal capacity and to ensure the optimal use of the transmission infrastructure, (Article 3(b) of the CACM Regulation). As all orders resulting from the available products shall be able to access the available cross-zonal capacity via the ID MCO Function, the ID Products Proposal provides function, these terms and conditions on SIDC products provide for non-discriminatory access to cross-zonal capacity, (Article 3(j) of the CACM Regulation).
- (11)(6) The ID Products Proposal shall ensure operational security, as NEMOs are required to consult TSOs at least every two years to ensure that the available products take into account operational security. These terms and conditions on SIDC products ensure operational security (Article 3(c) of the CACM Regulation), because the NEMOs can choose, which products will be supported in the SIDC and because all products allow for simultaneous allocation of energy and cross-zonal capacity. Moreover, if TSOs identify any challenge with respect to operational security they are entitled to request NEMOs to propose an amendment to the ID Products Proposal these terms and conditions for ID products.
- (12)(7) The products listed in the ID Products Proposal shall be these terms and conditions on SIDC products are available for all NEMOs to offer offered to their respective market participants and are all compatible with SIDC. As a result, the ID Products Proposal ensures these terms and conditions on SIDC products ensure fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants. To ensure that the ID Products Proposal continues to promote fair and non-discriminatory treatment, NEMOs shall consult all parties at least every two years on the available products. and respects the need for a fair and orderly market and fair and orderly price formation (Articles 3(e) and 3(h) of the CACM Regulation). For each product type, the same attributes should be applied in all bidding zones. There will be no differentiation in order characteristics to ensure a fair market.

- (1) In addition, any changes to the available products shall be managed in accordance with the Change Management Principles and process described in the Algorithm Proposal. These principles:
  - a. Provide an open, transparent, non-discriminatory way to manage Requests for Change, including stakeholder input where relevant:
  - Provide assurance that the performance of the continuous trading matching algorithm shall be maintained at acceptable levels now and over a reasonable period of time in the future, assuming plausible market growth and development;
  - c. Enable individual NEMO or TSO requests to be supported where this does not harm others or includes measures to mitigate any harm;
  - d. Establish a fair and efficient process that supports timely market development
- (2) By following the Change Management Principles and process described in the Algorithm Proposal when introducing any changes to the available products, NEMOs shall ensure that the ID Products Proposal respects the need for a fair and orderly market and fair and orderly price formation.
- (3) The continuous trading matching algorithm always performs matching in compliance with the price time priority principle for the submitted orders for the different contracts. It means that orders with a better price limit are selected first. If two orders have the same limit price, the one with the older timestamp is selected first. This ensures fair and orderly price formation for all products.
- (4) For each product type the same attributes (as listed in Article 2) shall be applied in all bidding zones. There will be no differentiation in order characteristics so as to ensure a fair market.
- (5) NEMOs intend to cover all market needs with the available products to maximise liquidity on the coupled markets. To reach this aim, the order types in Article 2 are available.
- (13)(8) By requiring NEMOs to publish and maintain a detailed public description of the SIDC products supported for, these terms and conditions on SIDC the ID Products Proposal products shall ensure and enhance the transparency and reliability of information- (Article 3(f) of the CACM Regulation). Moreover, the NEMOs shall should involve all stakeholders in any consultation necessary to manage changes to the ID Products Proposal these terms and conditions on SIDC products or the available products.
- (14)(9) The ID Products Proposal creates These terms and conditions on SIDC products create a level playing field for NEMOs as all-all NEMOs (Article 3(i) of the CACM Regulation), because all products listed in these terms and conditions on SIDC products listed in the ID Products Proposal shall becan be made available to all NEMOs, and any change to the products-available products shall be governed by the Change Management Principles in the Algorithm Proposalall NEMOs.
- (15)(10) By consulting all parties at least every two years on the available products, all NEMOs shall ensure that the ID Products Proposal continues to These terms and conditions on SIDC products contribute to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union (Article 3(g) of the CACM Regulation), because all the products allow for efficient implicit allocation of cross-zonal capacity.
- (6) Each individual product can have an impact on the performance of the algorithm, depending on their actual usage and the actual composition of the orders. In particular, the impact on the performance of the algorithm depends on:
  - a. number of orders submitted of that product;
  - b. the specific values of the parameters specified in the orders submitted of that product, including prices and quantities;
  - c. its concurrent usage together with the other products and the TSO constraints.

