

Market Segment Integration



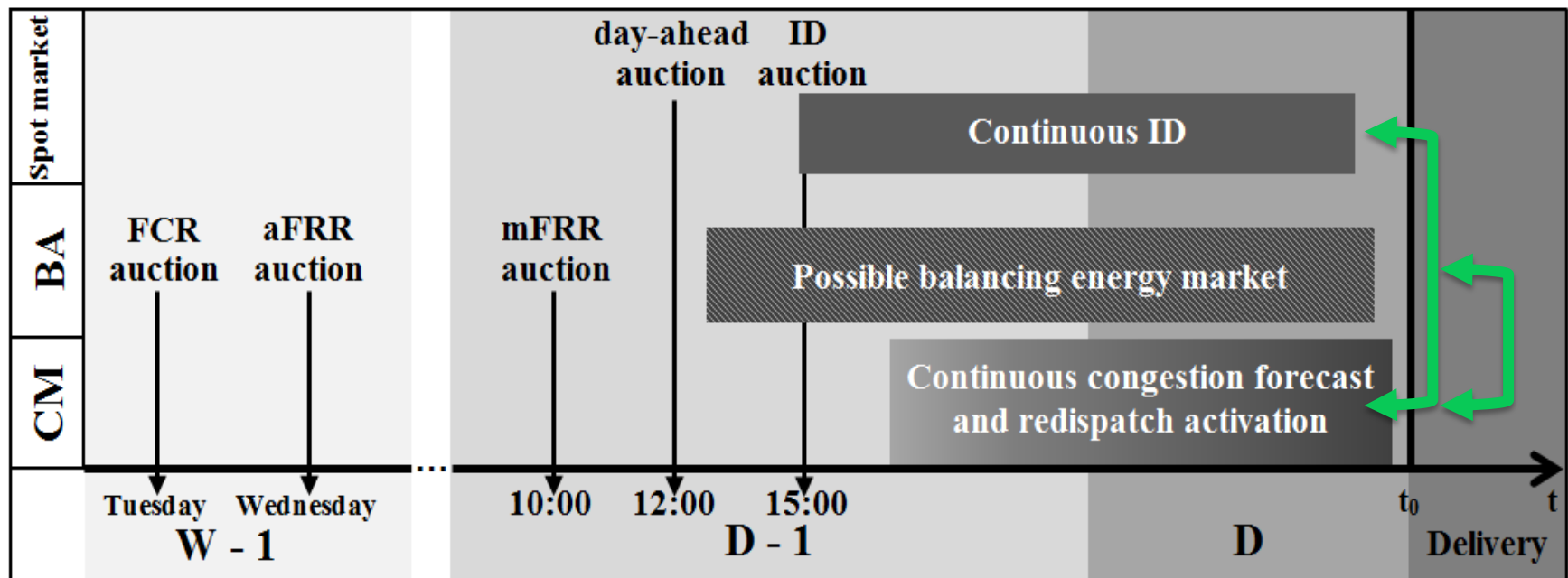
The background image shows a construction site for an offshore wind turbine. A worker in a red suit and white hard hat stands on a blue metal walkway. A large black cable with yellow markings is being hoisted by a crane. The sky is blue with some clouds. In the foreground, there are large coils of black cable with yellow markings.

09.02.2018

Dr. Christoph Neumann



Rethinking short-term electricity market design



Market segment integration (MSI) is defined as the interaction between and possible combination of market segments, i.e. intraday market (ID), congestion management (CM) and balancing market (BA).



4 trigger for the discussion



The integration of significant amounts of intermittent renewable capacity is challenging the power system and will lead presumably to **increasing congestion issues at all voltage levels**.



Conventional units are leaving the market and congestion management will inevitably rely in the future on **smaller units/small-scale flexibility**.



DSOs expect also the need for congestion management on their voltage levels. This triggers the necessity for a **coordinating mechanism between TSOs and DSOs**.

