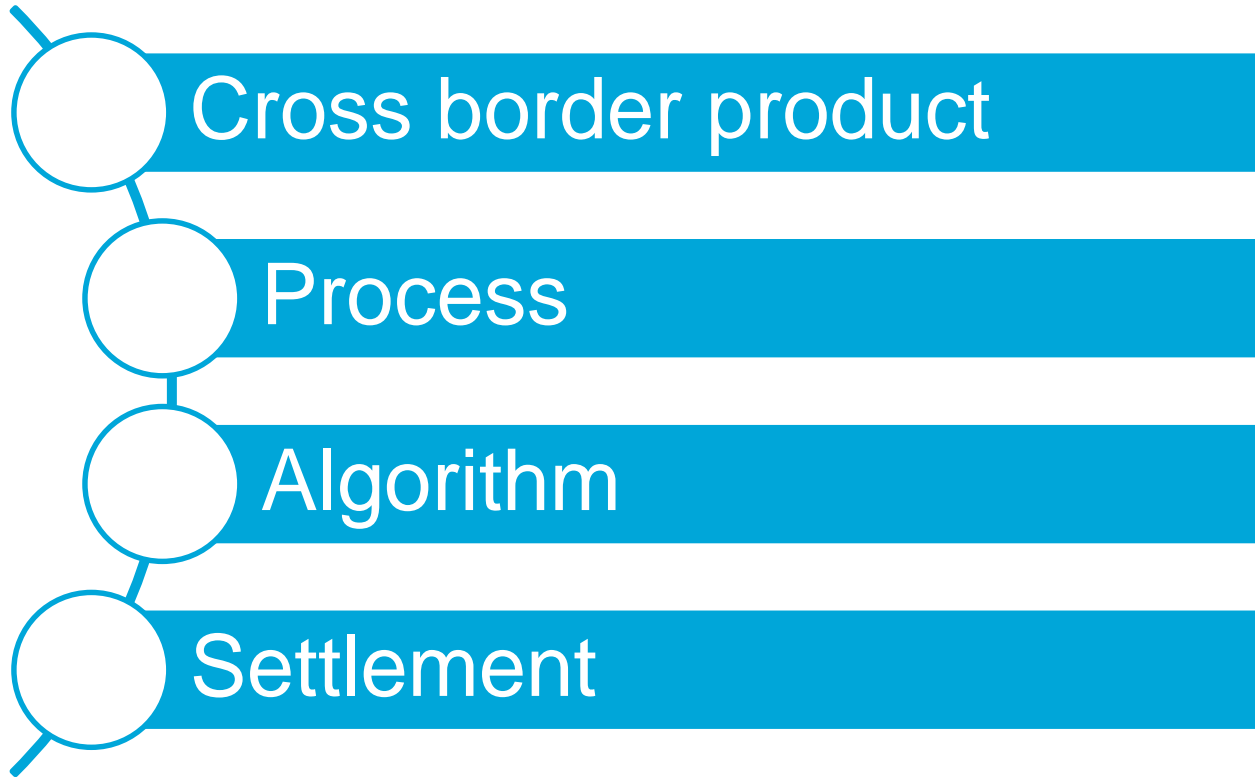




INTEGRATION OF MFRR MARKETS

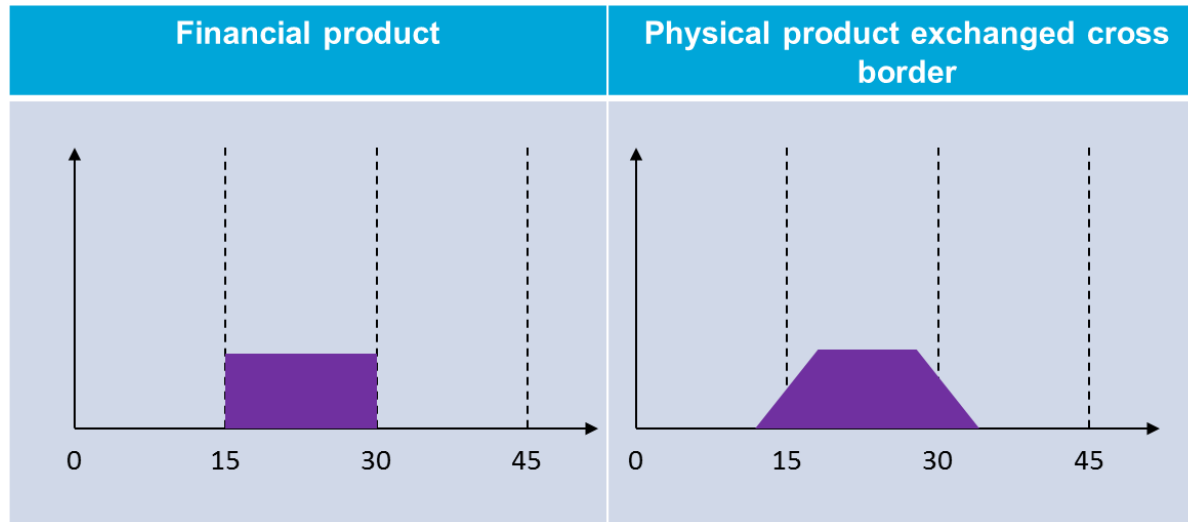
Opportunity document for France and Germany

