I-SEM Rules Liaison Group

Intraday market (XBID)
21st January 2015

XBID- Background

- XBID – Cross (***X***) ***B***order ***I***ntra***d***ay;

- "*Establish a common cross border implicit continuous Intraday trading solution across Europe, where all the cross border capacities are allocated*";

- First project phase delivers "interim solution";

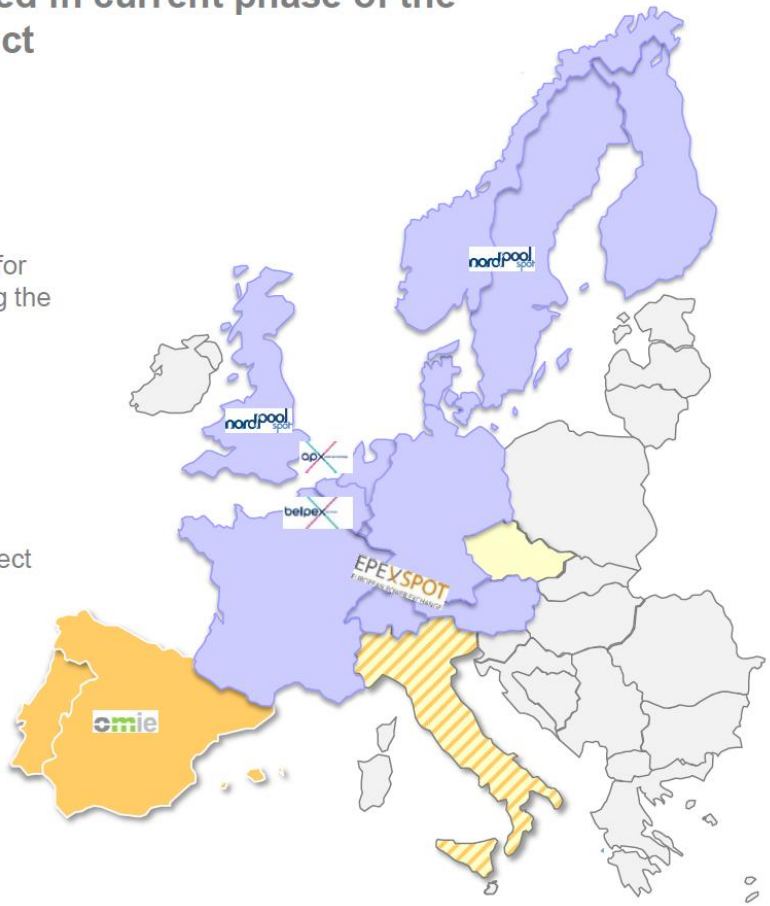
- Deutsche Börse (DBAG – the German Stock Exchange) has been selected as the IT solution developer/provider;

- IT solution has 2 main modules:
  - Shared Order Book (SOB)
  - Capacity Management Module (CMM)

XBID- Background

Parties involved in current phase of the Intraday Project

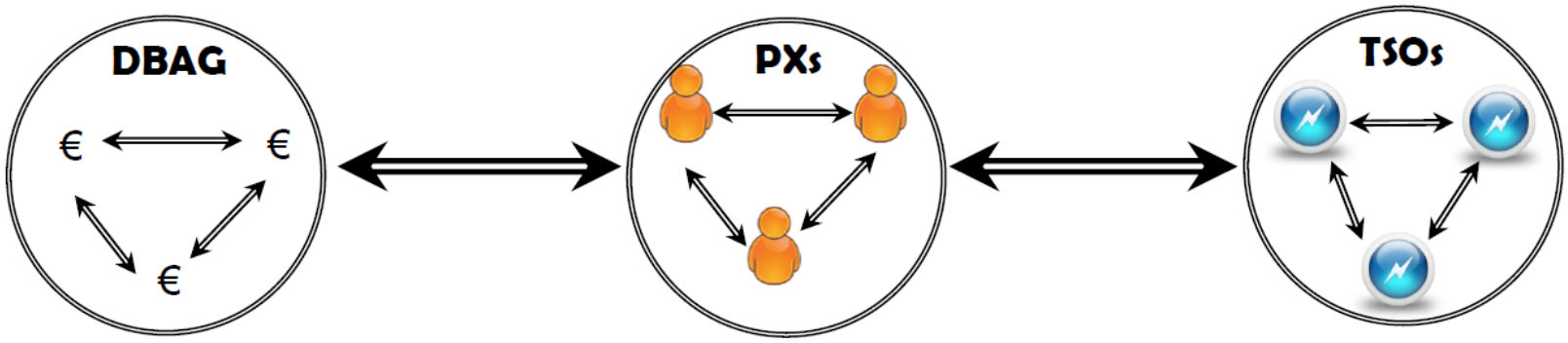
- TSOs and PXs participating for developing and implementing the XBID Solution
- PXs participating; TSOs observers
- PX observer status
- Adherence of PX to the project ongoing



