

# **Electricity Balancing Framework Guidelines**

Presentation of Draft for consultation and Initial Impact Assessment

**Presentation of Draft Framework Guidelines** 



## **EBFG** process

- Scoping phase (from April 2011 to December 2011)
  - » 7 NRAs drafting team meetings;
  - » 3 expert group meetings;
  - » 1 workshop in Ljubljana.
- Letter from EC to submit the EBFG (18 January 2012)
  - » EBFG is expected to be finalised by 18 July 2012.
- Consultation phase until 25 June 2012, 12:00

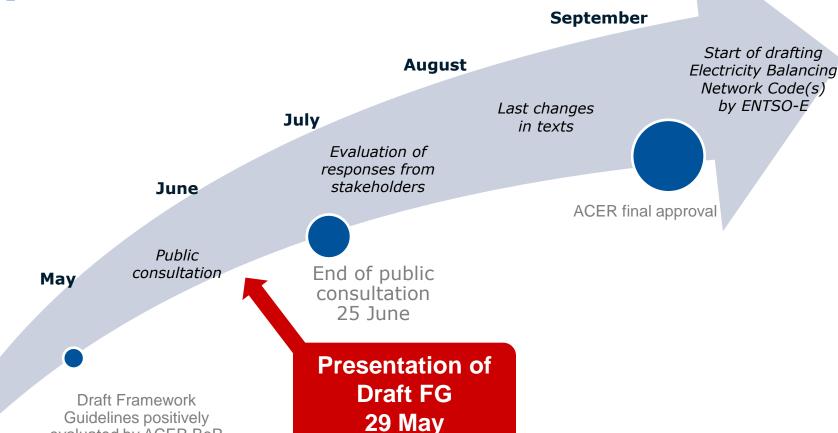
**April** 

#### **ELECTRICITY BALANCING FRAMEWORK GUIDELINES**

# **Expected timeline**

evaluated by ACER BoR

End 2012





## **Scope of Framework Guidelines**

(Invitation letter from EC)

- Roles & responsibilities, including support involvement of consumption;
- Harmonised technical specifications to facilitate offering across balancing areas, compatible products & timeframes, harmonised rules for remuneration of offers;
- Harmonised and non-discriminatory framework for imbalance settlement;
- Rules for the use of cross-border capacities.



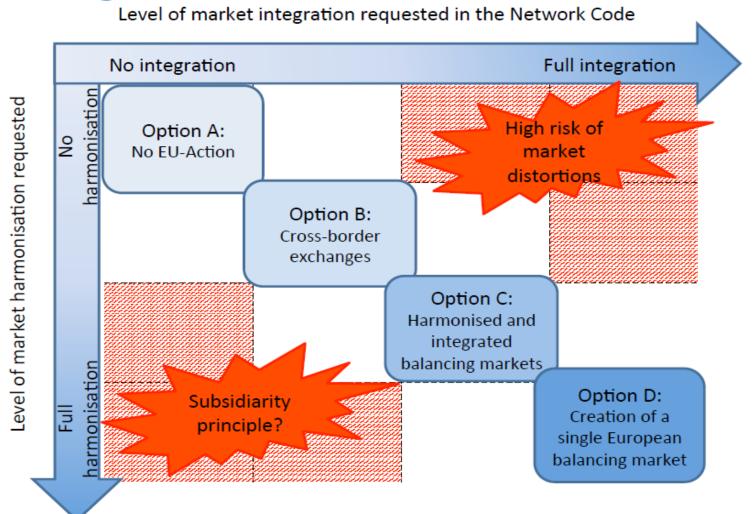
# **Initial Impact Assessment**

### 1. Policy objectives

- Guarantee / enhance operational security
  - How does the proposed option affect short term operational security?
- Improve competition in balancing markets
  - What is the impact of the proposed option on competition?
- Increase social welfare
  - What is the impact of the option on the overall social welfare?
- Facilitate the integration of intermittent generation
  - What is the impact of the option on the integration of IG?
  - » Does it hamper the further IG deployment?



