XBID Cross-Border Intraday
Market Project

**XBID Information Package**

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1. Purpose of this document

This document centralises, consolidates and comprehensively describes the necessary information which is useful for market players in order to use the XBID platform.

2. High level description of XBID Platform

The XBID Programme started as a joint initiative by Power Exchanges and Transmission System Operators (TSOs) from 11 countries, to create a coupled integrated intraday cross-border market. Meanwhile the XBID Platform has been confirmed as the Single Intraday Coupling (SIDC) which shall enable continuous cross-border trading across Europe. XBID is 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.
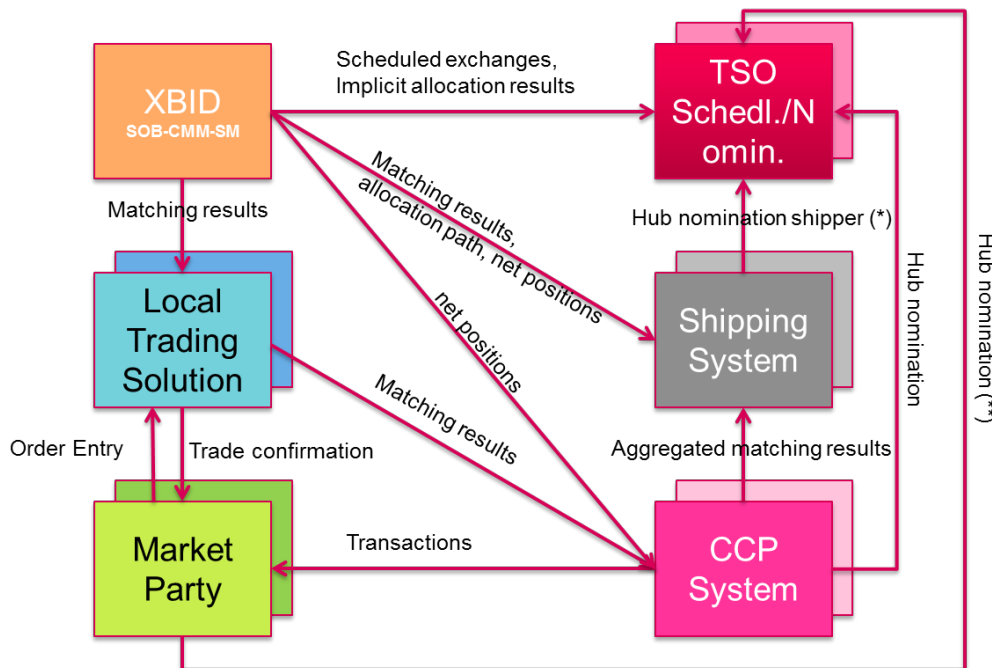
(*) XB nominations could be also needed in areas where nomination behalf is not applicable
(**) According to local procedures (direct or indirect nominations)

Picture 1: XBID high-level architecture

The orders submitted by the market participants of each NEMO via the Local Trading Solution (LTS) of the respective NEMO will be centralised in the SOB. Similarly, all the intraday cross-border capacities are made available by the TSOs in the CMM.

It is important to clearly distinguish between Local Trading Solutions (LTSs) and XBID Solution:

- LTSs represent an interface (the only interaction point) between the Implicit Market Participants and Single Intraday Coupling (SIDC) Solution. In other words the Implicit Market Participant may access the SIDC only via the LTS of a particular NEMO.
- XBID Solution is a so called backend process which does not interact with the Implicit Market Participants. XBID Solution provides, among others, a functionality of the Shared Order Book via interaction with the connected LTSs.

Note: Explicit Market Participants have a direct technical access to the XBID Solution in order to perform explicit allocations on the German-French border.

Order books displayed to the market participants via the LTS provided by their NEMO(s) will contain orders coming from other participants of the concerned NEMO and also orders coming from other NEMOs subject to cross-border matching, provided there is enough cross-border capacity available. Among others the NEMOs' trading systems provide the following features:

- It shows to its market participants the local view, i.e. the order book that the market participants can view in each area according to the available capacity on the borders.
- It sends the anonymized orders to the SOB (XBID solution) received from their market participants. A 'trading solution client' is provided by the NEMOs to their market participants for their activities on the market (submit orders, receive trade information, etc.).
- It receives the required information from the XBID solution (matching results, local view, etc.).
- It provides the required information to the market participants and to its clearing system.

Orders submitted in different market areas can be matched provided there is enough capacity available. In such a case, order matching will result in an implicit capacity allocation. Concretely, when two orders are being matched the SOB and CMM will be updated immediately. The trading principle remains first-come first-served 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. The number and location of the borders where the capacities are updated will follow the cross-border flows originated by the geographical location of the matched orders.

