

6 February 2024

10 Years of integrated Spot Markets in Europe – A Success Story of Cross-Border Cooperation in the Internal Electricity Market

- Anniversary: following the 5th anniversary of the Single Intraday Coupling, which took place in June 2023, all Nominated Electricity Market Operators (NEMOs) and all Transmission System Operators (TSOs) celebrate this month the 10th anniversary of the Single Day-Ahead Coupling.
- Both platforms enhance cross-border electricity exchanges in 27 and 25 countries respectively with a total population over 440 million. In 2022 an annually traded volume of 1794 TWh was channelled through these platforms.
- Market integration and cooperation strengthen security of supply, generate substantial social welfare gains, promote competition and support decarbonisation in Europe.

It was in 2014, when NEMOs and TSOs voluntarily decided to build upon the previously existing Day-Ahead regional markets and stepwise coupled all regions in Europe by means of one algorithm in the Single-Day Ahead Coupling. Today both platforms embody market integration, as they couple all European bidding zones and enhance cross-zonal trade by allocating the grid capacity in the most efficient way.

Market coupling is crucial for system resilience and grid stability across Europe. An integrated market enables the efficient management of weather-related fluctuations in renewable generation and helps to mitigate security of supply risks derived from unexpected disruptions in the supply of primary energy sources.

Driving the energy transition together

The energy transition makes markets more attractive than ever. At times when the wind is not blowing in the North, the reduced generation from Europe's northern wind farms can usually be compensated by other resources, like solar energy generated in Southern Europe. This is possible because the grids and markets of these different zones are fully integrated, both physically through interconnectors and in terms of their markets through market coupling. Cosimo Campidoglio, Market Coupling Steering Committee co-chair explains: "Market coupling leads to a pan-European division of labour. The integration of European electricity markets will be key for dealing with the growing complexity of weather-related variations of renewable power generation across the continent."

In spot markets, participants can adjust their trading positions almost in real time, reducing imbalances and supporting the balance of the system. Due to the growing need for short-term adjustments derived from the greater penetration of renewables into the electricity system, intraday traded volumes have increased over the last years in most Member States.

Trading as the way to increase power system resilience

The pandemic and the recent energy crisis have once again highlighted the importance of interconnection and cooperation. “Mitigating price spikes due to peak demand and/or supply shortages has been possible by fully utilizing the integrated system. This has made Member States more resilient to unexpected exogenous shocks,” says André Estermann, Market Coupling Steering Committee co-chair. As a result, between 2019 and 2022 intraday traded volumes have grown around 85% in Europe. We often see that countries switch from imports to exports, within the day, which shows the importance of having integrated markets.

Ondřej Máca, Market Coupling Steering Committee co-chair adds: “European NEMOs and TSOs would like to express their special thanks to regulators, ministries, the European Commission, and ACER, who have supported these pan-European projects from the very beginning. Our special thanks go to market parties as well, who use our systems and make the market generate social welfare gains for end-consumers every day”. European NEMOs and TSOs will continue to work with stakeholders to create competitive markets, ensure system resilience, design efficient infrastructure and invest in innovative IT systems.

About SDAC

SDAC allocates scarce cross-border transmission capacity in the most efficient way by coupling wholesale electricity markets from different regions through a common algorithm, simultaneously taking into account cross-border transmission constraints, thereby maximising social welfare.

The aim of SDAC is to create a single pan European cross zonal day-ahead electricity market. An integrated day-ahead market increases the overall efficiency of trading by promoting effective competition, increasing liquidity and enabling a more efficient utilisation of generation resources across Europe.

For additional information on SDAC go to:
<http://www.nemo-committee.eu/sdac>
https://www.entsoe.eu/network_codes/cacm/implementation/sdac/

About SIDC:

The SIDC solution is based on a common IT system with one Shared Order Book, a Capacity Management Module and a Shipping Module. It allows for orders entered by market participants for continuous matching in one bidding zone to be matched by orders similarly submitted by market participants in any other bidding zone within the project’s reach as long as transmission capacity is available. The intraday solution supports both explicit allocation (where approved by the respective National Regulatory Authorities) and implicit continuous trading. It is in line with the EU Target model for an integrated intraday market.

European-wide intraday coupling is a key component for completing the European Internal Energy Market. With the rising share of intermittent generation in the European generation mix, connecting intraday markets through cross-border trading is an increasingly important tool for market parties to keep positions balanced. The purpose of the SIDC initiative is to increase the overall efficiency of intraday trading.

For additional information on SIDC go to:
<http://www.nemo-committee.eu/sidc>
https://www.entsoe.eu/network_codes/cacm/implementation/sidc/