# Subject matter and scope

#—The These terms and conditions on SIDC products accommodated in continuous SIDC as\*
determined in this ID Product Proposal isdetermine the common proposal by all NEMOs in products that can be taken into account in the SIDC in accordance with Article 53 of the CACM Regulation (EU) 2015/1222 and include products that can be offered by NEMOs in the continuous SIDC as well as

The products accommodated in SIDC auctions have been adapted the IDAs, in order to support ACER decision 1/2019 on ESTABLISHING A SINGLE METHODOLOGY FOR PRICING INTRADAY CROSSZONAL CAPACITY accordance with the Methodology for pricing intraday cross zonal capacity, as adopted in accordance with Article 55 of the CACM Regulation.

#### Article 2

#### **Definitions**

- <u>1. For the purposes of this proposal, the The terms used in these terms and conditions on SIDC products shall have the meaning given to them in Article 2 of Regulation (EU) 2019/943, Article 3 of the definitions included Regulation (EU) 2017/1485, in Article 2 of Regulation (EU) 543/2013 and Article 2 of Regulation (EU) 2015/1222<sub>r</sub>.</u>
- 2. In addition, the terms used in these terms and conditions on SIDC products shall have the meaning given to them in the other items of legislation referenced therein and Methodology for the price coupling algorithm, the continuous trading matching algorithm and the intraday auction algorithm, as adopted in accordance with Article 37 of the CACM Regulation; the MCO Plan-, as approved in accordance with Article 7(3) of the CACM Regulation; and the Methodology for pricing intraday cross-zonal capacity, as adopted in accordance with Article 55 of the CACM Regulation.
- 4.3. In addition, the following definitions shall apply:
  - a) Request for Change Acceptance Ratio: means the minimum percentage on offered volume for which a formal request by one or more Parties for any modification to block order can be made to the continuous trading matching algorithm or accepted. It cannot be different for periods belonging to its usage in the same block.
  - b) Maximum Payment Condition (MP): means economical condition that can be associated to complex buy orders aimed at ensuring that the payment related to the order in all periods must not exceed a fixed consumption cost, which is global for the whole set of periods, and a consumption costs per MWh.
  - a)c) Minimum Income Condition (MIC): means economical condition that can be associated to complex sell orders aimed at ensuring that the income related to the order in all periods must cover at least underlying production—costs, quantified by considering the start-up cost of a power plant and operational costs per MWh of the same power plant.
- a) Scheduling Area: means an area within which the TSOs' obligations regarding scheduling apply due to operational or organisational needs
  - d) Scheduled Stop: means condition that can be added to a MIC and applies when the MIC order is deactivated. It only applies to the periods defined in the condition and

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treats the cheapest sub-order in these periods as a standard (aggregated) market time unit (MTU) order. The purpose of this condition is to avoid abrupt stop in power generation.

#### Article 3

#### General Requirements requirements for continuous single intraday coupling products

- Each NEMO shall publish to in its market participants rules the list of the SIDC products that
  are available products in the relevant NEMO's market rules in its NEMO trading hub separately
  for continuous SIDC and IDAs.
- 2. All orders resulting from thesethe products submitted to the continuous trading matching algorithmSIDC shall be expressed in euros and make reference to the market time for continuous SIDC and to the MTU for SIDC auctions in the continuous SIDC and to the market time in the IDAs. NEMOs are entitled to arrange that orders submitted by market participants are expressed and settled in local currencies or euros.
- New or modified products are subject to a Request for Change which is subject to the Change Management Principles established in the Algorithm Proposal.

#### Article 4

# Continuous Single Intraday Coupling products

- 1. On the continuous SIDC, the transaction is taking place based on a set of characteristics which are defined in a contract. The contract refers to thean instrument, which is used by the market participants to enter into agreement to sell/buy a certain amount of energy having a predefined time of delivery. A product defines the guidelines ruling the generation of the contracts. The product is a template which is used as the standard for generating contracts with behaviour as defined in the product template. The relationship between the products and the contracts is that of 1 is to 'n'. i.e. each product shall have one or multiple contracts and each contract shall belong to one and only one product.
- The continuous trading matching algorithm shall support the following products or the
  combination of this, which can be implemented according to the Change Management Principles
  and process described in the Algorithm Proposal: their combination, in compliance with
  paragraph 7:
  - a) Hourly: the product supports trading in 24 power contracts, one for each hour of the calendar day. The system automatically generates these contracts and makes them available for trading one day before the delivery day at a specified time.
  - b) Half-hourly: the product supports trading in 48 power contracts, one for each half-hour of the calendar day. The system automatically generates these contracts and makes them available for trading one day before the delivery day at a specified time.
  - c) Quarter-hourly: the product supports trading in 96 power contracts, one for each 15-min slot of the calendar day. The system automatically generates these contracts and makes them available for trading one day before the delivery day at a specified time.

