

ACER decision on the Products That Can be Taken into Account
in the Single Day-Ahead Coupling: Annex I

Products That Can be Taken into Account in the Single Day-Ahead Coupling

in accordance with Article 40 of Commission Regulation (EU)
2015/1222 of 24 July 2015 establishing a guideline on capacity
allocation and congestion management

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Whereas

- (1) These terms and conditions determine the products that can be taken into account in the single day-ahead coupling ('terms and conditions on SDAC products'). They are established in accordance with Article 40 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 SDAC 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 (3) to (9).
- (3) The range of products that the NEMOs make available to the market participants as a part of SDAC reflects the needs expressed by market participants along the years of operation. Moreover, it supports overall liquidity with respect to SDAC and, where relevant, over-the-counter trading. Therefore, the terms and conditions on SDAC products promote price resiliency and economic surplus maximisation and 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 SDAC 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.
- (4) The orders resulting from the SDAC products are compatible with the characteristics of the cross-zonal capacity and these terms and conditions on SDAC 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 DA MCO function, these terms and conditions on SDAC products provide for non-discriminatory access to cross-zonal capacity (Article 3(j) of the CACM Regulation).
- (5) These terms and conditions on SDAC products ensure operational security (Article 3(c) of the CACM Regulation), because the NEMOs can choose, which products will be supported in the SDAC 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 DA products.
- (6) The products listed in these terms and conditions on SDAC products are available for all NEMOs to be offered to their respective market participants and are all compatible with SDAC. As a result, these terms and conditions on SDAC products ensure fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants and respect 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.
- (7) By requiring NEMOs to publish and maintain a detailed public description of the SDAC products, these terms and conditions on SDAC 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 SDAC products or the available products.

- (8) These terms and conditions on SDAC 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 SDAC products can be made available to all NEMOs, and any change to the available products should be governed by all NEMOs.
- (9) These terms and conditions on SDAC 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.

Article 1

Subject matter and scope

These terms and conditions on SDAC products determine the products that can be taken into account in the SDAC, in accordance with Article 40 of the CACM Regulation.

Article 2

Definitions

1. The terms used in these terms and conditions on SDAC 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 SDAC 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 and the MCO Plan, as approved in accordance with Article 7(3) of the CACM Regulation.
3. The following definitions shall also 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 or ‘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 or ‘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) PUN order for each market time unit ('MTU') means an average of clearing prices in the bidding zones where PUN merit orders are active (offered volume from PUN merit orders higher than zero), weighted for total accepted purchases from PUN merit orders.
- (e) 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) MTU order. The purpose of this condition is to avoid abrupt stop in power generation.

Article 3

General requirements for single day-ahead coupling

1. Each NEMO shall publish in its market rules the list of SDAC products that are available in its NEMO trading hub.
2. All orders resulting from the products submitted to the price coupling algorithm shall be expressed in euros and make reference to an MTU. NEMOs are entitled to arrange that orders submitted by market participants are expressed and settled in local currencies or euros.
3. 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.
4. 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).
5. 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.
6. 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.
7. 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 4

Mandatory products for single day-ahead coupling

1. The SDAC 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 SDAC 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, the block is defined also as a 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; and
 - (d) The condition of rejection for a simple block order depends on the block volume-weighted 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 5

Optional products for single day-ahead auctions

1. The optional products in the SDAC are subject to the rules and governance described 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.
2. Optional products for SDAC 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 means that 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-the-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 group of block orders means a set of simple block orders for which the sum of the acceptance ratios cannot exceed 1; and
- (iii) a flexible MTU order means a simple block order with a duration of a single time period but for which the period is left 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 of:

- (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 fixed term in euros or a variable term in euros per accepted MWh.

If the economic condition is not fulfilled, the MIC order (respectively, MP orders) must be rejected. If the economic condition is fulfilled, the MIC order (respectively, MP order) can be accepted. If the economic condition is fulfilled but the MIC order (respectively, MP order) is rejected, the MIC order (respectively, MP orders) 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 in 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) **Scalable MIC orders** (respectively, scalable MP orders) are composed of:

- (i) 'N' set of MTU sub-orders (sell for scalable MIC orders; buy for scalable 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 fixed term in euros and the price of each sub-order in the N-set of MTU sub-orders in euros per accepted MWh of each sub-order.
- (iii) a minimum acceptance volume, one value per MTU.

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

Scalable MIC orders (respectively, scalable MP) orders cannot be accepted for a volume less than the minimum acceptance volume defined for all and each one of the minimum acceptance volume of the MTU.

Scheduled stop condition only applies to deactivated scalable MIC orders and only in the periods declared as part of the scheduled stop interval by the scalable MIC order. In case in which a scalable MIC order is deactivated, the first MTU sub-order of the set of offers belonging to the deactivated scalable MIC order in an 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.

- (d) **Load gradient orders** mean MIC or scalable MIC 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.
- (e) **Merit orders and PUN 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:

- (i) are cleared at their own bidding zone clearing price;
- (ii) must be accepted if in-the-money;
- (iii) must be rejected if out-the-money;
- (iv) can be accepted or rejected if at-the-money; and
- (v) cannot be paradoxically accepted or rejected.

PUN merit orders:

- (i) are buying merit orders cleared at PUN price;
- (ii) must be accepted if in the money;
- (iii) must be rejected if out the money;
- (iv) can be accepted or rejected if at the money; and
- (v) cannot be paradoxically accepted or rejected.

Article 6

Timescale for implementation

1. Upon approval of these terms and conditions on SDAC products, each NEMO shall publish them on the internet in accordance with Article 9(14) of the CACM Regulation.
2. The NEMOs shall implement these terms and conditions on SDAC products immediately after their adoption.

Article 7 Language

The reference language for these terms and conditions on SDAC products shall be English. For the avoidance of doubt, where NEMOs need to translate these terms and conditions on SDAC 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 SDAC products to the relevant national regulatory authorities.