XBID- Background

- Cross-Border Intraday Solution throughout Europe
  - XBID Solution
  - Trading Solution*
- Context
  - A common solution developed by **1** provider (DBAG)
  - Business requirements established by **4** PXs entities
  - A project supervised by **14** TSOs
  - Open to new members (PXs and TSOs)

Contractual position



*complementary solution to the XBID Solution, used by the Power Exchanges to support PX market activities

XBID- Challenges

- Solution based on standard market product provided by DBAG
- Complex IT project. Main XBID solution and 'Front End' (Optional Trading Solution, OTS) are based on same platform but have different requirements
- Equal Treatment is essential with ownership/competitor context
- Demanding functional requirements
- Settlement processes across multiple borders/multiple parties involved
- Detailed review of offered Solution and requirements has identified gaps
- Forecasting and future proofing for market development– importance of performance

XBID- Project Progress (1)

- Project structure is in place with active participation of Power Exchanges and TSOs
- Joint Co-operation Agreement is in place between the Power Exchanges
- All Party Co-operation Agreement is in place between the Power Exchanges and TSOs
- Letter of Cost Comfort from NRAs
- Regulatory reporting of all historic costs and monthly financial reporting

XBID- Project Progress (2)

- Regular project interface with EC, ACER and Ofgem (as lead Regulator for this project)