- d) User defined blocks: these are on-demand combinations of hourly, half-hourly or quarter-hourly contracts defined by the market participant. The delivery period of user defined blocks must always be coverable by multiple regular market contracts of the product and with consecutive delivery times, which must be executed together. A userdefined block order cannot be an iceberg order.
- The continuous trading matching algorithm shall support the following order execution restrictions:
  - a) NON An order submitted with the execution restriction NON (None) is either executed immediately or, if the order can't be matched right away, entered into the order book. Partial order executions are allowed and NON orders can be executed against multiple other orders and create multiple trades.
  - b) Fill or Kill (FOK) the order is either fully traded at one point immediately after the order is submitted with its full quantity or deleted without entry in the order book. FOK orders can be matched against multiple existing orders in the order book. FOK orders cannot have a validity restriction.
  - c) Immediate or Cancel (IOC) the order is either traded (in any amount) at one point immediately after the order is submitted or, if the order can't be matched, deleted without entry in the order book. Partial executions are allowed and IOC orders can be executed against multiple other orders and create multiple trades. An order with execution restriction IOC cannot have a validity restriction.
  - d) All or Nothing (AON) An order submitted with the execution restriction AON is either executed against exactly one other order with its full quantity or entered into the order book. Partial executions are not allowed. The execution restriction AON is only allowed for orders in the user-defined market.
- 4. The continuous trading matching algorithm shall support the following order validity restrictions:
  - a) Good for session (GFS) the time validity of the order is determined by the validity of the corresponding trading session of the order. The order is pulled out of the trading automatically the defined time validity of the corresponding trading session passes.
  - b) Good till date (GTD) the time validity of the order is defined by date and time. The order is pulled out of the trading automatically the defined time validity passes.
- 5. The continuous trading matching algorithm shall support the following order types:
  - a) Regular orders (also known as Limit orders): buy or sell orders with a specified quantity and price, where buy orders can be executed at that price or lower and sell orders can be executed at that price or higher. Regular orders for the predefined market can be entered with the execution restrictions NON, FOK or IOC. Regular orders for the user-defined market always have the execution restriction AON. All regular Orders can be entered with the validity restrictions GFS or GTD.
  - b) Linked Orders: in case linked order submission either all orders can be fully executed or no order will be executed. A group of orders can only be submitted with this submission restriction if it contains orders only with the execution restriction FOK and if all orders were entered for the same NEMO Trading hub.
  - c) Iceberg Orders are regular orders which are only visible with part of their total quantity in the market, while their full quantity is available to the market for matching. Part of the hidden quantity shall be disclosed for trading as soon as the part that had already been disclosed has been executed.

- The <a href="https://intradaySystem.sy
- DaylightThe switching of the daylight saving times (23 and 25 hours) shall be implemented in case of Single Intraday Coupling products supported.
- Products shall be made available for trading per scheduling area, thus relevant NEMOs shall define set of products tradable in each scheduling area.
- 9. All products shall support trading is in EUR and MW.
- 10. The usage and parameterisation of any individual product is a decision of each individual NEMO, subject, to the extent it has an impact on the <u>performance of the</u> continuous trading matching algorithm <u>performance</u>, to the application of the Change Management Principles, <u>following the principles</u> established <u>underin</u> the <u>Algorithm Proposal Methodology for the price coupling algorithm</u>, the continuous trading matching algorithm and the intraday auction algorithm as adopted in accordance with Article 37 of the CACM Regulation.

#### **Single Intraday Coupling Auction products**

- On the SIDC auction the ID auction algorithm shall support the same products defined in article 4, "Single Day Ahead Coupling Products" in the products proposal for SDAC, with the following exceptions:
  - a) PUN order shall not be supported

