

## Cross-Border Intraday: Questions & Answers

### 1. What is the Cross-Border Intraday initiative?

The Cross-Border Intraday initiative (XBID Project) is a joint initiative by the Power Exchanges (PXs): EPEX SPOT (including former APX and Belpex), GME, Nord Pool and OMIE together with the Transmission System Operators (TSOs) from 11 countries, to create a joint integrated intraday cross-border market. The single intraday market will enable continuous cross-border trading across the entire Europe. This single intraday market solution will be based on a common IT system with one Shared Order Book (SOB), a Capacity Management Module (CMM) and a Shipping Module (SM). This means that orders entered by market participants for continuous matching in one country can be matched by orders similarly submitted by market participants in any other country within the project's reach as long as transmission capacity is available. The intraday solution supports both explicit (where requested by NRAs) and implicit continuous trading and is in line with the EU Target model for an integrated intraday market. The purpose of the XBID initiative is to increase the overall efficiency of intraday trading.

### 2. Why is the intraday market so important to integrate European markets?

There are three different physical markets for trading electricity; Forward Market, Day-Ahead Market and Intraday market before delivery hour. The solution for implementing the Target model for the Day-Ahead market went into operation in February 2014 covering approximately 75% of the consumption in Europe. On the Forward market there are ongoing projects to harmonise auction rules and making a joint allocation platform.

An integrated intraday market will promote effective competition and pricing, increase liquidity and enable a more efficient utilisation of the generation resources across Europe. With the increasing amount of intermittent production, it becomes more and more challenging for market participants to be in balance after the closing of the Day-Ahead market. Therefore, interest in trading in the intraday markets is increasing. Being balanced on the network closer from delivery time is beneficial for market participants and for the power systems alike by, among others reducing the need of reserves and associated costs.

### 3. Are there currently any existing Cross-Border Intraday solutions?

There are several cross-border intraday solutions across Europe. On some borders, capacity is allocated through explicit procurement before energy is traded. On other borders, implicit allocation mechanisms are in place, which means that energy and capacity are traded simultaneously. On other border, none of these mechanisms currently exist.

### 4. What is the geographical scope of the initiative?

The first phase of the project initially involved the countries named under point 5. However, the scope has since been considerably expanded with all other members of the European Union being invited to join the so called 'Accession Stream' to enable them to prepare to implement XBID. It is envisaged that there will be three phases of go-live. The three Baltic TSOs and the two TSOs on the Iberian Peninsula have all confirmed that they plan to join the first go-live phase. The final objective is to extend the mechanism for cross border intraday trading to all Europe and, potentially, interconnected countries, coherently with the scope foreseen for the Target model and

this is being organised through the Accession Stream. The same platform will allocate all available intraday cross border capacity in an optimal way.

## 5. Which countries/areas are currently involved in the initiative?

The original members of the project are Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Italy, Luxembourg, Norway, Portugal\*, Spain\*, Sweden, Switzerland\*\*, and The Netherlands. The Accession Stream covers Bulgaria, Croatia, Czech Republic, Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Poland, Romania, Serbia, Slovakia and Slovenia.

\* Please note that the TSOs in these countries are currently not full members of the project

\*\* Please note integration of Swiss borders is not going to be possible due to the intergovernmental agreement on electricity cooperation not having been reached by end of 2016 [CACM Article 1 (4) & (5)]. In consequence, Swissgrid left the project in January 2017.

## 6. Who are the original partners?

The Power exchanges: EPEX SPOT (including former APX and Belpex), GME, Nord Pool and OMIE.

The TSOs: 50 Hertz, Amprion, APG, BritNed, Creos, Elia, Energinet.dk, Fingrid, National Grid Interconnectors, RTE, Statnett, Svenska Kraftnät, Swissgrid\*, TenneT BV, TenneT GmbH, and TransnetBW.

\* Please note integration of Swiss borders is not going to be possible due to the intergovernmental agreement on electricity cooperation not having been reached by end of 2016 [CACM Article 1 (4) & (5)]. In consequence, Swissgrid left the project in January 2017.

## 7. Is the initiative open for other TSOs and PXs to join?

All PXs and TSOs across Europe who are not currently members of the project have been invited to join the XBID Accession Stream. The current members of the Accession Stream are:

|                |                |
|----------------|----------------|
| EXAA           | Austria        |
| IBEX           | Bulgaria       |
| Cropex         | Croatia        |
| HOPS           | Croatia        |
| ČEPS           | Czech Republic |
| OTE            | Czech Republic |
| Elering AS     | Estonia        |
| IPTO           | Greece         |
| Lagie          | Greece         |
| HUPX           | Hungary        |
| MAVIR          | Hungary        |
| Terna          | Italy          |
| Eirgrid        | Ireland        |
| AST            | Latvia         |
| Litgrid        | Lithuania      |
| TGE            | Poland         |
| PSE            | Poland         |
| REN            | Portugal       |
| OPCOM          | Romania        |
| Transelectrica | Romania        |

|        |          |
|--------|----------|
| EMS    | Serbia   |
| Seepex | Serbia   |
| OKTE   | Slovakia |
| BSP    | Slovenia |
| ELES   | Slovenia |

#### **8. What is the timeframe of the project go-live?**

The current planning targets a go-live of the XBID Solution in Quarter 1 2018.

The use of the system in production will be subject to TSOs and PXs Local Implementation Projects (LIPs) consisting on migrating respectively their borders and markets on to the XBID Solution.