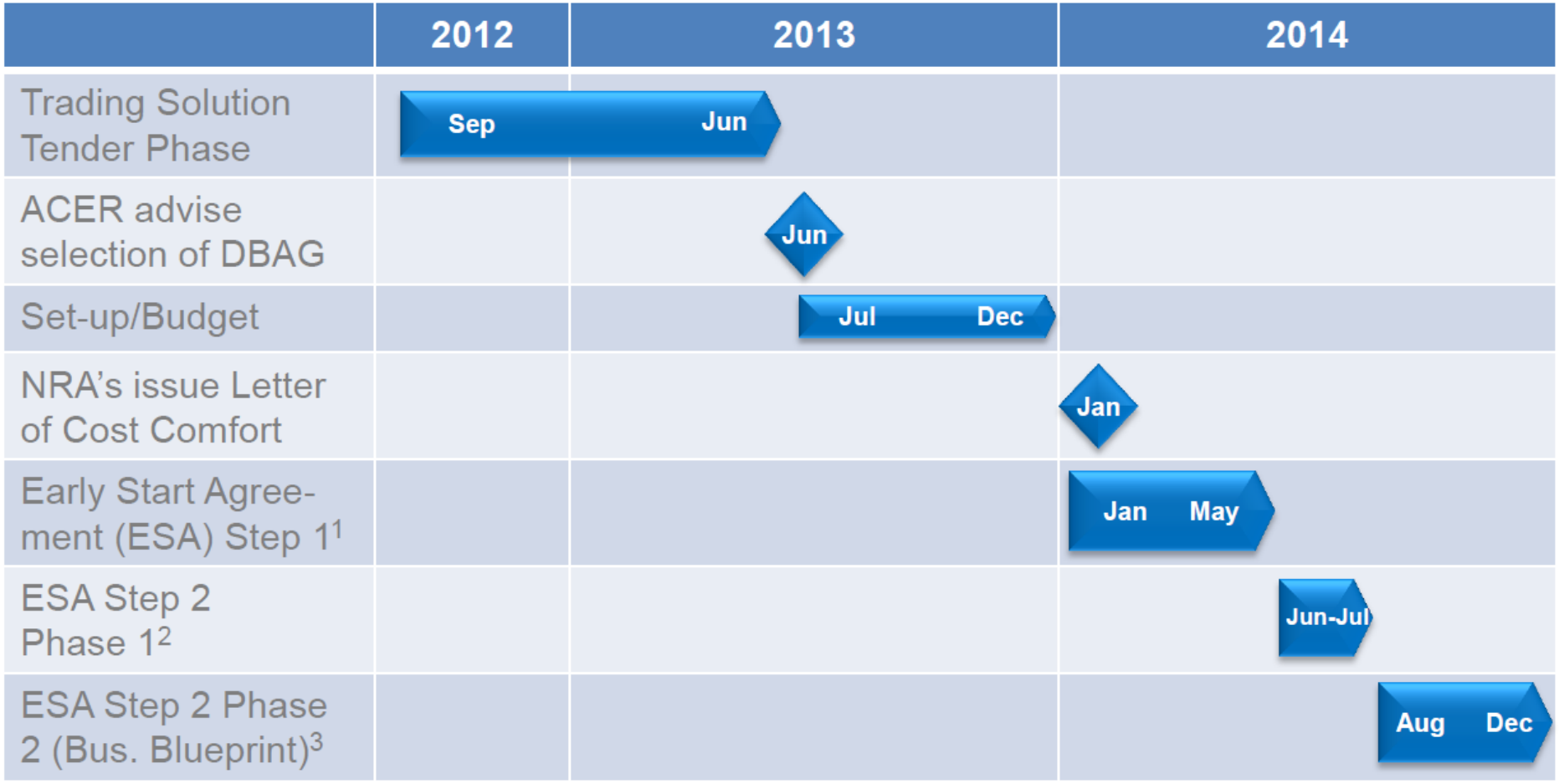
- Early Start Agreement in place with DBAG

- Agreement reached on key areas such as Test Strategy

- Key areas such as system performance and equal treatment are being actively managed with extensive resource commitments from Power Exchanges, TSOs and DBAG