# Integration / harmonization





**OPTION A: status quo** 

- Continuing the current voluntary approach;
- Projects as BALIT and GCC will continue to develop but without any further harmonization at European level
- Possibly a fully integrated balancing market impossible to be achieved



# OPTION B: European exchange with minimum harmonization requirements

- Identification of selected cross border products to be exchanged
- Key concept: exchanges of surpluses both for energy and reserved
- Implementation models:
  - »BSP-TSO
  - »TSO-TSO without common merit order
  - »Imbalance netting
- Minimum harmonisation



OPTION C: European exchange of balancing services by means of a defined (medium/high)level of harmonization of National arrangements

- Key elements harmonized (products, PTU, GCT etc...)
  - Settlement?
- Key concept: every <u>available</u> resource (considering network constraints) is shared in the common merit order – possible use of "margins"
- Implementation models:
  - »Imbalance netting
  - »TSO-TSO with common merit order (activation of replacement reserves and frequency restoration reserves)



**OPTION D: Single European balancing** mechanism – possible creation of "supranational TSOs"

- Market design harmonized (BSP, BRP, procurement and settlement) at least at synchronous area level
- Key concept: fully integrated market
- Main advantages: guarantee that the most efficient resources are used, optimization of reserves through a centralized sizing and procurement, common management of the system also in critical situation



# **Initial Impact Assessment**

**Assessment of policy options** 

Criteria		Option A	Option B	Option C	Option D
Effectiveness	Security of supply	-	+	+	++
	Competition	-	+	++	+++
	Social welfare	-	+	++	++
	Renewables		+	++	++
Time of implementation		++	-		
Efficiency		-	+	++	+
Coherency		-	+	++	+



# **Initial Impact Assessment**

Medium term preferred policy option

- While Option D is considered the most efficient, <u>Option C</u> seems the only possible to be implemented in the mid term
- Responsibility to balance the system remains at National TSOs
- "Margins" should have limited effects on overall efficiency and should progressively decrease
- Amount of procured balancing reserves should progressively decrease
- Other key harmonization areas: products, pricing method, imbalance settlement
- Exchange of reserves less prescriptive
- Reservation of interconnection capacity: only upon a duly detailed cost benefit analysis



# Main objection WHY NOT START FROM OPTION B?

- Indeed Option B may represent a first interesting step, but...
- Not enough guarantees of improving system efficiency;
- Not a real integration, lack of control on actually activated bids;
- Only "most expensive" resources to be made available
- Suboptimal use of balancing resources and transmission capacity
- Insufficient expected increase in social welfare
- Long implementation process (to create compatible crossborder products) with limited gains



# Study commissioned by the EC

- Intended to assist ACER in drafting the Impact Assessment
- Analysis on the feasibility and on technical, economic and social impacts of the identified options
- Quantitative assessment to support strategic decisions
- Main inputs expected at the end of the consultation phase



### **Framework Guidelines**

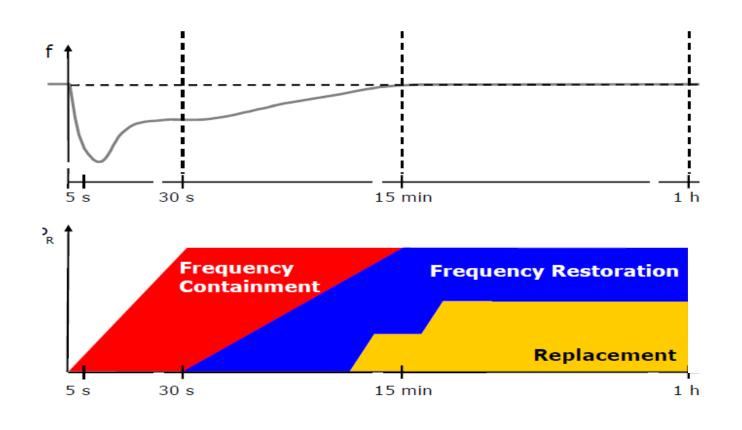
#### THE SCOPE

- General provisions
  - » Scope, links and interdependencies, existing arrangements...
- General principles
  - » NRAs, TSOs, BSPs, BRPs, transparency, reporting
- Procurement of balancing services
  - » Activation and cross-border exchanges of balancing energy
  - » Procurement and cross-border exchanges of <u>reserves</u>
- Reservation and use of interconnection capacity for balancing
  - Underlying grid model, use and reservation
- Balance responsibility and imbalance settlement



### **Common definitions**

Reserves definitions to clarify the provisions of the FG





### **ELECTRICITY BALANCING FRAMEWORK GUIDELINES**

### **Framework Guidelines**

MAIN ELEMENTS: BALANCING ENERGY

#### **Activation of balancing energy**

- Harmonisation of products (with possible local specificities)
- Common principles for the pricing method (marginal pricing) and selection process (Merit Order)
- Harmonisation of intraday gate closure times, as close to real time as possible

#### Cross-border exchanges of balancing energy

- No guideline on Frequency Containment Reserves FCR (Primary Control)
- Step 1: imbalance netting between adjacent control areas;
- Step 2 : coordination to optimise the activation of Replacement Reserves RR;
- Step 3: coordination to optimise the activation of Frequency Restoration Reserves FRR.

