

Official

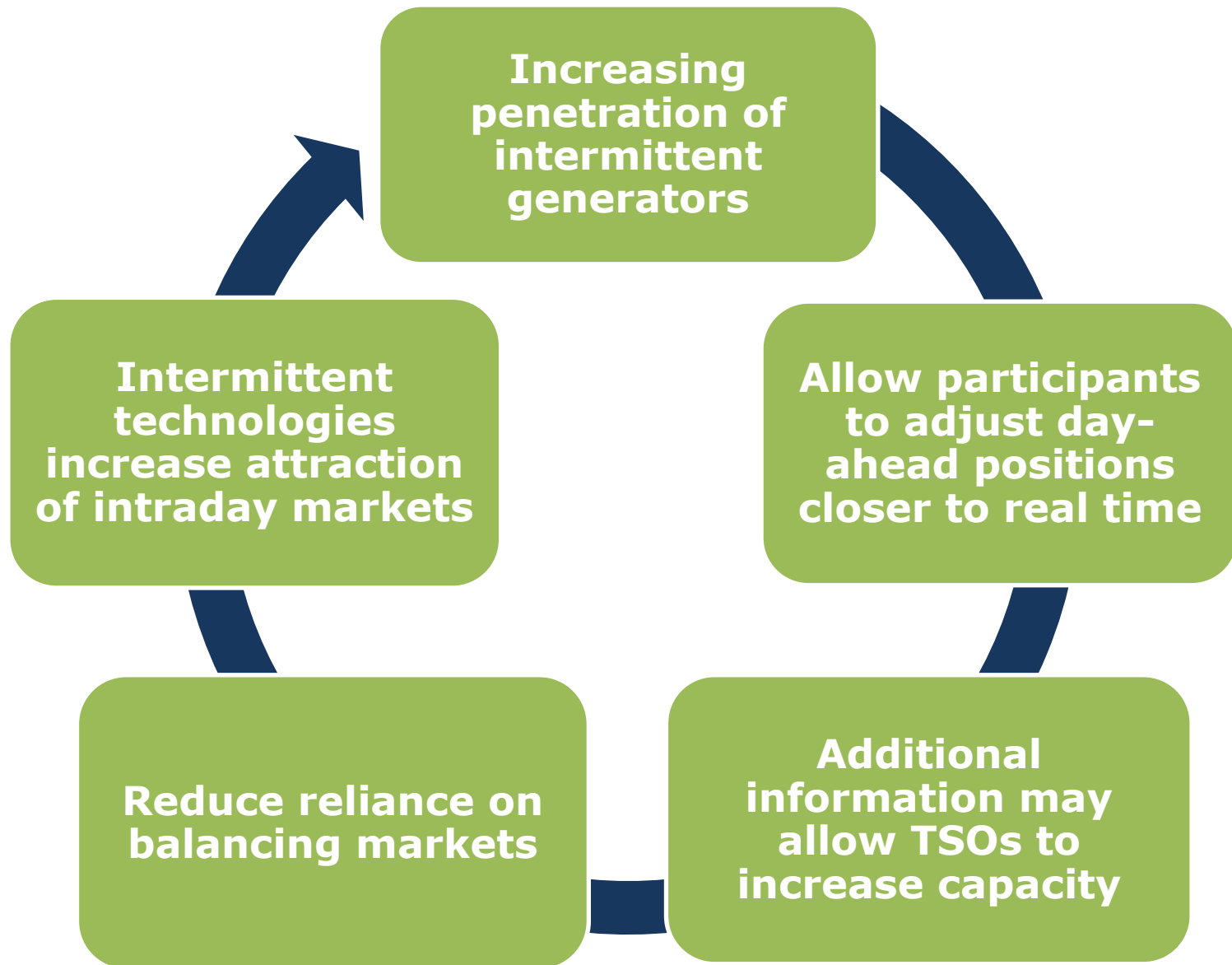
# European Energy Regulators' workshop on intraday capacity pricing

