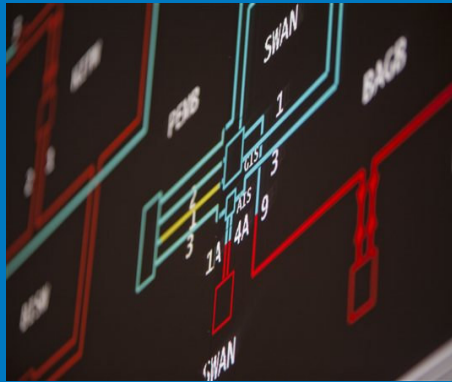


European Balancing Code



Graham Hathaway
JESG
19 Mar 2013

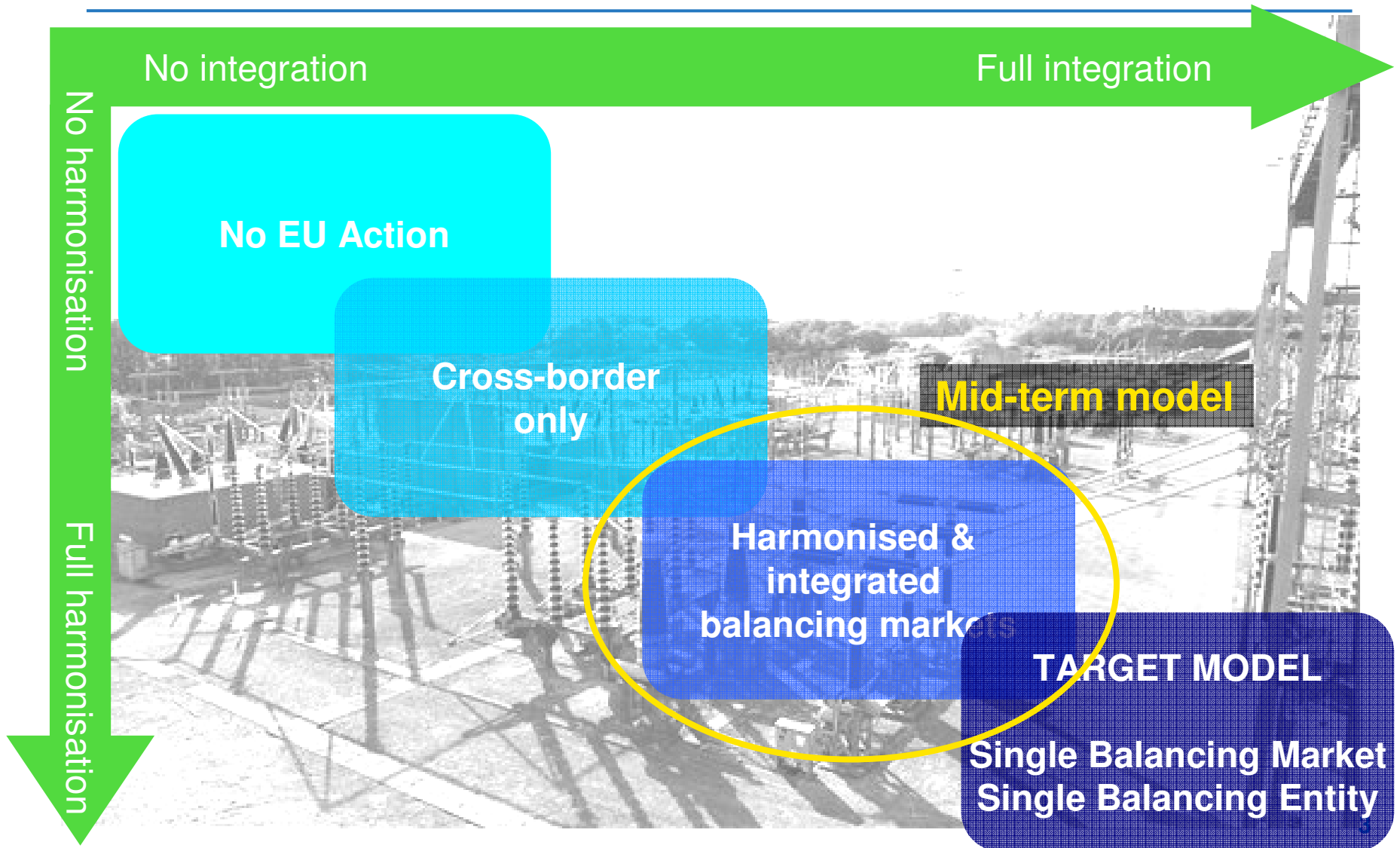
Based on Draft NC EB as 19 Mar 2013

Progress

- Scoping phase of DT started in June 2012 – about 15 meetings
- After final FG EB was available (18.09.12) drafting of EBNC started
- First draft (half) was available beginning of December 2012 (which we shared immediately with EBSAG)
- Official start of EBNC development 01.01.2013
- First “complete” draft was available middle of February 2012