For borders where NRAs requested for it (the French/German border is the only one requested), 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 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

3. Bidding zone borders where ID is managed by XBID solution

The bidding zone borders of the following countries (marked orange) are managed by the XBID solution:

Picture 2: Countries coupled by XBID solution since 13th June 2018

List of bidding zone borders:

Bidding zone borders		
BE-NL	EE-LV	NO2-NL
DE-DK1	FI-SE1	NO3-NO4
DE-DK2	FI-SE3	NO3-NO5
DE-NL	FRE-FI	NO3-SE2
FR-BE	LT-SE4	NO4-SE1
DE-FR	LV-LT	NO4-SE2
FR-ES	NO1-NO2	SE1-SE2
DK1-DK2	NO1-NO3	SE2-SE3
DK1-NO2	NO1-NO5	SE3-SE4
DK1-SE3	NO1-SE3	ES-MA
DK2-SE4	NO2-NO5	ES-PT
EE-FI		

4. Products offered at go-live at bidding zone borders

XBID system supports the following products:
- 15-minutes
- 30-minutes
- 60-minutes
- Hourly User Defined Blocks

Products are configured to the XBID solution per market area.

Specific product availability in different market areas is detailed in the table below:

		German TSO areas	Austria	France	NL & Belgium	Nordics & Baltics	Iberia
Size		Min vol. increment 0.1 MW					
Price Tick		EUR 0.01 per MWh					
Price Range		-9 999 €/MWh to 9 999 €/MWh					
Products	**15-min**	X	X				
	30-min	X		X			
	Hourly	X	X	X	X	X	X
	User Defined Blocks*	X	X	X	X	X	
Notes		* Hourly blocks (not 15 or 30 min blocks)					

Order types:

Order type	Execution Restrictions	Validity Restrictions	Predefined	User-Defined
Regular predefined	NON (None) IOC (Immediate-or-Cancel) FOK (Fill-or-Kill)	GTD (Good Till Date) GFS (Good For Session)	Yes	No
Regular user-defined block	AON (All-or-Nothing)	GTD (Good Till Date) GFS (Good For Session)	No	Yes
Iceberg	NON (None)	GTD (Good Till Date) GFS (Good For Session)	Yes	No
Basket Orders	None (1) Valid (2) Linked (3)	--	Yes	No

(1) Orders are processed as if they would have been submitted separately

(2) All orders in the basket are accepted or rejected

(3) All orders in the basket must be executed immediately with their entire quantity; all orders inside basket have the execution restriction "FOK"

The Project Parties anticipate increasing the range of products on borders. This requires forward planning including changing local systems and consultations. It is not possible to provide the answer at present but information will be provided to NRAs on this in the future.

5. Delivery hours covered by XBID for each bidding zone border
Delivery hours are 24/7.

6. List of bidding zone borders, where intraday capacity is allocated in another way in parallel (e.g. implicit auctions, explicit allocation);
At the following borders cross-zonal capacity is allocated in another way in parallel to the implicit continuous allocation:

Germany-France (DE-FR)	Explicit continuous
Spain-Portugal (ES-PT)	Implicit auctions

7. The user manual of the XBID platform

For implicit continuous intraday trading market participants will not connect directly to the XBID platform. Market participants will enter their orders into the Local Trading Solution(s) of the NEMOs which is connected to XBID.

Only for the explicit access to cross-zonal capacity at the German-French border a connection to XBID is required. The respective user manuals for explicit participants were published by RTE under the following link:

http://clients.rte-france.com/lang/an/clients_traders_fournisseurs/services_clients/inter_france_allemagne.jsp

8. Gate opening time (GOT) and gate closure time (GCT)

Intra-Market Areas:

		German TSO areas	Austria	France	NL & Belgium	Nordics & Baltics	Iberia
Opening times	**All products**	18:00	15:00	15:00	14:00	14:00	22:00 *Under NRAs' assessment*
Closing times	**15-min**	Delivery (D)-30 min	D-30 min				
	30-min	D-30 min		D-30 min			
	Hourly	D-30 min	D-30 min	D-30 min	D-5 min	D-60min*	D-60 min
	User Defined Blocks	D-30 min	D-30 min	D-30 min	D-5 min	D-60 min*	
Notes		* Finland and Estonia at D-30 min					

Cross-Market Areas:

	German TSO areas	Austria	France	NL & Belgium	Nordics	Baltics	Iberia
Opening times[4]	22:00[1]	22:00	22:00	22:00	15:00[2]	18:00[3]	22:00 *Under NRAs' assessment*
Closing times	D-60 min[5]						
Notes	[1] DE-DK2 (Kontek) and DE-DK1 opening at 18:00. [2] NorNed opening at 21:00 [3] Pending decision by ACER to move it to 14:00 as is today [4] Pending regulatory approval at ENTSO-E / NRA level [5] Estlink Closing time D-30 min; for FR-DE, same GCT applies to both half hours of a given hour. For DE-AT the same GCT applies for all products of a given delivery hour. Ramping constraint on DK1-NO2, DK1-SE3, DK1-DK2, DE-DK2, EE-FI, LT-SE4, NO2-NL Cross-border contract resolutions: - DE-AT border: 15 min - FR-DE border: 30 min - All other borders: 60 min						

ACER's decision of April 2018 defines the intraday cross-zonal gate opening time (IDCZGOT) as 15:00 D-1 from 1st January 2019 onwards. This deadline and therewith the implementation of the gate opening time (GOT) can be postponed until 30 days after approval of the intraday capacity calculation methodology for Capacity Calculation Regions (CCRs) where such approval was not made before 30th November 2018. The effective implementation of the GOT is managed on each relevant border. Provided below is an overview on GOT timings for borders in operation outlining:

- Effective GOT in place as of 1st January 2019 and application of ACER's decision
- Corresponding capacity available, especially for borders where no cross-border capacity can be published at Effective GOT

CCR	Bidding zone border	*Effective GOT* as of 01.01.2019	Cross-border capacities published at *Effective GOT*	Point in time cross-border capacity is made available after *Effective GOT*
Baltic (Intraday capacity calculation methodology has been approved)	EE-FI	15:00 CET, D-1	Calculated cross-border capacity	N/A
	EE-LV			
	LV-LT			
	LT-SE4		0	As soon as possible after *Effective GOT*
Core (Intraday capacity calculation methodology is currently under approval, ACER decision not expected before mid-February 2019)	DE-NL	15:00 CET, D-1[1]	0	22:00 CET, D-1[2]
	FR-BE			
	BE-NL			
	DE-FR			
	DE-AT			
Hansa (Intraday capacity calculation methodology is currently under approval, NRAs' decision not expected before mid-December 2018)	DE-DK1	15:00, D-1 CET[1]	0	18:00 CET, D-1[3]
	DE-DK2			
	NO2-NL			18:00 CET, D-1[2]
Nordic (Intraday capacity calculation methodology has been approved)	DK1-DK2, DK1-NO2, DK1-SE3, DK2-SE4	15:00 CET, D-1[4]	Calculated cross-border capacity	N/A
	FI-SE1, FI-SE3, NO1-NO2, NO1-NO3, NO1-NO5, NO1-SE3, NO2-NO5, NO3-NO5, NO3-SE2, NO4-SE1, NO3-SE4, NO4-SE2, SE1-SE2, SE2-SE3, SE3-SE4	15:00 CET, D-1	Calculated cross-border capacity	N/A
	NO3-NO4	15:00 CET, D-1	0	18:00 CET, D-1[2]
SWE (Intraday capacity calculation methodology has been approved)	FR-ES	15:00 CET, D-1[5]	Under NRAs' assessment	Under NRAs' assessment
	ES-PT		Calculated cross-border capacity	N/A

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[1] Implementation date will be 30 days after NRAs' approval

[2] At the latest

[3] Approximate timing

[4] Already in place today

[5] Implementation date under NRAs' assessment

9. Documentation on the functioning of a fall back solution

In case of failure of the XBID solution the intraday trading would still remain possible internally within each bidding zone, provided local trading is offered by the NEMOs.

Measures have been taken to achieve a high XBID solution availability.

There will be no fallback option for any of the borders currently operational. The complexity of providing a fall back solution which is compliant with Multi-NEMO Arrangements (MNA) equates to delivering a project of similar cost and complexity as XBID. Local fallback arrangements which comply with MNA do not exist and the outcome of individual LIPs' assessments has therefore been that it is not possible to provide fallback other than local trading.

10. Roll-back solution

Rollback is defined as situation where the XBID Steering Committee is forced to decide to stop operations of the SIDC and to return to the situation before Initial Go-Live. The XBID solution has been running since go-live with stability and therefore, beginning of September 2018 the Steering Committee has decided, in line with the contractual agreement between NEMOs and TSOs, to remove rollback systems. This was communicated at the time in a press release.

11. Status of CACM methodologies linked with the XBID project

Back up Methodologies and Product Methodologies (both for DA and ID) have been approved.

- Backup and product methodologies are fully aligned with the XBID.
- Algorithm Methodology (related to both DA and ID) was approved by ACER 30th July 2018. With its approval ACER requested all NEMOs in coordination with all TSOs to jointly develop a change control methodology and monitoring methodology by 1st August 2019.