27 October 2014

# Introduction

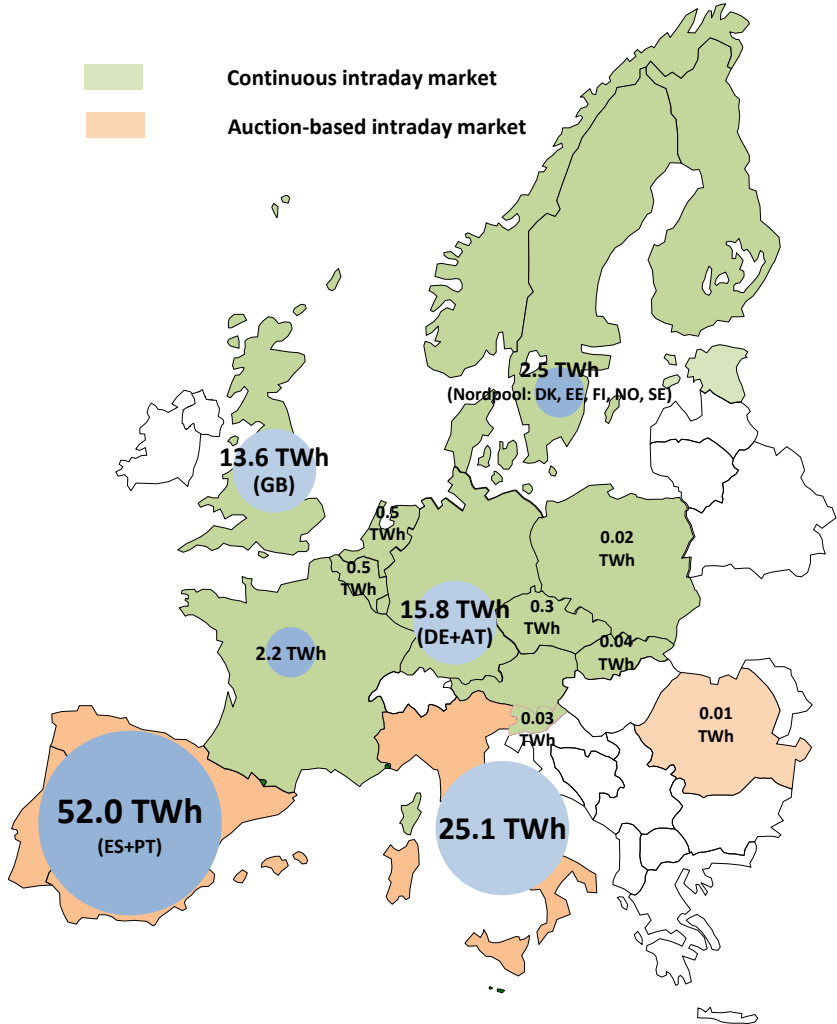
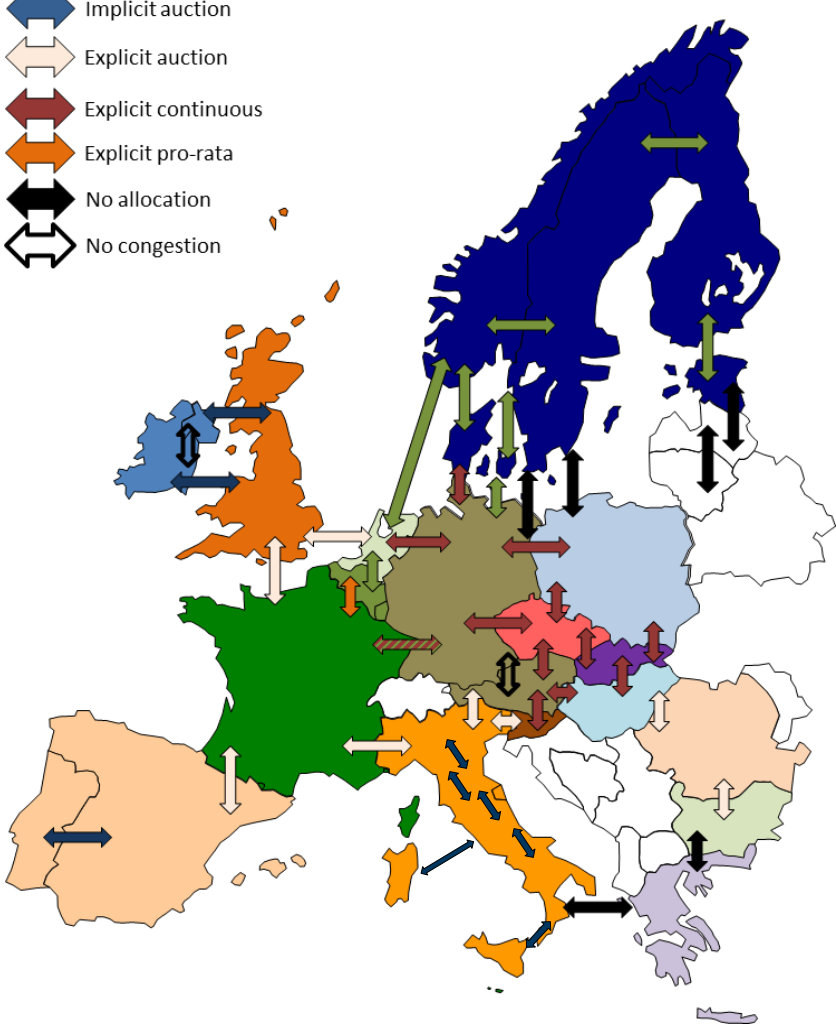
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# Rationale for intraday Markets