- Development Contract with DBAG is currently being negotiated

XBID- Project Milestones

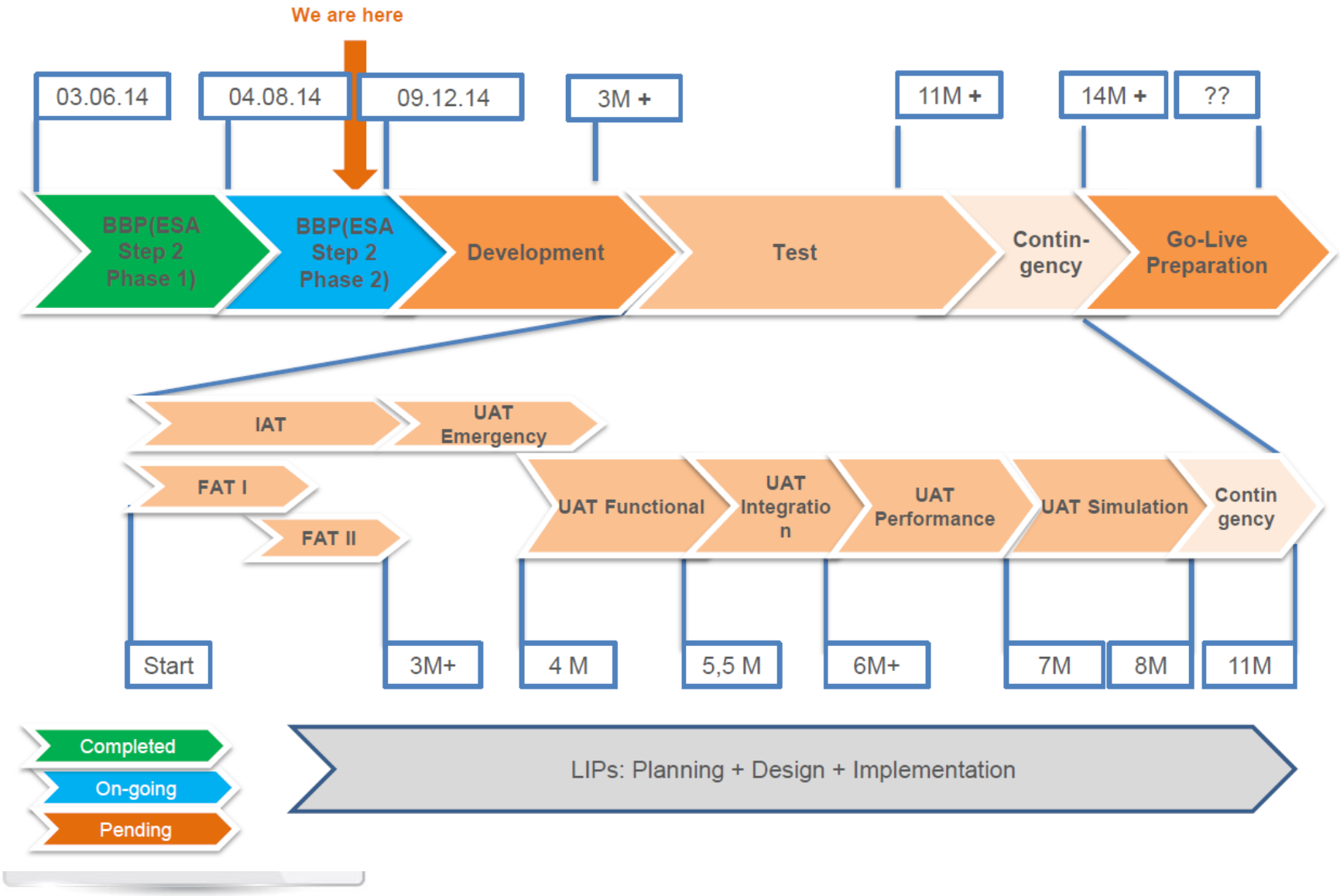


[1] Step 1 delivered: The detailed project plan; Details of the plan deliverables; The quality plan and approach on areas such as testing & change management

[2] Step 2 Phase 1 delivered: The Fact Book

[3] Step 2 Phase 2 enables the solution to be developed and delivers: The functional specifications (11 deliverables) for the modules, interfaces etc.; Agreement of contract with DBAG; Clarification on key areas such as system performance

XBID- Project Milestones

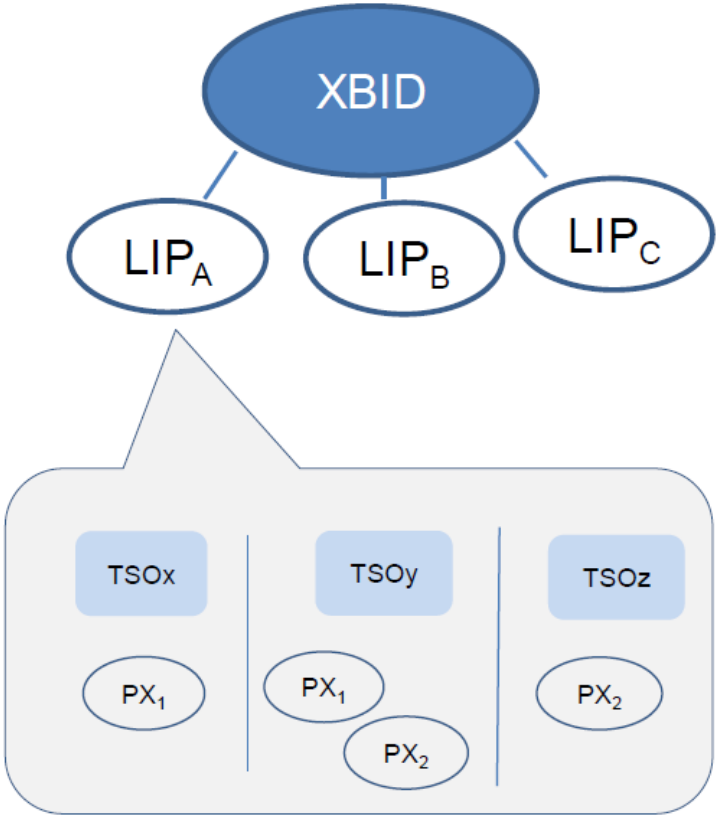


XBID- Local Implementation Project (LIPs)

