

15-MINUTE MTU - INFOSHEET

After the go-live of DAM 15-minute MTU, **15-minute and 60-minute resolution products will be available** both for linear and block products on HUPX markets.

- Supported types and parameters of orders remain unchanged
- Cross Product Matching will be offered: the algorithm will automatically match products with longer granularity with multiple products with shorter granularity, meaning that 60-minute and 15-minute products will be traded and matched together
- 15-minute MTU orders will facilitate more efficient bidding, notably improving flexibility signals to better integrate renewable
- there is no paradoxically rejected 15-minute curve order while due to the Average Rule it may occur that hourly curve orders of the bidding zone may be paradoxically partially or fully rejected.

15-minute resolution prices will be the official DAM prices used for clearing and settlement, 60-minute resolution prices will be calculated using a joint calculation method by NEMOs based on data calculated by the market coupling algorithm (Average rule: strict arithmetical average of the 4 15' clearing prices of the hour).

- 15-minute prices will be available in the trading system and in the market data files, provided with a two-decimal precision, while
- a 60-minute price index will be still published by HUPX webpage and on HUPX sFTP.

AVAILABILITY OF DATA

Trading data 15-minute MTU format will be available on HUPX sFTP. Additionally, HUPX Labs, the new data portal of HUPX, provides API endpoints for DAM market datasets, which will reflect the changes as soon as they are implemented.

AGGREGATED CURVES

HUPX will publish 15-minute resolution aggregated trading data where 15-minute aggregated linear curve points will be available and adjusted by:

- executed 60-minute linear order quantities for 15-minute MTU period
- executed 15-minute and 60-minute block quantities
- net position (for 15-minute period)

15-MINUTE MTU HISTORICAL DATA

Starting from the GO-live month, reports will follow the 15-minute MTU format, please note that:

- daily reports (e.g. Aggregated Volumes): first half of June remains unaffected by the change
- monthly reports (e.g. Invoice Annex) will be generated on quarter hourly basis
- yearly reports (e.g. Prices and Volumes, Flow Repots) will be provided on quarter hourly basis from the GL date, where historical data from 1st January 2025 until GL extracted from hourly values.
- publication of hourly reports will be ceased after GL, but they still remain available with _OLD flag for our members

Samples for HUPX members and infousers are available [here](#).

ROLLBACK

To secure the continuity of the day ahead coupling, and taking into consideration market participants' suggestions, NEMOs and TSOs have agreed to follow the go-live with a short **rollback period of one week**.

- End of the activation of Rollback period is 17th of June (implementation of hourly configuration starts), **the decommissioning of 60'MTU-related systems/functionalities must not be done prior 19th June** (last day on which rollback can be activated, starting trading with hourly configuration).
- **In the event of a rollback, the clearing price will be in 60'. Hence, NEMOs will discontinue with the publication of 15-minute clearing price.**

Triggers for rollback:

- Occurrence of Partial Decoupling during the rollback period.
- Occurrence of Full Decoupling during the rollback period.

Communication of rollback to market participants:

- In case of rollback, a clear communication will be shared by MCSC as well as individual NEMOs.

Switching back to 15-minute resolution after triggering rollback:

- If there is a decision to launch the rollback, a new set of testing activities would have to follow.
- NEMOs and TSOs would have to reassess the planning.

Corrective Measures (CMs)

According to the Algorithm Methodology (AM Annex I Article 12), in case NEMOs detect an unanticipated degradation of the algorithm's performance due to an overall effective usage higher than the usage range, NEMOs – in cooperation with TSOs – may decide to apply specific CMs with the aim to maintain adequate performance of the SDAC algorithm.

CMs shall be limited to:

- Limitations to the selection of products that NEMOs are allowed to offer
- Limitation to the availability of the technical features or parameters of a product or an algorithm requirement
- Limitations on the overall usage of products or requirements based on usage range
- Changes in parameters related to the operation of the SDAC algorithm, or the thresholds described in the DA Algorithm Monitoring Methodology (Annex IV to the AM)

NEMOs and TSOs will announce any introduction (or discontinuation) of a CM at least 7 calendar days before its introduction (or discontinuation) and maintain an up-to-date publicly available list of currently applied CMs.

CMs shall only be applied up to 8 months to solve unanticipated impacts on the algorithm performance, but extensions are possible in case algorithm performance cannot be restored within the deadline.

NEW OPERATIONAL TIMINGS AFTER 15-MINUTE MTU GL

With the introduction of 15-minute MTU in SDAC, calculation time of Euphemia will increase from 17 to 30'.

This requires to find time in the current process to maintain feasible and safe operation; please be aware validation of the proposal is subject to successful testing:

| TIME | 30 MIN CALCULATION TIME |
|---|-------------------------|
| NEMO gate closure time | 12:00 |
| PMB Gate Closure Time Start of Calculation | 12:10 |
| End of Calculation | 12:40 |
| Regular publication time | 12:51 |
| Publication of Final Results | 13:01 |
| Risk of Full decoupling decoupling | 13:50 |
| Full decoupling | 14:20 |

Priority between 15-minute MTU orders and 60-minute Period orders
In principle, 15-minute MTU orders and 60-minute Period orders are treated identically:

- If an order is in-the-money, it shall be accepted (no paradoxical rejection)
- If an order is out-of-the-money, it shall be rejected (no paradoxical acceptance)
- If an order is at-the-money, it shall be either accepted (fully or partially) or rejected

However, there exists an exception that is linked to the minimum and maximum clearing price that shall be respected. This exception could occur in case a marginal (at-the-money) 60-minute Period order constrains the price for a 15-minute time period and the averaging rule induces an out of bound 15-minute price. In this case, Period Orders can be paradoxically rejected.

Simplified example:

Assume a market situation where the first three 15-minute periods have marginal orders setting the prices at 0 €/MWh for each MTU. We also have a marginal 60-minute Period order at 2000 €/MWh

Now, the averaging rule dictates that:

$$MCP(hourly) = \frac{MCP(qh1) + MCP(qh2) + MCP(qh3) + MCP(qh4)}{4}$$

$$2000 \text{ €/MWh} = \frac{0 \text{ €/MWh} + 0 \text{ €/MWh} + 0 \text{ €/MWh} + MCP(qh4)}{4}$$

From which it follows that the price of the fourth quarter-hour should be 8000 €/MWh, which exceeds the (current) 4000 €/MWh maximum price. Once this MTU price is clipped to 4000 €/MWh, the 60-minute period price becomes 1000 €/MWh and some sell orders that were in-the-money at 2000 €/MWh may no longer be at this new price, effectively becoming paradoxically accepted.

The heuristic to prevent this situation involves rejecting volumes from the 60-minute Period orders. If too much is rejected, this results in paradoxically rejected volume from the 60-minute Period orders.