ETSO's Vision On Congestion Management: The Best Options

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Background

The European market is today composed of a number of 'regions'. These regions are characterised by:

- a given market structure and composition (type of contracts, grid access arrangements, balancing mechanism, bilateral trade and/or power exchanges, ...) which can be different from those in neighbouring regions
- internal organisations and methods which are mostly determined by member states and regulators independently of other regions
- relative freedom from local congestion within each region, at least as seen by market participants (ie any internal congestion which does occur is managed by the TSO using local methods).

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ETSO Vision (1)

Our goal is to create

the network access arrangements that the market needs to enable effective competition across Europe,

and to optimise the use of the network in a pan-European perspective

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ETSO Vision (2)

This goal will be achieved

by providing practical market-based mechanisms to manage congestion *between* regions,

while allowing the co-existence and evolution of different market structures *within* regions

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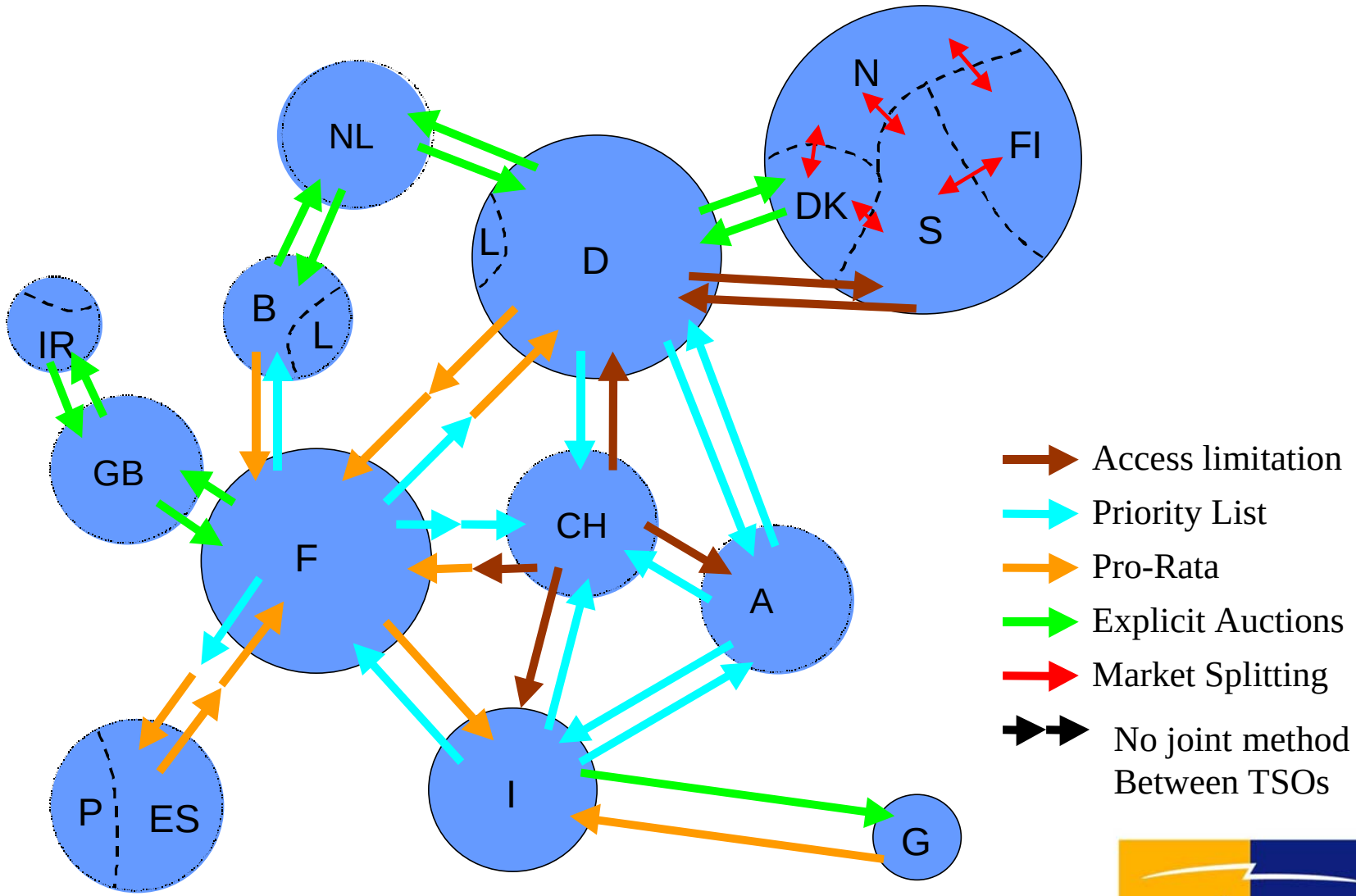
Known Congestion Management Methods

- **Allocation based on a rule**
  - **Priority list**
  - **Pro rata rationing**
- **Allocation based on economic value, providing signals**
  - **Already implemented in Europe**
    - Capacity Auction (based on ATC)
    - Market splitting (based on ATC)
  - **Not yet implemented in Europe**
    - Co-ordinated Market Coupling (CMC)
    - Capacity Auction (using PTDF)
    - Market splitting (using PTDF)
    - Coordinated Cost+ (Redispatching; proposed by IFIEC)

Congestion Management Methods In Place



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Why Market Based Methods ?