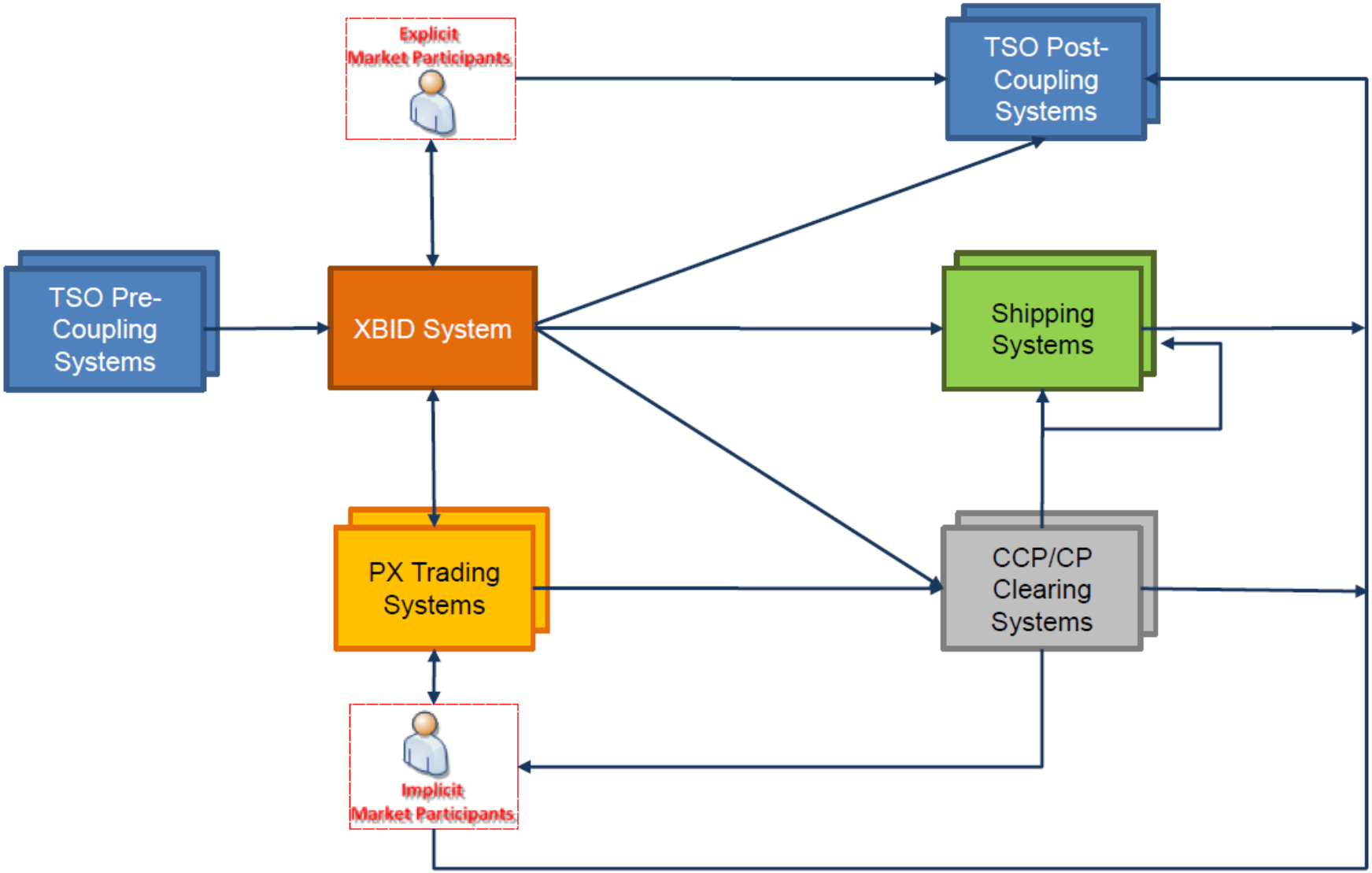
- LIP consists of
  - One or more borders
  - One or more TSOs
  - One or more market operators