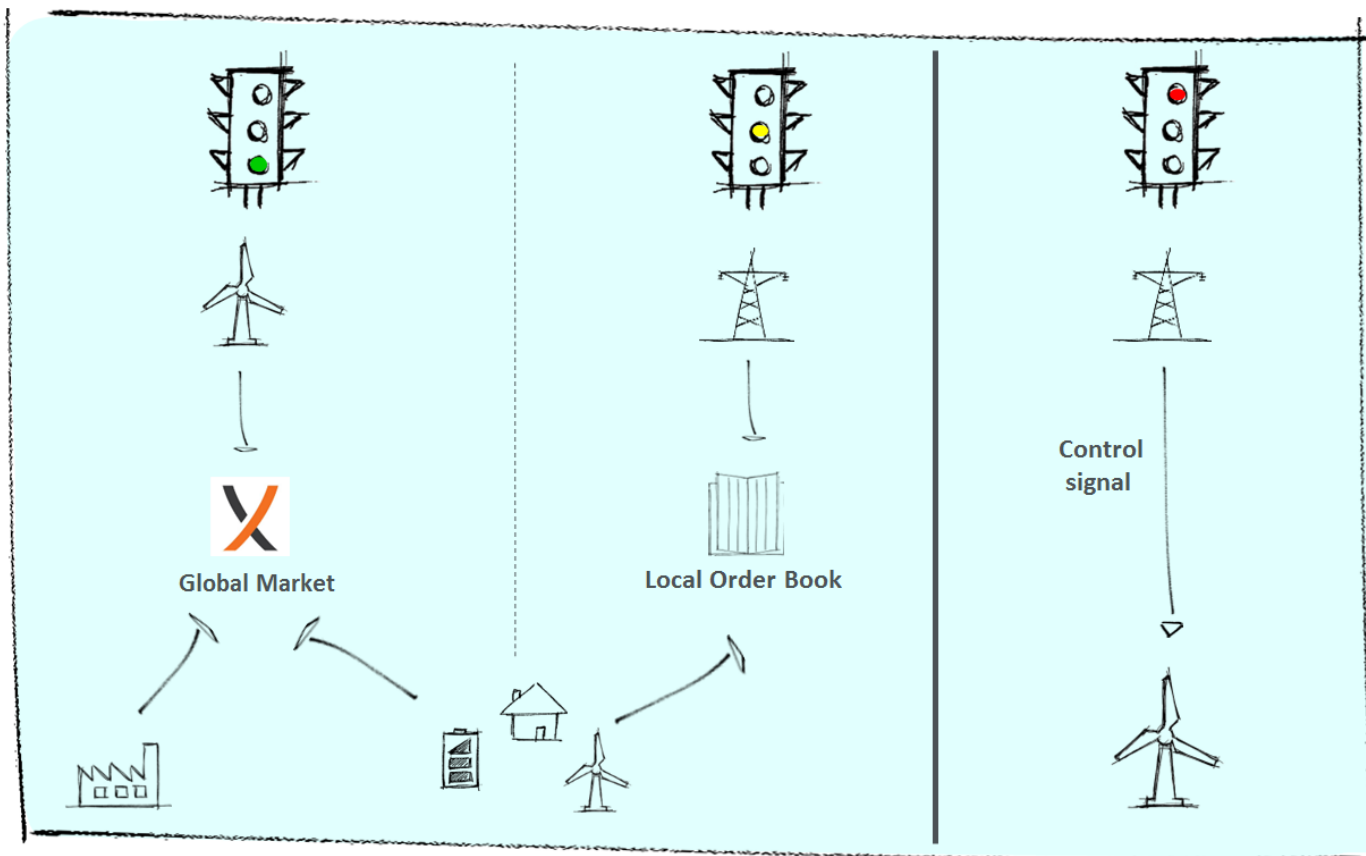


The **CEP** is requesting a mandatory **market-based redispatching process**. Non-market-based redispatching shall only be used where no market-based alternative is available. SO's would have to manage occurring congestion relying on voluntary bids(?)

SINTEG project: enera



Idea: Development of locational order books. LOBKs are one-sided markets and any certified flexibility provider can participate. TSOs + DSOs can use ID bids with locational tags and ex-ante price formation to solve local grid problems.



- project started in 2017 and has a duration of 4 years.
- with partners i.a. EWE AG, EWE Netz, Avacon NETZ, EPEX Spot, UDE, TenneT.



Sum up

- Detachment of market and system operations one of the main challenges to solve
- Flexibility discussion triggered (mainly!) by this congestion issue
- SINTEG project will explore in practice chances and limitations of market-based redispatch for Germany
- Open questions
 - Interaction on other market segments
 - Remuneration
 - Liquidity issue
 - Coordination TSO + DSO
 - ...