#### **General requirements for intraday auctions**

- Demand or supply aggregated MTU orders are offers from all market participants submitted in the same bidding zone and aggregated into a single curve referred to as aggregated demand or aggregated supply curve defined for each relevant period of the day. Orders are sorted by price:
  - a) demand orders are sorted from the highest price to the lowest; and
  - b) supply orders are sorted from the lowest to the highest price.
- 2. The aggregated MTU orders can be:
  - a) linear piecewise curves containing only interpolated orders (curves should be strictly
    monotonous i.e. two consecutive points of the same curve cannot have the same price,
    except for the first two points defined at the maximum / minimum prices of the bidding
    zone); or
  - b) stepwise curves containing only step orders (curves should be monotonous i.e. two consecutive points always have either the same price or the same quantity); or
  - c) hybrid curves containing both types of orders (composed by both linear and stepwise segments).
- One demand (respectively, supply) MTU order is 'in-the-money' when the market clearing
  price is lower (respectively, higher) than the price of the MTU order. Any order in-themoney must be fully accepted.
- 4. One demand (respectively, supply) MTU order is 'out-of-the-money' when the market clearing price is higher (respectively, lower) than the price of the MTU order. Any order out-of-the-money must be rejected.

One demand or supply MTU order is 'at-the-money' when the price of the MTU order is
equal to the market clearing price. Any order at-the-money can be either accepted (fully or
partially) or rejected.

#### Article 6

#### Mandatory products for intraday auctions

- 1. The IDA algorithm shall support products covering one MTU:
  - a) Hourly: the product supports trading power contracts, one for each hour of the calendar day.
  - b) Half-hourly: the product supports trading power contracts, one for each half-hour of the calendar day.
  - Quarter-hourly: the product supports trading power contracts, one for each quarter-hour of the calendar day.
- The IDA algorithm shall support products covering multiple MTUs by combining products, pursuant to the previous paragraph 1, in the form of simple block orders:
  - a) a simple block order consists of a fixed price limit (minimum price for sales block and maximum price for purchase blocks), a minimum acceptance ratio and a volume for a number of MTUs. If volume is not the same for all periods, block is defined also as profile block;
  - b) simple block orders cannot be accepted for a volume less than their minimum acceptance ratio. Acceptance ratio must be the same for all MTUs belonging to the block;
  - c) For simple block orders one single price shall be calculated on the volume weighted average of the respective MTUs market clearing prices;
  - d) the condition of rejection for a simple block order depends on the block volumeweighted average marginal clearing prices over all periods;
    - i. sales simple block orders must be rejected if the block's volume-weighted average market clearing price is lower than the block order price;
    - ii. purchase simple block orders must be rejected if the block's volume-weighted average market clearing price is higher than the simple block order price; and
    - iii. a simple block order can be paradoxically rejected (not accepted in-the-money block), but not paradoxically accepted (accepted out-of-the-money block);

# Article 7

#### **Optional products for intraday auctions**

- 1. The optional products can only be introduced to IDAs under the condition that the IDA algorithm is able to accommodate them together with all current and future requirements, while securing at least an adequate level of performance. Should the IDA algorithm's performance deteriorate below an adequate level and prevent the introduction of any requirements not yet in production or limit the usage of existing functionalities, all NEMOs shall cease the support for optional products in the IDA algorithm.
- 2. Optional products for intraday auctions are:
  - a) Complex block orders are the simple block orders as defined in Article 4(2) with the following additional characteristics:
    - i. linked block orders mean simple block orders in the same bidding zone can
      be linked together in a parent-child relation. A child block order cannot be
      accepted if the parent one is rejected. An out of money parent block order can
      be saved by one or more in-the-money children block orders (if the child's

- acceptance compensates, in terms of economic surplus, the loss associated to parent's acceptance);
- ii. exclusive groups of block orders mean a set of simple block orders for which the sum of the acceptance ratios cannot exceed 1; and
- iii. flexible MTU orders mean a simple block order with a duration of a single time period but for which the period is let free (not defined by the participant).

  The period, in which the flexible MTU order is accepted, is calculated by the algorithm and determined by the optimization criterion, which maximizes the economic surplus.
- b) MIC orders (respectively, MP orders) are composed by:
  - i. 'N' set of MTU sub-orders (sell for MIC orders; buy for MP orders, whereas N is the number of MTUs included in a day), one set per MTU;
  - ii. an economic condition, which represents the minimum income (respectively, the maximum payment) expected by order's owner defined by a fix term in euros or a variable term in euros per accepted MWh.

If the economic condition is not fulfilled, the MIC (respectively, MP) order must be rejected. If the economic condition is fulfilled, the MIC (respectively, MP) order can be accepted. If the economic condition is fulfilled but the MIC (respectively, MP) order is rejected, the MIC (respectively, MP) order is then defined as paradoxically rejected.