# Current intraday markets

- Implicit continuous
- Implicit auction
- Explicit auction
- Explicit continuous
- Explicit pro-rata
- No allocation
- No congestion



# The European Electricity Target Model

- Common rules to integrate European wholesale markets to deliver secure, affordable, and sustainable electricity.
- Key feature of intraday market is to **enable market participants to trade energy as close to real-time as possible** in order to (re-)balance their position.
- **Requires provisions to support continuous implicit trading, with reliable pricing of cross-zonal capacity.**

# Rationale for reliable intraday capacity pricing

**Pricing mechanism makes sure scarce capacity is allocated in an economic and efficient way**

**Provides signal for operation and use of intraday capacity, and investment in new network and generation infrastructure**

**Removes temporal arbitrage & uncompetitive advantage between timeframes**

# Highlighted objectives and requirements for ID capacity pricing in draft CACM

## **Article 3 Objectives of capacity allocation and congestion management cooperation**

- Promote effective competition
- Ensure optimal use of transmission infrastructure
- Respect need for fair and orderly market and fair and orderly price formation
- Providing a non-discriminatory access to cross-zonal capacity

## **Article 49 Objectives of the continuous trading matching algorithm**

- aim at maximising Economic Surplus for single intraday coupling per Trade for Intraday timeframe by Allocating Capacity to Orders for which it is feasible to Match in accordance with the price and time of submission
- repeatable and scalable

## **Article 53 – Pricing of intraday capacity**

- Intraday cross zonal capacity shall be priced and in a manner which reflects Market congestion and is based on actual Orders
- This mechanism shall ensure that the price of the Intraday Cross Zonal Capacity is available to the market participants at the moment of matching the orders
- **All TSOs shall submit a proposal for a single methodology for pricing intraday-cross zonal capacity to all regulatory authorities**

# Overall Objectives

**Allocated intraday capacity efficiently** and allow participants **to trade as close to real time as possible.**

This should:

- A) Ensure competitive market arrangements**
- B) Optimise overall economic surplus**
- C) Provide investment signals in new transmission, generation, and load infrastructure**

Pricing options should:

- A) Promote Liquidity**
- B) Prevent Market Power**
- C) Remove barriers to entry**



## **Transitional measure:**

### **Explicit Access**

- Target model allows direct explicit access to the capacity, subject to the approval by the relevant NRAs and conditions – set out in Articles 61-64 of draft guideline on CACM

## **Additional Arrangements:**

### **Complementary regional auction**

- Target Models states that where there is sufficient liquidity, regional auctions may complement the implicit continuous allocation – set out in Article 60 of the draft guideline on CACM

## **Scope of this work**

- Identify and qualitatively assess options to price intraday capacity in the context of the Target Model and draft guideline on CACM.
- Present and discuss options with stakeholders to assist TSOs to develop a solution.
- Identify areas for further analysis.

## **Not in scope of this work**

- Detailed assessment of options for implementation.
- Identification and recommendation of a solution.
- Transitional or fundamentally non-compliant options.

## Specific guidance for the purposes of this work only: interpreting TM and draft CACM requirements

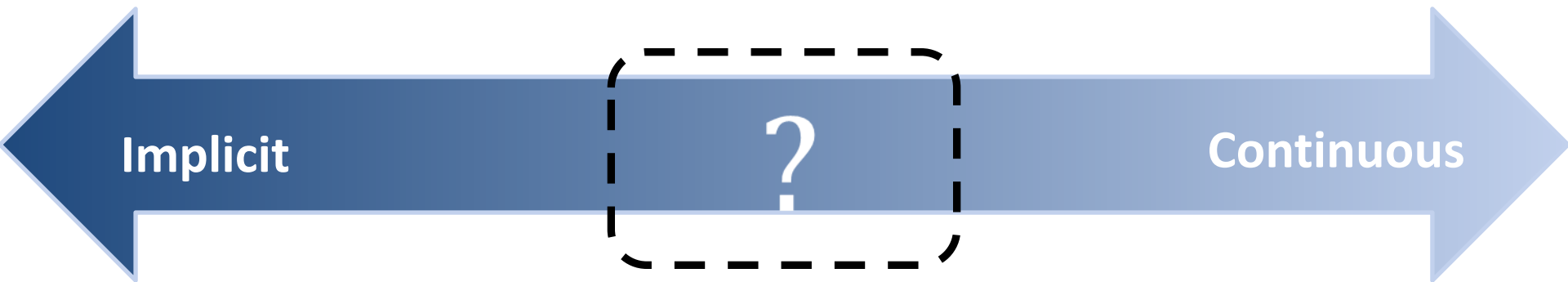
1. First instance and as a priority identify possible options **applying a strict interpretation** of the Target Model and draft CACM regulation which excludes auctions.
2. Second order priority **apply a less restrictive interpretation** that includes possibility for auctions.
3. Again, as a second order priority identify options which **may broadly fit with the requirements** and offer potentially optimal options but which may not be fully compliant.

## Specific guidance for the purposes of this work only: interpreting TM and draft CACM requirements

- 1. Article 3**, interpret ‘...optimal...’ to mean make sure pricing is economic and efficient.
- 2. Article 49**, interpret ‘...surplus per trade...’ to mean make sure pricing is economic and efficient.
- 3. Article 53**, interpret ‘...based on actual orders...’ to mean pricing must use orders actually submitted by market participants.
- 4. Article 53**, interpret ‘...price...available to the market participants at the time of matching the orders...’ to mean market should know in advance, or at time of matching, the price or mechanism for establishing the price, and should not have to pay a price higher than they offer.

# Challenge(s) with intraday capacity pricing

- Not possible to price capacity implicitly in a continuous trading environment in the same way as the DA Auction.
- This fundamental problem can be represented as sliding scale between implicit or continuous approaches.



- Challenge is to relax either the concept of implicit or continuous trading to allocate intraday capacity efficiently and allow trading as close as possible to real time.

# Possible Options to price Intraday capacity

Options closest to implicit and continuous

