



5. Status updates on ATCE Methodology

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Background (1/3)

- **Nordic Day-ahead Capacity Calculation Methodology (Nordic CCM):** approved on October 14, 2020, describes a transitional solution for the calculation and allocation of intraday (ID) cross-zonal capacities for continuous trading in the intraday timeframe. [Link to Nordic CCM approval](#)
 - *“Two months before the application of this transitional solution, the Nordic TSOs shall publish the exact values and parameters of the functions f , g and h , including their description, purpose and effect. During the development process of the functions f , g and h , Nordic regulatory authorities and stakeholders will be informed, and they may provide comments duly to be taken into account in development work.”*
- **ATCExtraction (ATCE) method:** In alignment with the stipulations of Article 20(2) and 20(3), the Nordic TSOs have developed and described the ATCE method that is currently undergoing implementation and examination within the Nordic CCR. [Link to ATCE method description](#)
 - In general, the ATCE methodology does two things: it determines the left-over capacity after the DA stage, and it translates the flow-based capacity domain into an ATC domain.

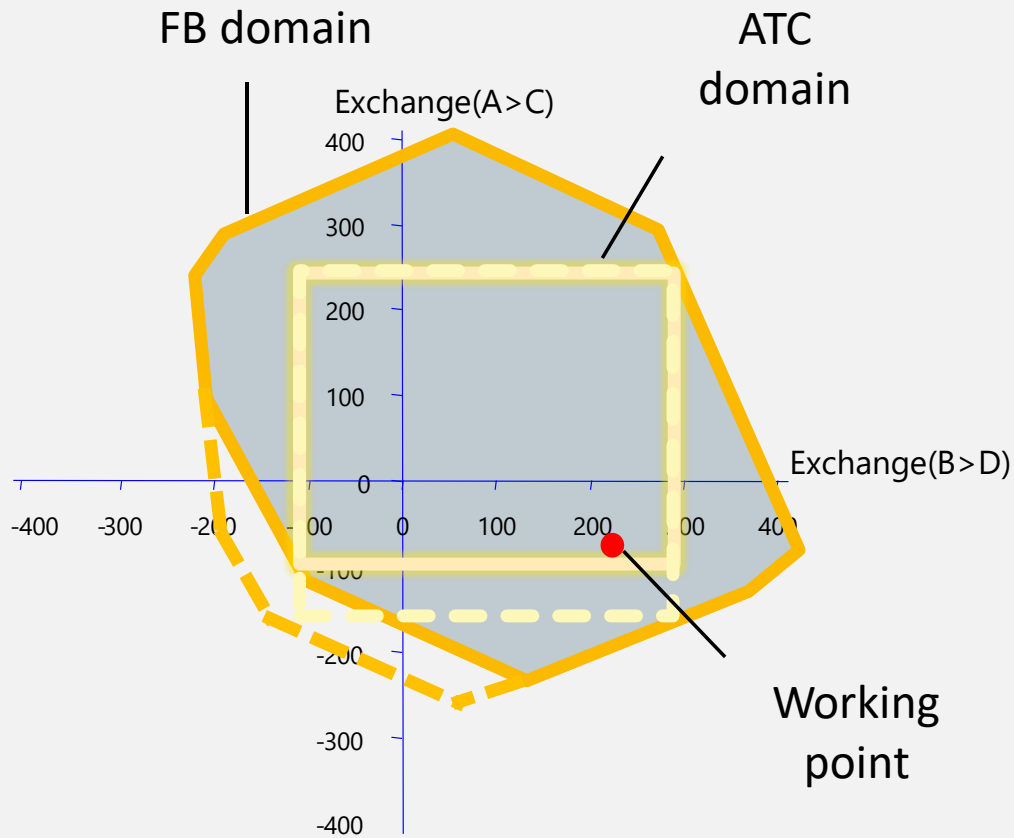


Background (2/3)

- **ATC capacity is an option:** it can be used but is not guaranteed to be used. As such, only the loading effect of the use of the ATC capacities can be accounted for on the flow-based CNECs; the relieving effect cannot be considered.
- **SDAC Optimization Algorithm for Capacity Allocation:** The primary objective of the SDAC optimization algorithm is to allocate day-ahead (DA) capacity in an optimal manner. This approach implies that only the available ID capacities, which are essentially the residual capacities after the DA allocation, can be offered to the ID market.



Background (3/3)



Facilitating ID Trading Opportunities: To ensure the availability of viable ID trading possibilities at the intraday gate opening, the TSOs have introduced a relaxation method within the ATCE method, known as "z2zPTDF relaxation." This relaxation is elaborated upon in Section 4.4.3 of the ATCE description document.

Note: the ATCE results reflect the ID ATC, seen from the Nordic perspective. The potential restrictions set by the neighbouring TSOs outside the Nordics are not considered.