7th December 2016



CROSS BORDER PRODUCT

- A focus on the product exchanged cross-border : local prequalification rules are left to national responsibility;

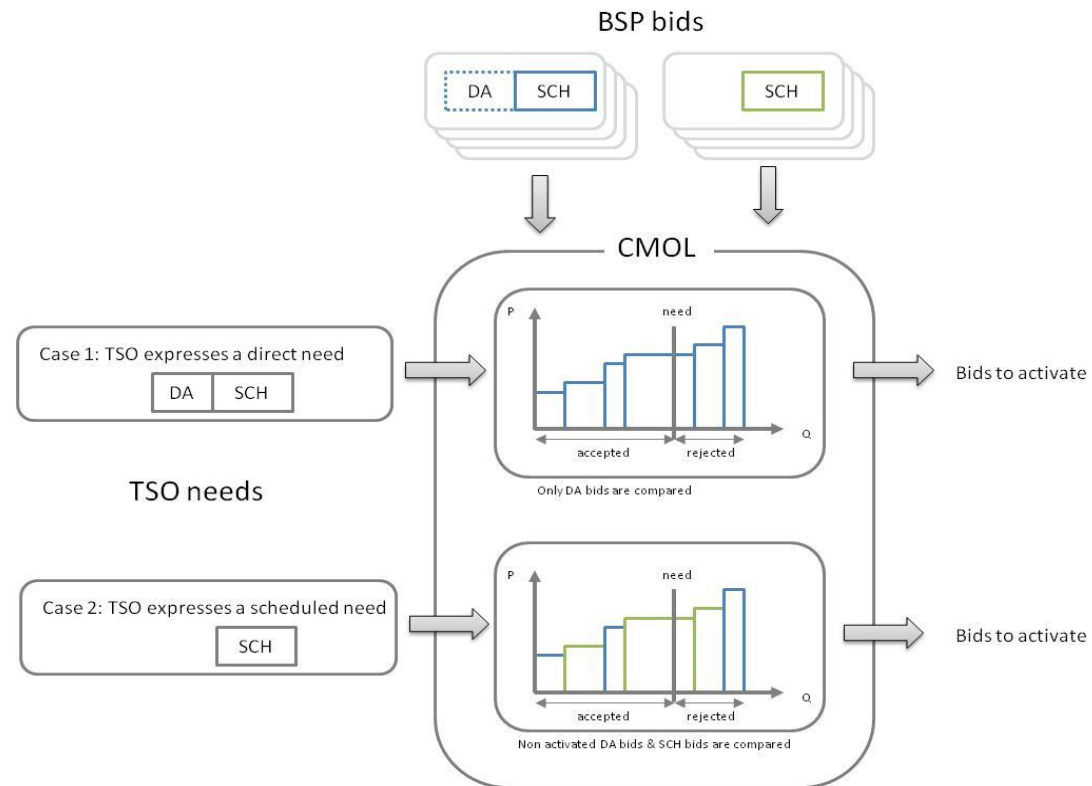


Example for scheduled activation

- This XB product can be either **direct or scheduled activated**: activation start can happen at any point in time. It has been agreed on the possibility for BSP to submit a bid that could only be scheduled activated;
- This XB product is always **scheduled deactivated**: deactivation is always based on an ISP boundary;
- The product lasts **between 15 and 30 minutes** (this refers to the length of the block settled): 15 minutes for scheduled activated products and between 16 and 30 minutes for direct activated products.

PROCESS – GENERAL PRINCIPLE

- BSPs can bid either with **direct or scheduled only activated bids**
 - Maximizes bids submitted to TSOs
- TSOs can express **direct or scheduled needs**
 - Direct needs allow TSOs to respect time to restore frequency targets (15 minutes)
 - Scheduled needs allows netting