### **BASE: TSO to TSO model with a common merit order**



### **Framework Guidelines**

THE PROPOSED ROADMAP

### 3 YEARS Balancing energy from RR

SINGLE POOL OF
BALANCING BIDS WITH A
COMMON MERIT ORDER

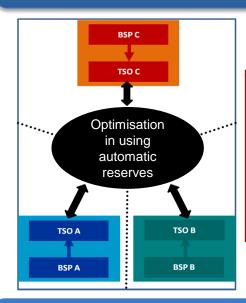
TSO A

TSO B

BSP B

- Possible « margins » for TSOs
- Possible regional approach

**5 YEARS at the latest** Balancing energy from FRR

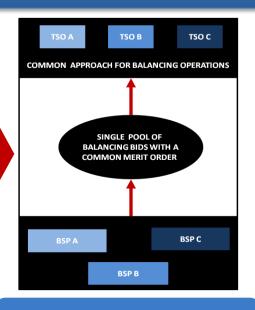


Coordination between TSOs to activate FRR and reduce costs

7 YEARS at the latest Balancing energy from FRR & RR

#### **SECURITY:**

Unless a CBA demonstrates that it is not positive



- No margin for TSOs
- European-wide

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## **Consultation questions**

### PRICING METHODOLOGY

 Do you consider that harmonisation of the pricing method is a prerequisite to establish a TSO-TSO model with common merit order list for balancing energy? Do you support PAC principle?

### **MARGINS**

 Do you think that "margins" should not exceed the reserve requirements needed to meet the security criteria which will be defined in network codes related to System Operation?



# **Consultation questions (2)**

### **IMPLEMENTATION MODELS**

- Do you support to aim at similar target models for FRR and RR? Do you think appropriate to distinguish manually and automatically activated FRR reserves in terms of target model or timing of implementation?
- Do you support the proposed timing for implementation?

### REGIONAL APPROACH

 Do you consider regional implementation as relevant milestones which are to be aimed at?

### **ELECTRICITY BALANCING FRAMEWORK GUIDELINES**

### **Framework Guidelines**

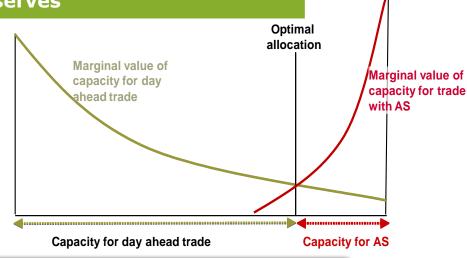
MAIN ELEMENTS: BALANCING RESERVES

#### **Procurement of contracted reserves**

- Harmonisation of products (with possible local specificities)
- Common principles for the procurement process (relation to BSPs)
- Coordination between TSOs for the sizing of reserves according to LF code provisions

### **Cross-border exchanges of contracted reserves**

- If reservation of cross border capacity is needed, it will allowed only where it can be demonstrated it would result in <u>increased</u> overall social welfare
- Subject to CBA performed by TSOs and submitted to NRAs for approval
- No charge for the use of XB capacity for the exchange of balancing energy after IGC



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#### **ELECTRICITY BALANCING FRAMEWORK GUIDELINES**

### **Framework Guidelines**

#### INCENTIVES and BALANCE RESPONSIBILITY

### **Balance responsibility and imbalance settlement**

- Marginal pricing = stronger incentives to participate and to be balanced
- NC to oblige Balance responsible parties (BRPs) to be balanced in day-ahead timeframe
- BRPs to be incentivised to be balanced in real time
- No special treatment for RES
- ENTSO-E to assess (CBA) the need to harmonise imbalance settlement period at Europeanlevel

#### **Transparency**

Consistent with ERGEG's proposal to EC with respect to balancing data

### **Derogations**

- Possible derogations can be granted by national regulators
- Maximum period of 2 years

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# **Consultation questions (3)**

### **PRICING**

Do you support pay-as-cleared / marginal pricing principle?

### **SETTLEMENT**

 Do you consider important to harmonize imbalance settlement? Do you think the EBFG should be more specific on how to do it?



### Thank you for your attention!



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