TSO assessment on EPR ID results

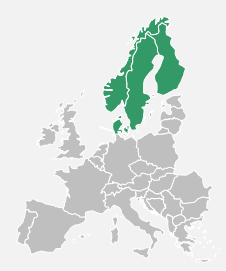
- Following investigations conducted during the EPR, the TSO operators have identified operational risks associated with the z2zPTDF relaxation that are difficult to manage. These risks specifically refer to potential overloads within the system in terms of both the frequency of occurrence and the magnitudes involved.
- A comprehensive ID validation before the gate opening, which includes a full-scale coordinated security analysis and updated common grid models, is not feasible due to data unavailability and the limited validation period around 30 minutes.
- The focus has been on the already-validated DA FB domain in combination with a more-controlled relaxation. The more-controlled relaxation has been found in the RAM relaxation, where the RAMs of all CNECs (except for PTCs, HVDC and allocation constraints) are subject to an increase, e.g. 3 - 10 MW.



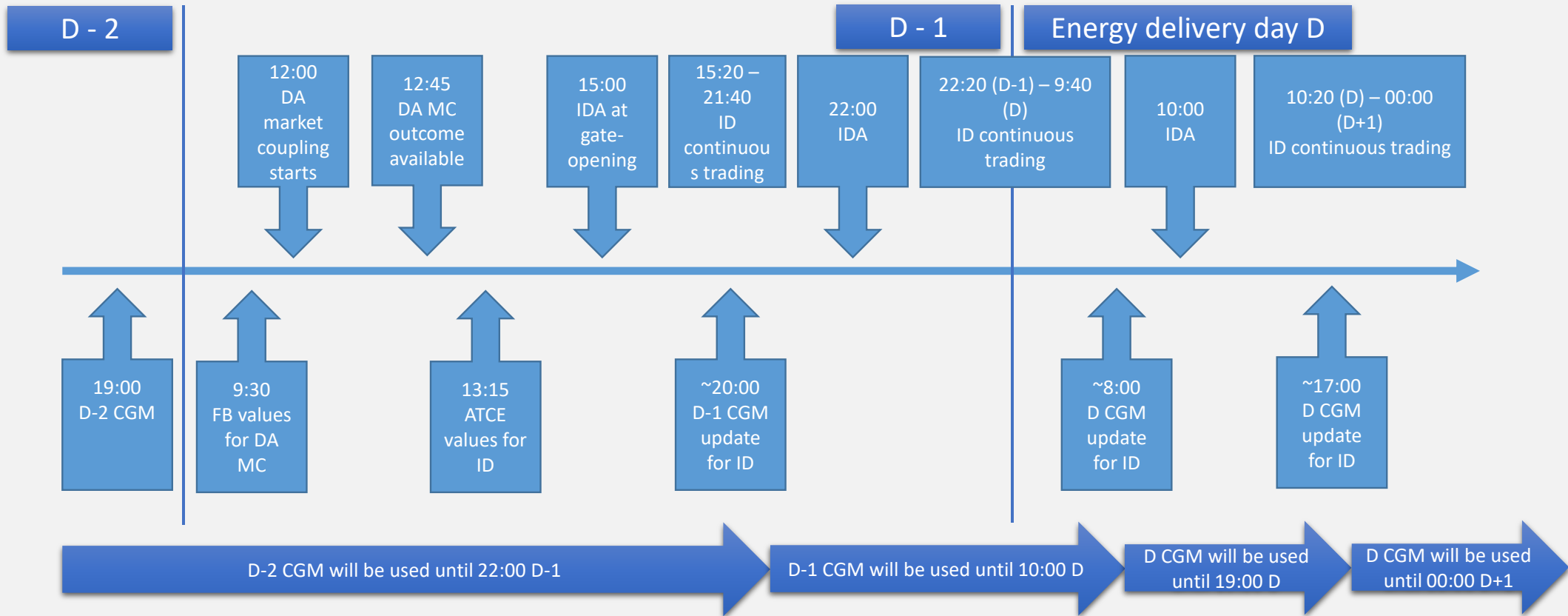
Status update

- The TSOs are assessing the impact of adjusting the ATCE parametrization by replacing the z2zPTDF relaxation with a RAM relaxation.
- Importantly, the TSOs conclude that ID validation for the ID gate-opening should follow the aligned DA validation outcome, knowing that the relaxation for the ID ATCE method will be implemented in a carefully controlled manner.

* Except for PTCs, HVDCs, and allocation constraints



Bigger picture in the future





Appendix Overview of relaxation methods

PTDF relaxation

- For z2zPTDF values below a specified relaxation threshold of X%, these smaller z2zPTDF values are effectively replaced with 0.

RAM relaxation

- With the exception of PTCs, HVDC and allocation constraints, all (internal) CNECs are subject to an increase of ~3 - 10 MW in their DA RAMs.