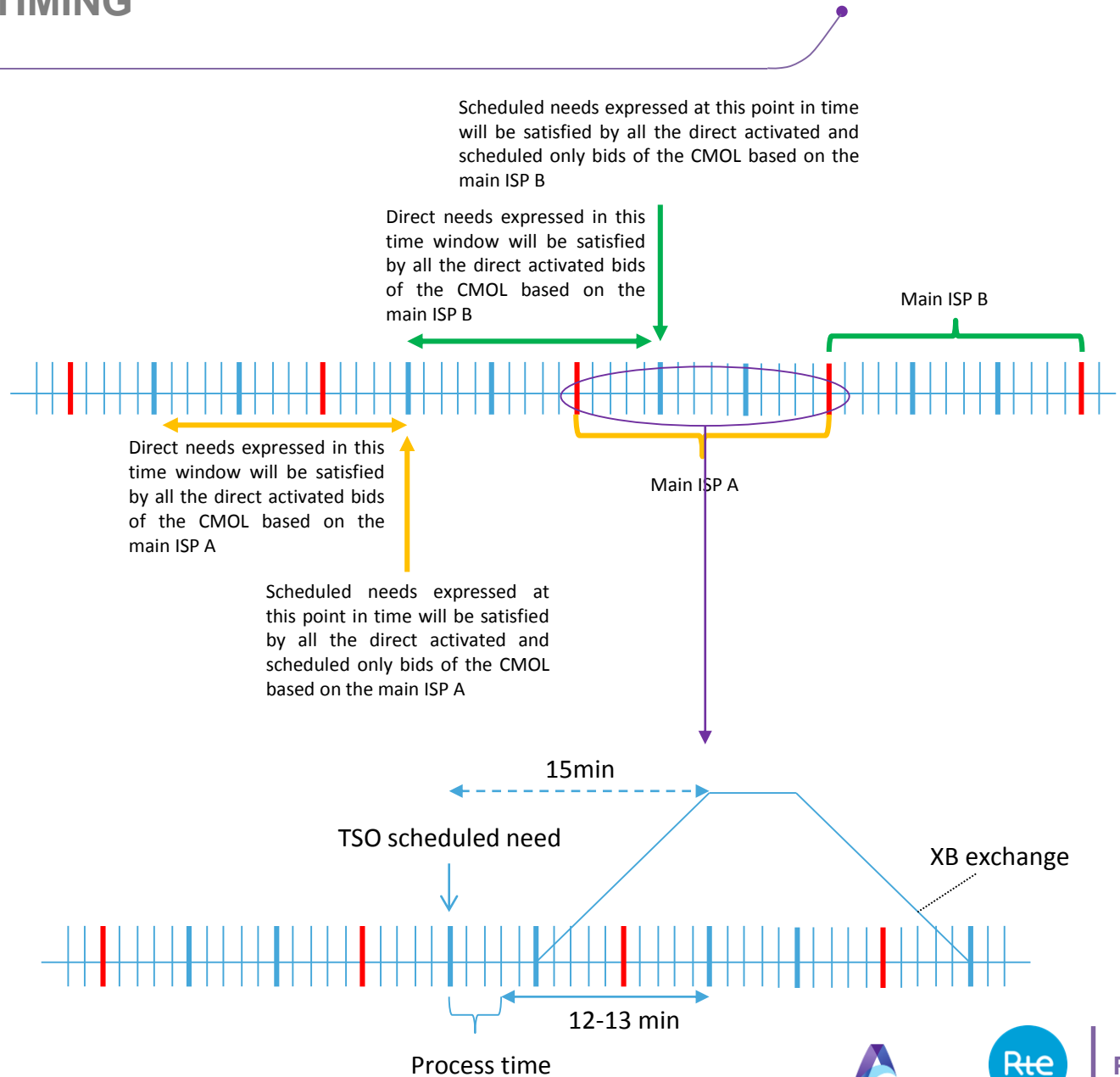


- The objective would be to try to express scheduled needs as much as possible in order to **take the most of netting potentials**

PROCESS – TIMING

A process compatible with 15 minutes MTU and 30 minutes lead time countries

Process is direct then scheduled.

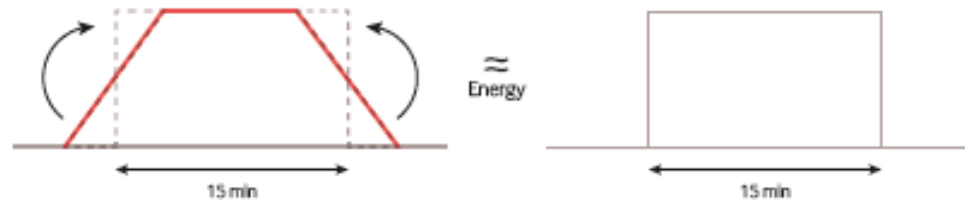


ALGORITHM

- General principle:
 - **Clearing** algorithm for **scheduled** needs
 - **FCFS** algorithm for **direct** needs
- Discussions around tolerance on needs optimizing the handling of indivisible bids
- No links in time
- Complex bids were not considered

SETTLEMENT

- Several pricing methods were studied : preference for “***cross zonal marginal pricing***”
- It is compliant with future EB GL:
 - Profits are shared in a “fair” way between countries;
 - Sets a fair competition between BSPs;
 - It generates congestion rent in case of congestion;
 - It is compatible with local imbalance pricing if deemed important for some countries.
- ***Settlement based on rectangles*** for pragmatic reasons:



- Complex discussions around direct activated bids settlement
 - BSPs should be incentivized to bid direct activated bids and not only scheduled activated bids, if they have the technical capability to do so.