- Main tasks are
  - Adaptation of local arrangements
    - Procedures
    - Shipping
    - Contracts
  - Secure equal treatment
  - Readiness for / participation in testing

- Join the XBID platform for go-live



XBID- High Level Architecture



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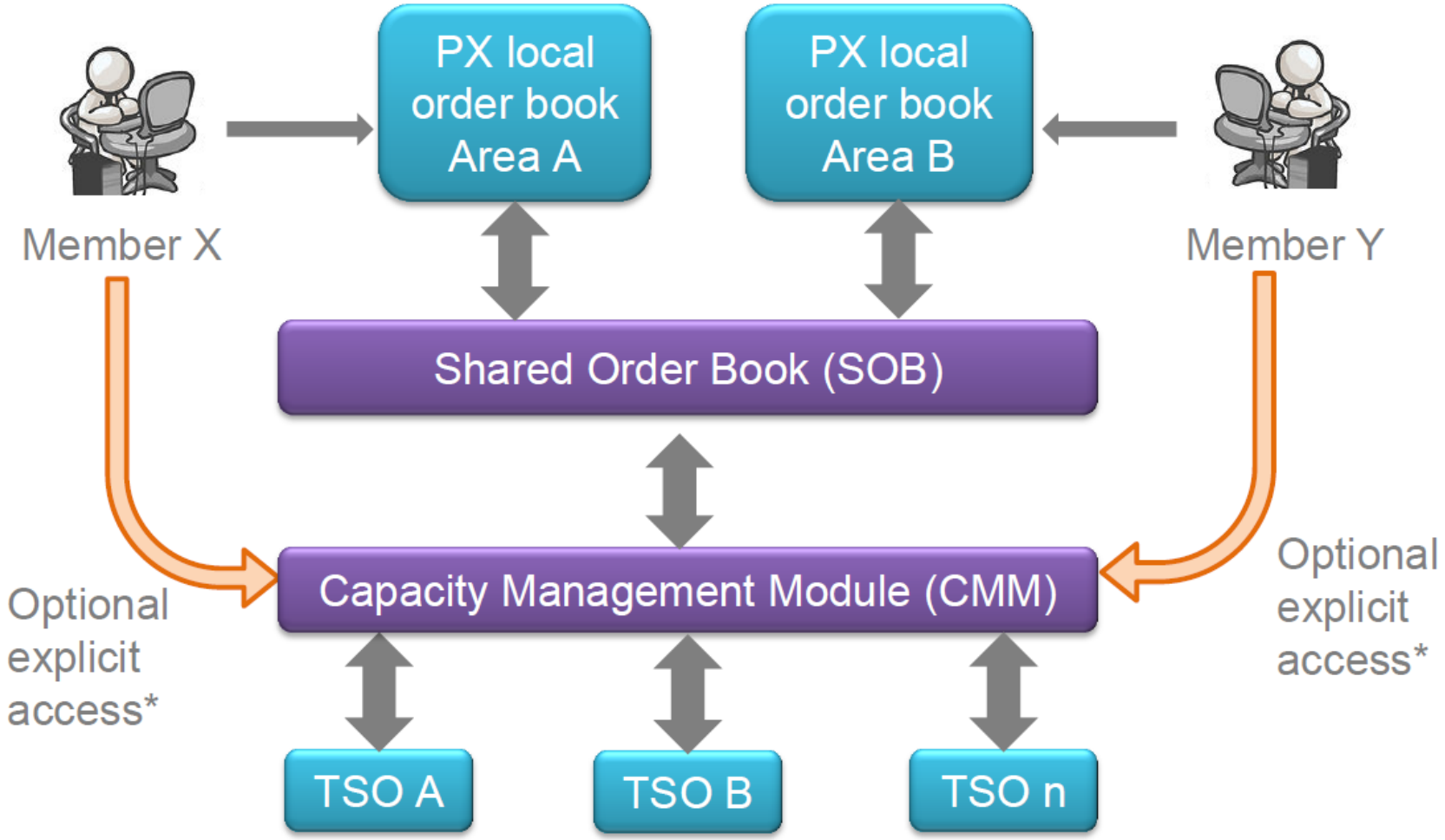