- To allocate a scarce good to the players who value it the most;
- To give economic signals to the market;
- To recover congestion costs on those actors active in cross border trade and not on the domestic markets;
- At the day-ahead stage, market based explicit methods are the logical step towards the implicit systems;
- Another rule has shortcomings for the future (initialisation of FCFS, how to do pro rata in a coordinated system?,...).

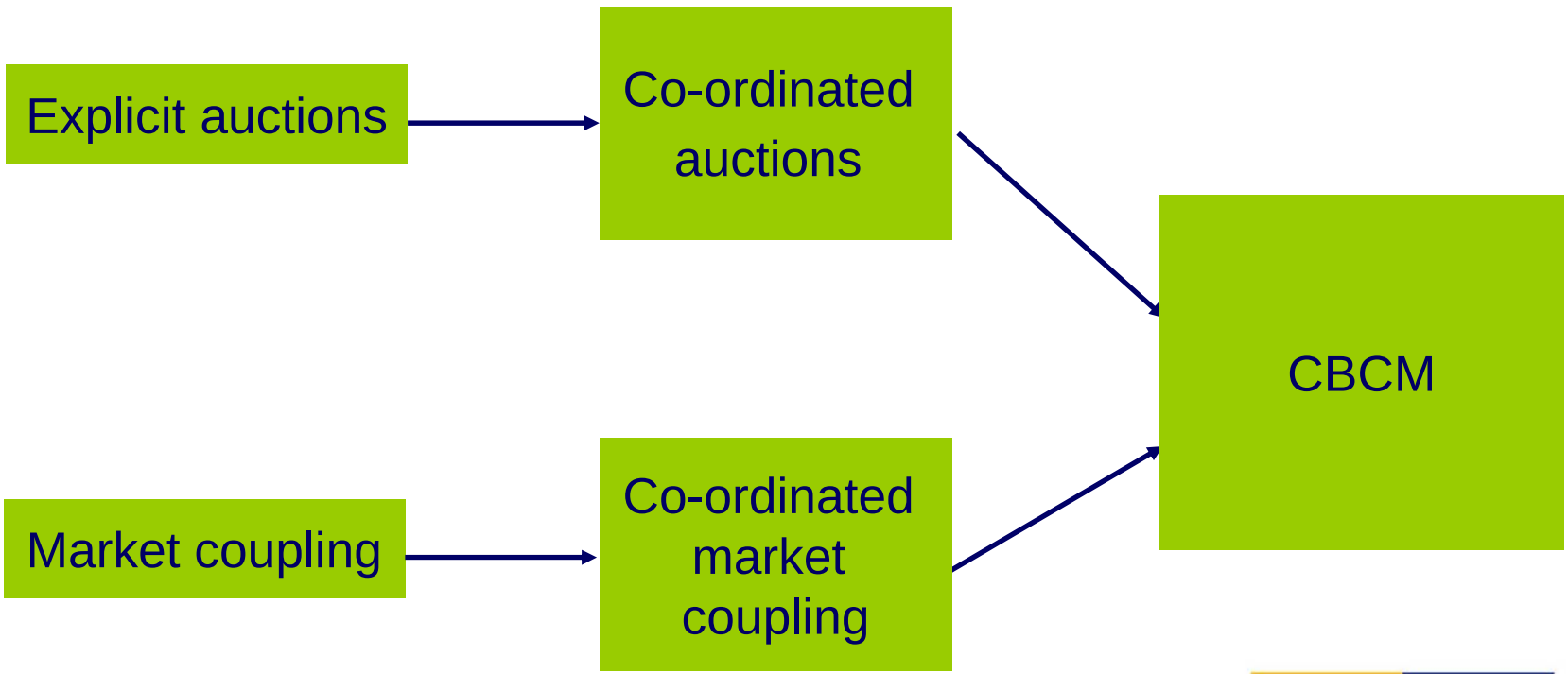
How to deal effectively with interactions between cross-border transmission constraints ?

- Use of PTDF factors representing the reality of physical flows in a meshed network, to reduce or eliminate inconsistencies associated with present « contract path » methods.
- Complex calculations for TSOs, simplified interface with users.
- Allocation of inter-regional transmission products via coordinated congestion management concept + subsequent trade if required.
- Subsequent congestion between regions managed by e.g. coordinated re-dispatch (and within regions by re-dispatch or market splitting, or any other local method).

Different energy market arrangements in operation across Europe consistent with the Vision

- Flexibility to support for example bilateral contracts, power exchanges and pools.
- Explicit and implicit products can be allocated together, avoiding the need for standardisation on either explicit or implicit auctions.
- Region-to-region and regional entry/exit products together.
- Gradual implementation.

Reconciliation of current methods
Cross Border Congestion Management Scheme



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Summary (1)

- **3 important results**
  - co-ordination method
  - market splitting and auctions reconciled
  - transactions can be avoided

Summary (2)

- **ETSO Vision**
  - based firmly on above results
  - cross-border congestion only
  - accommodates all market structures
  - emphasises user choice
  - can be developed via pilot

Summary (3)

- **But implementation not easy!**
  - agreement of participants
  - regional model
  - capacity values, firmness, etc.
  - market processes and facilities
  - legal, organisational and commercial arrangements, and willingness to co-ordinate