

PMB version 12.2 for Price Coupling of Regions

Unicorn Systems built a component of a solution called **PMB** for the integration of the European day-ahead and intra-day electricity market.

The PMB is a distributed application formed by a number of interconnected installations in different locations in European NEMOs. The interconnected network of PMB systems is forming a complex cloud application. The PMB application uses a web-based solution. The integration technology is web services, which is used to communicate in the scope of PMB Broker cloud and other IT Systems.

The PMB solution as part of so called PCR solution together with the algorithm Euphemia allows power exchanges designated as Nominated Electricity Market Operator (NEMO) to determine electricity prices in a uniform way and at the same time. Thanks to the PMB solution, European consumers can use the European electrification system more efficiently, which will be reflected in the convergence of electricity prices on integrated markets.

The PMB is the sole property of PCR parties.



Success story of PMB 12.2 and Intraday Auctions

The PMB 12.2 release completes the journey of changes in PMB to support intraday auctions. It is an important milestone in adapting the energy market to new dynamic conditions. The purpose of introducing the intraday auctions is to harmonize the calculation and allocation of cross-border capacities on the intraday market. The intraday auctions price intraday cross-border capacities to reflect their shortage at a given time and sends an appropriate price signal to the market.

In addition to this significant achievement, several improvements for anticipated future challenges were performed:

- Daily Operational Report introduced as part of the Session Files (simplification of operators' daily work)
- Performance testing evaluating the impact of the future 15min resolution data set and performance optimization
- Possibility to download Filtered Aggregated Orders relevant for cluster(s) defined in corresponding configuration
- Improvements in system reliability and performance: automatic tests improvement, component upgrades, etc.

The PMB system has been developed in coordination with NEMOs in stages. The development project **PMB 12.2** was started in 2022 by analysis and design. The implementation has been performed iteratively in iterations and sprints. The version was successfully deployed on 13.6.2024.

Representative statement of the client

"Unicorn is a reliable, flexible and knowledgeable IT partner for European NEMOs. The PMB 12.2 project was delivered in a high quality and professional manner."

Approved by NEMO Day-ahead and Intraday Steering Committees on the 5th of July 2024



Price Coupling of Regions (PCR) is a project of European power exchanges to develop a single price coupling solution to be used to calculate electricity prices across Europe respecting the capacity of the relevant network elements on a day-ahead and intra-day basis. This is crucial in order to achieve the overall EU target of a harmonised European electricity market and increase liquidity, efficiency and social welfare.