* Depending on regulatory approval

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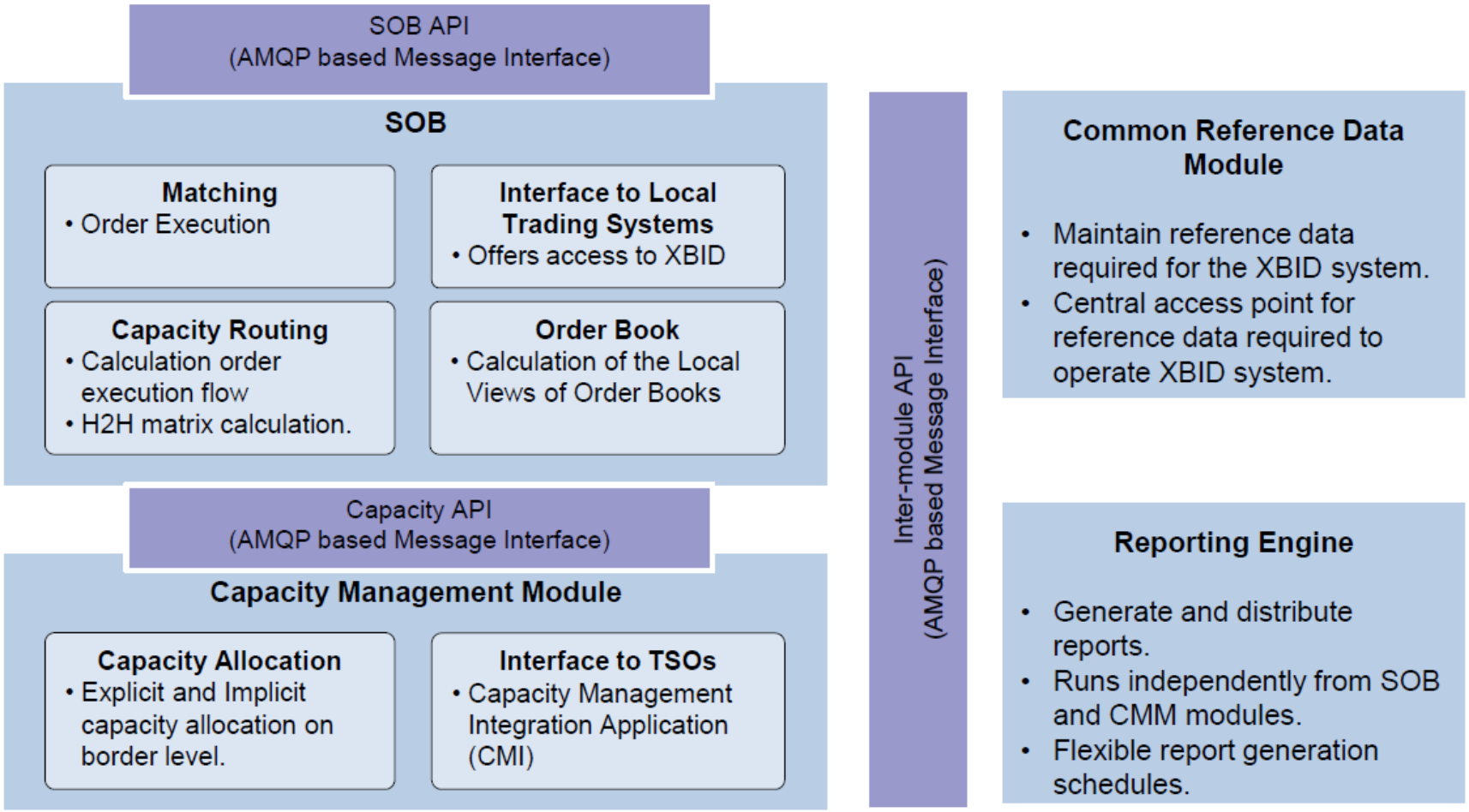