Scheduled stop condition only applies to deactivated MIC orders and only in the periods declared as part of the scheduled stop interval by the MIC order. In case on which a MIC order is deactivated, the first MTU sub-order of the set of offers belonging to the deactivated MIC order in the MTU will remain activated and they will be accepted if they are in-the-money and could be accepted if they are at-the-money).

- c) Load gradient orders mean sell complex orders with a condition that limits the variation between the accepted volume of an order in a MTU and the accepted volume of the same order in the adjacent MTUs, according to an increase gradient and/or a decrease one and come with or without MIC condition. Between two consecutive MTUs, the accepted volume of a load gradients order cannot vary by more than the defined gradients.
- Merit orders are a 'stepwise' MTU orders per bidding zone that include a 'merit order number'. That number sets the acceptance priority between merit orders at the same price (pro-quota criteria are not applied for merit orders). Merit selling or buying orders are:
  - a) cleared at their own bidding zone clearing price;
  - b) must be accepted if in-the-money;
  - c) must be rejected if out-the-money;
  - d) can be accepted or rejected if at-the-money; and
  - e) cannot be paradoxically accepted or rejected.

#### Article 8

# $Time scale\ for\ implementation$

 Upon approval of the ID Products Proposalthese terms and conditions on SIDC products, each NEMO shall publish itthem on the internet in accordance with Article 9(14) of CACM Regulation.

- 2. The NEMOs shall implement the ID Products Proposal with respect to the implementation of the continuous SIDC these terms and conditions on SIDC products immediately after the approval by the NRAs and with respect to the operation of the continuous SIDC immediately after the MCO function has been their adoption, except for Articles 5 to 7 which shall be implemented in accordance with the approved MCO Plan in line with Article 7(3) of the CACM Regulation.
- 3-2. The NEMOs shall implement the ID Products Proposal with respect to the implementation of SIDC auctions IDAs as defined in the Algorithm Methodology for the price coupling algorithm, the continuous trading matching algorithm and the intraday auction algorithm, as adopted in accordance with Article 37 of the CACM Regulation.

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## Article 9

#### Language

1.—The reference language for this proposal these terms and conditions on SIDC products shall be English. For the avoidance of doubt, where NEMOs need to translate this proposal these terms and conditions on SIDC products into their the national language(s), of a relevant national regulatory authority, in the event of inconsistencies between the English version published by the NEMOs in accordance with Article 9(14) of the CACM Regulation and any version in another language, the relevant NEMOs shall be obliged to dispel any inconsistencies by providing a revised translation of this proposal these terms and conditions on SIDC products to their the relevant national regulatory authorities.

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# ACER Decision on ID products: Annex II

# Evaluation of responses to the compliance of the all NEMOs' proposal for Products that can be taken into account by NEMOs in intraday coupling process

# 1 Introduction

Pursuant to Article 53 of the CACM Regulation, all Nominated Electricity Market Operators ('NEMOs') must develop a proposal for products that can be taken into account by NEMOs in intraday coupling processes.

Pursuant to Recital 25, Article 5(6) and Article 6(11) of the Regulation (EU) 2019/942, ACER needs to consult interested parties and at least ENTSO for Electricity and regulatory authorities to ensure that the Decision is in line with the purpose of the CACM Regulation and contributes to market integration, non-discrimination, effective competition and the proper functioning of the market.

In order to take an informed decision, ACER launched a public consultation on 21 October 2019 inviting all interested parties to express their views on potential amendments of the proposal for amendment submitted by all NEMOs. The closing date for sending the responses was 17 November 2018.

# 2 Responses

By the end of the consultation period, ACER received responses from 10 respondents.

This evaluation paper summarises all received comments and responses to them. The table below is organised according to the consultation questions and provides the respective views from the respondents, as well as a response from ACER clarifying the extent to which their comments were taken into account.