**Open and direct communication with stakeholders
was and still is the guiding principle!**

EU Target Model



Objectives

...to set roles & responsibilities of “electricity balancing” stakeholders

...define minimum standards for competitive balancing market

...develop integrated, harmonised, coordinated balancing regimes

For cross border and market integration issues

Covers all GB balancing activities

European Electricity Balancing Code

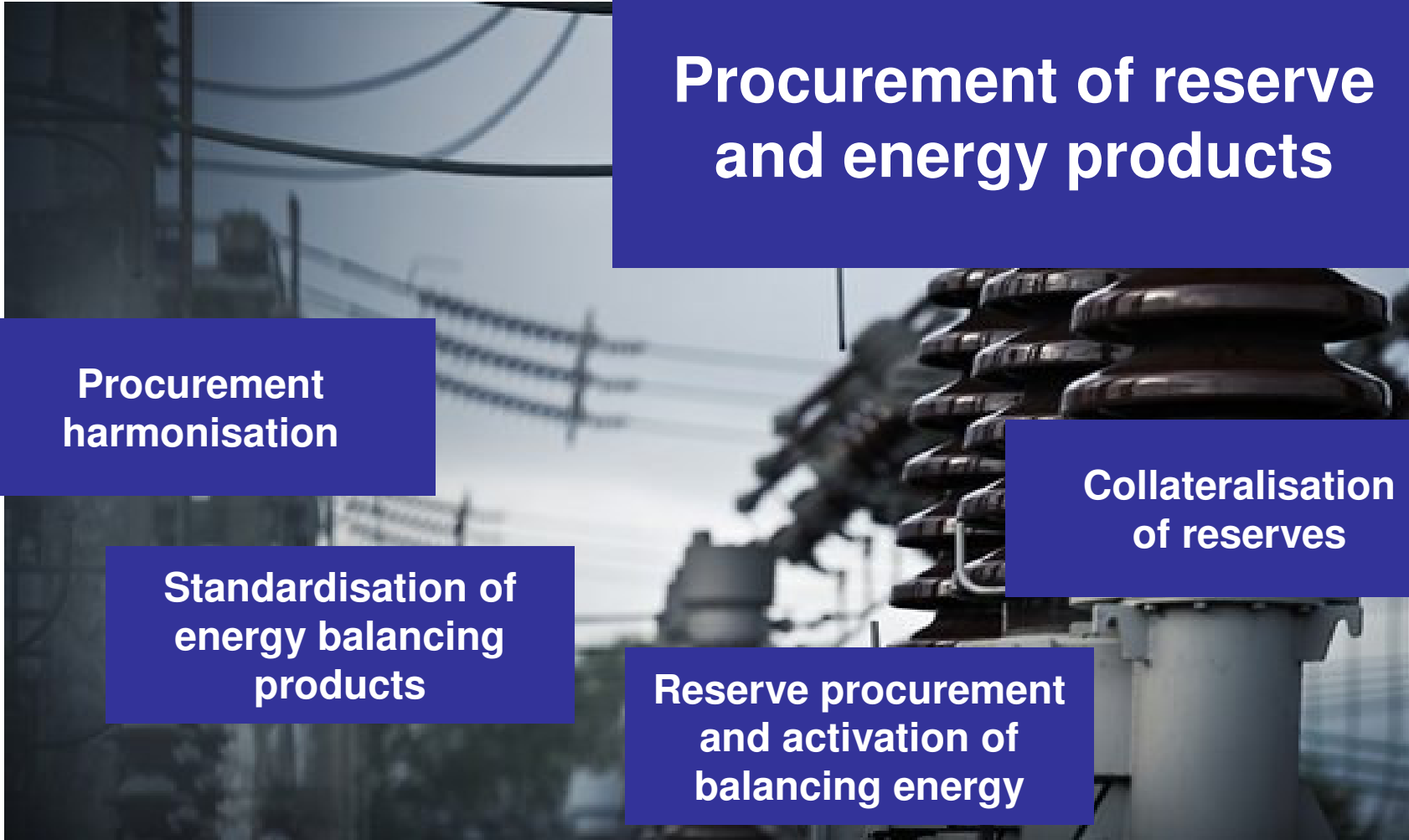


**Procurement of reserve
and energy products**

Capacity reservation on ICs

Settlement
Imbalance and Energy

European Electricity Balancing Code



Procurement of reserve and energy products

Procurement harmonisation

Standardisation of energy balancing products

Collateralisation of reserves

Reserve procurement and activation of balancing energy

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Capacity Reservation on Interconnectors

Reservation for operating reserves

Principle of co-optimisation

Probabilistic

Explicit & implicit

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Settlement
(Imbalance and Energy)

Imbalance Settlement
Pricing = marginal*

Automatic imbalance
netting cross-border

Settlement Period
Duration

Imbalance Volume
Calculation

*Pay as cleared

Settlement

- Settlement of Balancing Energy TSO-BRP (Imbalance Settlement)
- Imbalance Volume takes into account notified position (schedule) of the BRP, as well as allocated volume (metered values/profiling)
- Imbalance price is based on the marginal price of activated balancing energy for the balance area
- Imbalance settlement period – subject to Cost benefit analysis foreseen in FGs

- Settlement of Balancing Energy TSO-BSP (Energy)
- Energy from LFC&R processes (FCR, FRR, RR)
- Settlement of FCR volume left optional
- Settlement volume - Separated per direction (no netted volumes)
- Based on the requested (not delivered) volumes

Governing Responsibilities - TSOs

FWGL gives a clear obligation to TSOs:

“TSOs are responsible for organising balancing markets and shall strive for their integration [...]”

FWGL on Electricity Balancing, p.12 and Art.11, Draft EBNC

FWGL: Obligation to cooperate in procurement of Balancing Energy, however, FGWL do neither stipulate by who and how this is done before the target model is implemented, nor how cooperation is established for the Exchange of Reserves

Proposed solution: Coordinated Balancing Area

Coordinated Balancing Areas - Flexibility

Flexible obligation to cooperate in Coordinated Balancing Areas:

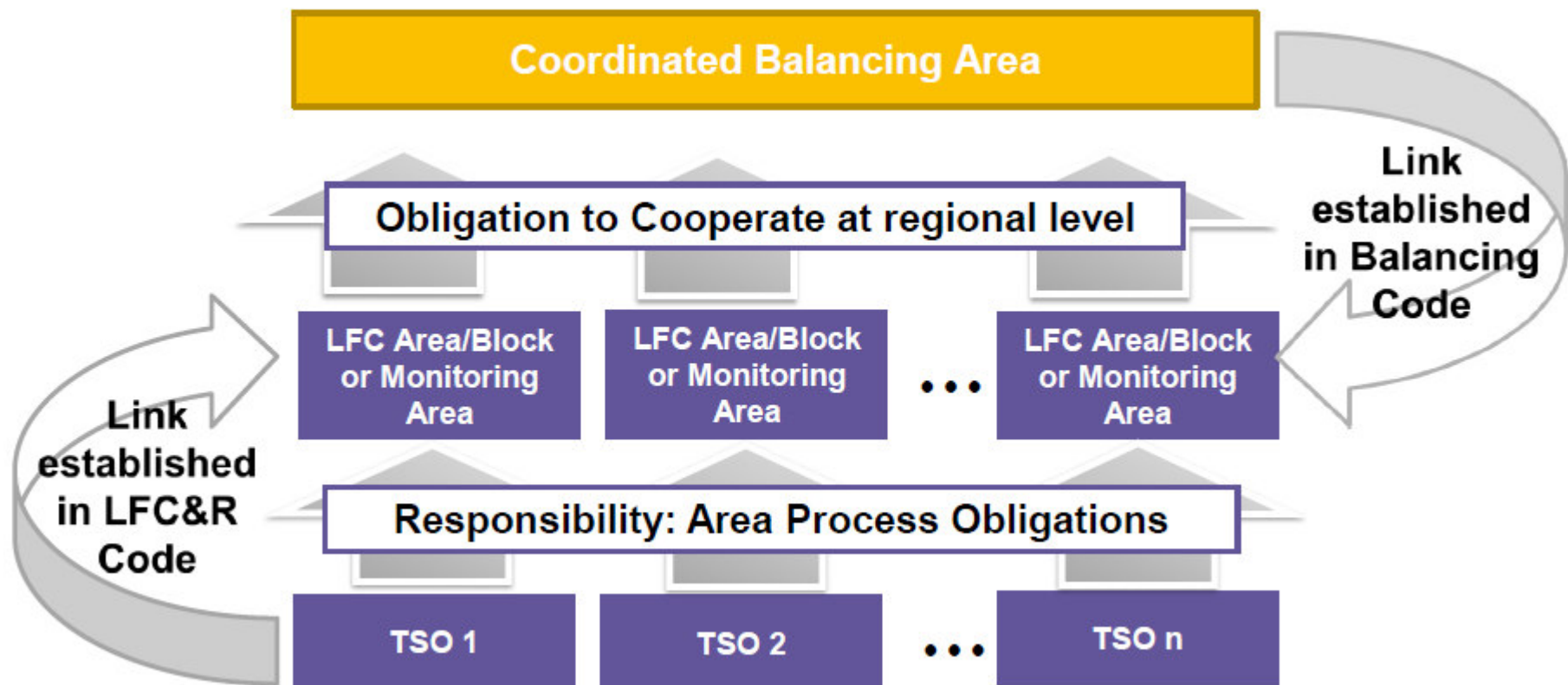
- TSOs can choose the standard product(s) and partner TSO(s) for Exchanging Balancing Services (cp. Art. 10)
- Terms & Conditions shall facilitate achievement of objectives (cp. Art. 13)
- Procurement (of standard product(s)) is harmonised (cp. Chapter 3)

Role of Transmission System Operators / Roles in CBAs

- Responsibility for procuring Balancing Services and Balancing the system efficiently rests with each TSO, also in case of delegation (cp. Art. 11)
- All TSOs cooperating in any Exchange or Sharing of Balancing Services or Netting of Imbalances have same rights and responsibilities (cp. Art. 11)
- Where TSOs are commonly responsible for carrying out a task, TSOs exercise functions commonly, which can be further assigned (cp. Art. 12)