#### **9. What is the relation between the XBID project and the upcoming network codes/guidelines?**

The XBID project is a multiparty project working on the implementation of the XBID Model being a continuous intraday market, based on a single capacity management module and a shared order book within a one-to-one relationship. The Guideline on Capacity Allocation and Congestion Management (CACM GL) endorse this XBID Model. The CACM GL sets out, amongst others, the methods for allocating capacity in intraday timescales, rules for operating intraday markets and the basis for the implementation of a single electricity market across Europe.

The XBID Model will be in line with the provisions of the CACM GL and the parties in the project will fulfil the future requirements of CACM through their involvement.

#### **10. Who is the system provider of the XBID Solution?**

The system provider is Deutsche Börse AG (DBAG) and a development contract has been signed with them. Negotiations for the Maintenance of the solution are currently underway.

#### **11. What does this system do?**

The orders submitted by the market participants of each PX will be centralised in one shared order book (SOB). Similarly, all the intraday cross-border capacities are made available by the TSOs in the Capacity Management Module (CMM).

Order books displayed to the market participants via the usual trading systems provided by their PXs will contain orders coming from other participants of the concerned PX and also orders coming from other PXs for cross-border matching, provided there is enough capacity available.

Orders submitted for different market areas can be matched provided there is enough capacity available. In such a case, the order matching will be associated with implicit capacity allocation. Concretely, when two orders are being matched the SOB and CMM will be updated immediately. Trade is done on a first-come first-served principle where the highest buy price and the lowest sell price get served first. The update of SOB will mean that the orders that were matched are removed, and consequently that the available transmission capacity in the CMM will be updated. For how many borders the capacities are updated will depend on where the matched orders were located geographically.

For borders where NRAs requested for it, explicit allocation will be made available to Explicit Participants.

During the trading period, available capacities and order books are simultaneously updated on a continuous basis.

The Shipping Module (SM) of the XBID Solution provides information from trades concluded within XBID to all relevant parties of the post-coupling process. The SM receives data from the SOB about all trades concluded:

- Between two different Delivery Areas
- In the same Delivery Area between two different Exchange Members

The data from the SOB and the CMM are enhanced with relevant TSO, Central Counter Party (CCP) and Shipping Agent data from the SM and transferred to the parties at the configured moments.

## **12. How is the 24/7 availability of the system guaranteed?**

The intention is to implement for both, CMM and SOB a primary and a back-up system that are separated physically to guarantee highest availability of the system. Trading at local intraday platforms and the explicit access to the CMM will not be affected by a down-time of the SOB.

## **13. How is the XBID project going to communicate with stakeholders? Will market participants receive reliable information on a regular basis?**

User Group meetings will be held approximately every 5-6 months and the first one was held on 25<sup>th</sup> November 2014. Attendees are a representative group of market participants. The purpose of the User Group is to facilitate the interaction between the XBID project and market participants with the aim of explaining the status of the XBID project and building knowledge/confidence in the proposed solution. It also provides stakeholders with the opportunity to provide feedback on key aspects of the project.

The User Group meeting slides and minutes will also be published at a dedicated XBID project section on the web pages of the involved PXs.

Regular XBID project updates are also provided to:

- Regulators (NRAs) through the Implementation Group (IG) meetings
- European Stakeholder Committees (previously AESAG) at each scheduled meeting
- The European Commission (EC)/ACER/ CACM WS (with potential for lead NRAs)

A larger scale User Forum is also proposed where 150-200 stakeholders will be invited is proposed to be hold prior the first go-live.

## **14. What is the gain for market participants?**

The solution is expected to significantly increase the liquidity of the intraday continuous market, since orders submitted for the purpose will be potentially matched with orders submitted in any other participating country. In other words orders that could not be matched in local markets increase their probability of being matched in the larger integrated market. In addition, the solution should facilitate the operational tasks of intraday cross-border scheduling, since the capacity allocation and energy matching

processes will be done simultaneously. As a consequence, market efficiency is also expected to increase, to the benefit of the market participant.

**15. How will this impact/how does this benefit the end consumers?**

The direct benefit for the end consumer is expected to be positive, and the end consumers will benefit from this initiative increasing the overall wholesale market efficiency and facilitate the integration of the RES in the market. More concretely market participants having larger possibilities to be balanced before the hour of delivery will contribute to reduce the costs of reserves.

**16. How does the XBID project interlink with the PCR Day-Ahead project?**

There is no direct interlink between these two projects other than the participating TSO and PXs are mostly the same. However, both projects share the same purpose of implementing the European Target models for electricity.

**17. What are the Local Implementation Projects (LIPs)?**

To implement the XBID solution Local Implementation Projects (LIPs) have been set up. Thirteen LIPs have been established. A LIP consists of one or more borders, one or more TSOs and one or more PXs. LIP's main tasks are adaptation of local arrangements (i.e. procedures, shipping, contracts), IT system adjustments, secure equal treatment between PXs and implicit/explicit access and ensuring readiness for the participation in the XBID LIP testing.

The LIPs are monitored via the Joint XBID Steering Committee and the Joint Coordination Team where individual LIP's progress is reported to. Further each LIP has set up a formal governance structure within the LIP (i.e. project manager, Steering Committee, etc.). Within the XBID governance structure the LIPs have to report on their readiness for LIP testing and go-live.

**Last update: 08/03/2017**