Respondents' views	ACER views			
Question 1: Do you agree with the choice of intraday products proposed by all NEMOs?				
Nine respondents provided an answer to this question.				
Three respondents explicitly agree with the choice of intraday products proposed by all NEMOs (UPM-Kymmene Oyj, RWE, EFET).	ACER agrees with respondents' observation that the choice of intraday products proposed by all NEMOs is satisfactory.			
Two respondents explicitly welcome the introduction of smaller granularity products (UPM-Kymmene Oyj, RWE).  One respondent suggests that ACER should ensure that the NEMOs are ready to provide cross-product matching in continuous SIDC. If this is not the case, the result will be effectively the split of continuous SIDC in separate markets for each product and corresponding transmission capacity granularity (EFET).	Nevertheless, ACER decided to separate the products for IDAs into two groups, which distinguish between the products strictly required by the CACM Regulation ('mandatory'; covering at least one MTU and multiple MTUs) and other products, which are not explicitly prescribed by the CACM Regulation ('optional'). This distinction will give the NEMOs a guidance on what are the minimum requirements in terms of products, when they establish the new IDAs, therefore preventing any product-driven difficulties with algorithm performance.			
	Smaller granularity of products (i.e. the introduction of quarter-hourly and half-hourly products) is stemming from and is compliant with the requirements of Article 8(4) of the Regulation (EU) 2019/943 and ACER is obliged to transfer its provisions to the Decision.			
	ACER recognises that cross-product matching in continuous SIDC is an important element to reach the full benefits of the continuous SIDC. Therefore, ACER will cooperate with the regulatory authorities and invite the NEMOs to increase their efforts to assess this feature in the future evolution of the continuous SIDC and if it proves to significantly increase the welfare and liquidity to implement it. However, the issue of cross-product matching relates to the abilities of the continuous trading matching algorithm and is not directly related to products offered by NEMOs.			



# Respondents' views

Four respondents express some objections to the proposal (EDF, Eni, Eurelectric, Fortum Power and Heat).

Two respondents agree with the principle to offer the same products in DA and ID auctions (Eurelectric, Fortum Power and Heat).

One of them opposed removing the possibility to offer complex products in intraday auctions as it can be a threat for their valuation, likely to reduce their competitiveness and to generate inefficient dispatch decisions (Eurelectric).

One of them further suggests that the exclusion of "complex" products in order to solve performance issues should be driven by clear prioritisation rules, namely based on traded volumes, the amount of bidding zones where the products are offered and traded, and the impact of including/excluding the product to the performance of the algorithm (Fortum Power and Heat).

One respondent believes that the proposal is not achieving the ultimate goal of the methodology, namely the implementation of both 15/30 minute products and complex products, in order to align with what is done on XBID. This respondent nevertheless agrees to the prioritisation of 15/30 products in the context of performance issues and recommends setting a hard deadline (e.g. 2021) for the technical developments rather than for the go-live, and a relative deadline (e.g. 6 months after the achievement of the appropriate level of performance) for the operational go-live. (EDF).

One respondent requests that with regard to the introduction of the granularity of 15 and 30 minutes for the existing products should be announced well in advance (at least one year), in order to guarantee enough time for market participants to adapt their IT systems, their internal procedures and market strategies.

# **ACER views**

# **Regarding IDA products:**

ACER notes respondents' objections. In principle, all the products will be accommodated by IDAs, if the algorithm is able to manage them. Only in the case that the algorithm is not able to find a solution within the required time, the NEMOs need to decide, which of the optional products (on the top of the mandatory ones) can be offered to the market.

ACER understands the difficult situation of the NEMOs, which need to implement the quarter-hourly and half-hourly products in the IDAs together with all other requirements. To ease the required burden for NEMOs, ACER postponed the implementation of IDAs by one year to January 2023.

# **Regarding continuous SIDC products:**

Although the deletion of half-hourly products and user defined blocks can be an option for dealing with split liquidity in continuous SIDC, ACER decided to keep such products for the moment, as the Article 8(4) of the Regulation 2019/943, envisages the possibility for exemptions and derogations for the requirement to set the imbalance settlement period to 15 minutes. Therefore, only after all derogations are expired, the reference to 30 minutes products can be removed.

Finally, Article 53 of the CACM Regulation envisages a consultation on SIDC products every two years, which will give the NEMOs an opportunity to review the products and decide to remove them at some point.



Respondents' views	ACER views
Two respondents explicitly disagree with the choice of intraday products proposed by all NEMOs (CEZ, TIWAG-Tiroler Wasserkraft AG). One respondent asks that the products b) "half-hourly" and d) "user defined blocks" in article 4 paragraph 2 be cancelled as they are not necessary and would only withdraw liquidity from hourly and quarter-hourly products (TIWAG-Tiroler Wasserkraft AG). One respondent believes that no products other than 15 and 60 minutes products are needed (CEZ).	

# 3 List of respondents

Organisation	Туре
CEZ	Energy company
EDF	Energy company
EFET	Association
Eni S.p.A.	Energy company
Eurelectric	Association
Fortum Power and Heat	Energy company
RWE Supply & Trading GmbH	Energy company
TIWAG-Tiroler Wasserkraft AG	Energy company
UPM-Kymmene Oyj	Energy company