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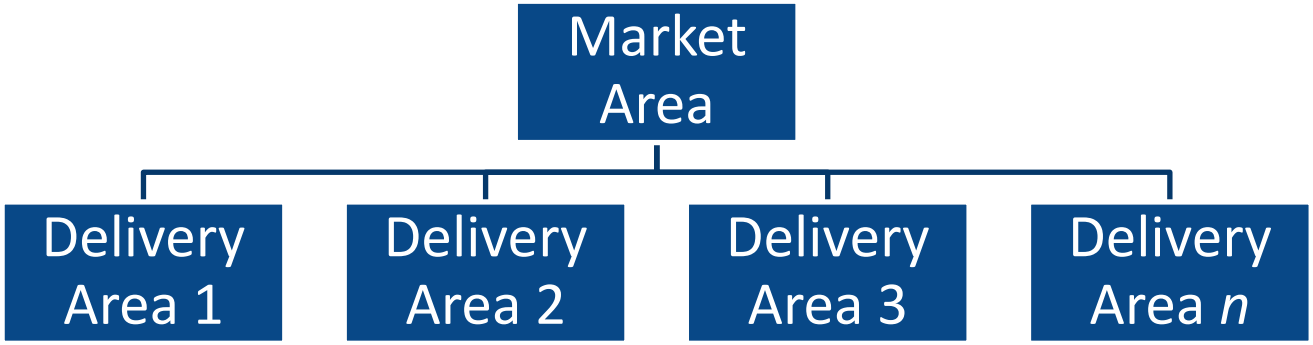

➢ **Market Area**

- A “price area”
- Can be one or more delivery areas
- Allocation between market areas subject to congestion
- Typically at national level

➢ **Delivery Area**

- Area managed by one TSO
- Often but not always, a market area will have one delivery area

XBID- Local View Calculation (1)

- Order Book Calculation
  - Local views will be enriched with cross-border orders if sufficient transmission capacity is available
  - The same order can be displayed in multiple local views
  - Cross-border orders in the local views will be displayed up to the available capacity; hence orders can be shown with partial volume
  - An order is removed from all local views after full execution, deactivation or deletion
  - Orders that cannot be executed in the selected area because of a PX dispute are not displayed Rules for Order Book Calculation

XBID- Local View Calculation (2)

- Rules for Order Book Calculation
  - Orders from foreign markets are selected based on available capacity and price-time-priority
  - Iceberg orders are displayed with their visible quantity and not with their total quantity
  - AON orders can only be displayed with full quantity
  - Traders cannot tell in which area the orders that they see in their local order book were entered

XBID- Cross Border Routing (1)

- Routing
  - Transportation of power via the delivery grid requires a calculation of a route (sequence of delivery areas) through the power network
  - Whenever multiple routes exist, the shortest path rule is applied to define the outcome of the routing process
- Routing calculation is done for:
  - Order Book Calculation
  - Trade Flow Calculation

XBID- Cross Border Routing (2)

- Shortest path rule:
  - If more than one route with sufficient ATC is available, the shortest route (smallest number of delivery areas) is select
  - When the capacity of the first best route is depleted, the remaining quantity will be routed via the next best until either the full quantity has been transferred or no more routes with a positive ATC are available
  - If more than one route fulfils the shortest path criteria, it is not specified which one is selected by the system (so the system selects any one path)

XBID- Losses

- Losses are not part of the go-live version
- Have been identified as a future requirement to be implemented post go-live
- Intraday losses are not as simple as day-ahead
- Trades in the direction of the prevailing flow will increase the cost of losses
- Trades in the opposite direction will decrease the cost of losses
- It is not clear how best to deal with this when trading is continuous

Questions?