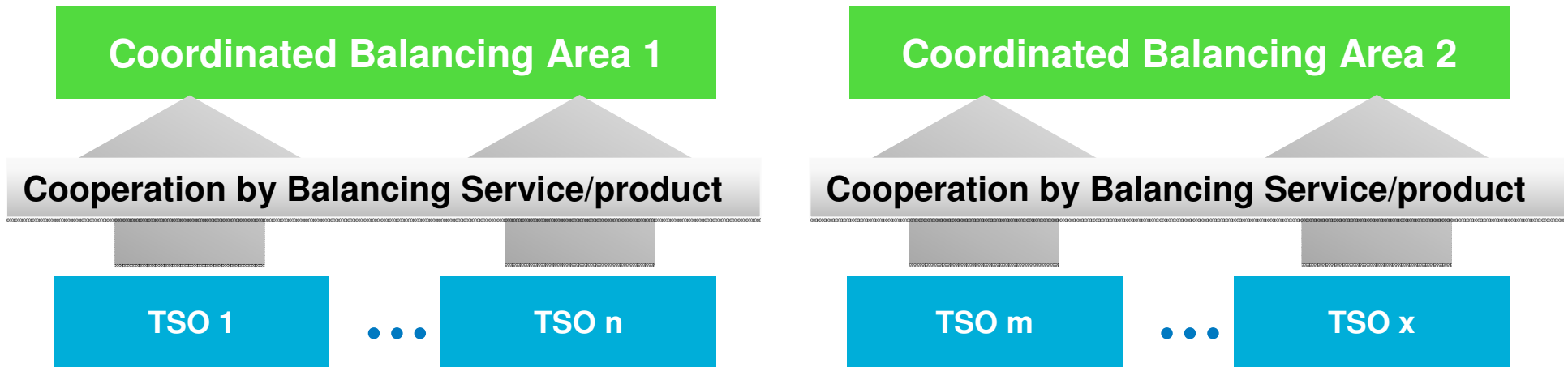
Flexibility is key to reach the FWGL targets and is ensured by not detailing which cooperation is to be done with which TSO

Link to proposed area definitions



Coordinated Balancing Area (CBA)

May exchange Balancing Services between Co-ordinated Balancing Areas, based on the same standard products already exchanged in within them



STANDARD Reserve and Energy Products

Standards products

1- Request time

2- Preparation time

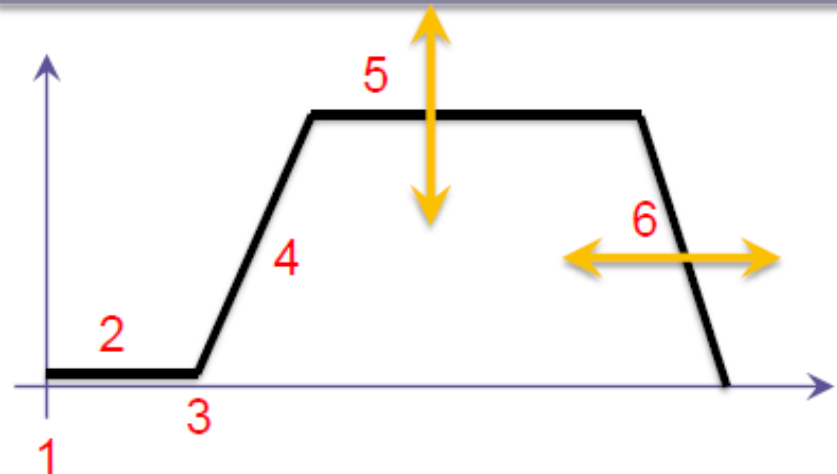
3- Starting time

4- Ramping period

5- Min & max bid size

6- Min & max delivery time

Common at synchronous area level



Specific products

Additional or other characteristics

LFC Area level

Timescales

**Stakeholder Draft
Mar 13**

**Stakeholder
Workshop
Mar 13**

**Public Consultation
June 13**

**Final Code to ACER
Dec 2013**

**European Law
Apr 2014**

**Implementation
2014 to 2020**

Any Questions

Contact

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Other

Balancing Reserves

What is the approach prescribed in the EB NC?

- To describe general Balancing Reserve procurement preconditions applicable both for a single TSO (one area) and for several commonly procuring TSOs (more than one area)
- To use standard Balancing Reserve products even if a TSO procures alone
- Not to bind any TSO to commonly procure with other TSO(s), just to give the possibility
- To bind TSOs to harmonise Balancing Reserve procurement rules if they commonly procure

General preconditions

- Contract for a longer period than 12 months is subject to NRA approval
- Except FCR, the procurement is done separately for upward and downward reserves
- BSP's counterparty is a TSO in its area
- BSP has the possibility to delegate obligation to deliver a Balancing Reserve to other BSP(s)
- Therefore a secondary market with Balancing Reserves is possible