

EUROPEAN COMMISSION

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## COMMISSION STAFF WORKING DOCUMENT

# EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT

## Accompanying the document

# Commission Regulation (EU) No .../...

# establishing a Guideline on Electricity Balancing

 $\{C(2017) 7774 \text{ final}\} - \{SWD(2017) 383 \text{ final}\}$ 

## **Executive Summary Sheet**

Impact assessment on the Commission Regulation establishing a Guideline on Electricity Balancing

## A. Need for action

### Why? What is the problem being addressed?

Balancing mechanisms are not a solely technical issue ensuring system stability but have significant commercial implications and in turn implications for competition. When TSOs intervene to balance out demand and supply, they often face **insufficient competition for balancing services** due to few available suppliers to secure the balance. The lack of competition results from the manner in which balancing energy prices are set and insufficient use of cross-border transmission capacity (i.e. fragmented national balancing markets). Until today, large disparities exist in balancing energy prices in Europe and efficient rules that allow an efficient use of the cross-border transmission capacity for balancing are missing. The current methods used to activate balancing energy are not exploiting the full potential of the grid and leaves available capacities unused. Current balancing energy prices do not always reflect scarcity and reward flexibility.

#### What is this initiative expected to achieve?

Increasing amounts of renewable electricity, in particular from wind generation, and other changes to achieve a low carbon economy requires that the electricity system is able to integrate more volatile and more distributed production sources. The proposed implementing act is expected to **safeguard a balance between electricity supply and demand at the lowest possible cost** to customers so as to complete the integration of the internal electricity market.

#### What is the value added of action at the EU level?

The proposed measures will addresses the inefficient use of the European electricity transmission network by means of improving coordination, harmonisation and transparency of balancing markets, **maximising the usage of available cross-border transmission capacity** for balancing purposes and enhancing, at the same time, the system security and the integration of electricity markets to **promote competition**. Furthermore, a minimum degree of harmonisation will be achieved to complete the integration of the internal electricity market leaving the implementation of the rules therein to TSOs and NRAs.

## **B. Solutions**

What legislative and non-legislative policy options have been considered? Is there a preferred choice or not? Why?

The functioning of balancing markets could be improved by addressing the causes for the lack of competition for balancing services, namely:

- by harmonising the pricing methodology for balancing energy; and
- by using cross-border transmission capacity for exchanging balancing energy.

To this end, the following policy options are being considered:

- Baseline: no further EU action
  - Option 1: harmonisation of the pricing methodology for balancing energy
    - **Option 1.A:** pay-as-cleared methodology
    - Option 1.B: pay-as-bid methodology
  - Option 2: usage of the cross-border transmission capacity for exchanging balancing energy
    - **Option 2.A:** *only* cross-border exchanges
    - **Option 2.B:** cross-border *and* national exchanges
    - **Option 2.C (discarded):** enforcing regional regulated entities performing the tasks of supranational balancing operators

The assessment has revealed that Option 1.A is a prerequisite for the operationalization of any of the Sub-Options under 2 and that Option 1.A and the Sub-Options under 2 are thus complementary. Although Option 2.C is expected to bring the biggest benefits, there is currently no legal basis in the Third Energy Package to support it and it has therefore been decided not to proceed with this Option.

The assessment showed that **Option 2.B in combination with Option 1.A** is the most adequate choice to achieve the objectives of the proposal. Such preference assumes a pay-as-cleared ('marginal pricing') methodology for balancing energy, a standardisation of balancing products and the establishment of Europeanwide balancing platforms to facilitate the coordination of operational processes between transmission system operators. Such coordination still relies on the concept of local responsibilities within individual balancing zones, which consist of one or more control areas but do not necessarily cover more than one Member State. Thus, the approach is compatible with the current operational security principles.

### Who supports which option?

Most stakeholders are in favour of implementing a pay-as-cleared methodology together with a binding regulation on both cross-border *and* national exchanges for balancing energy. In March 2016, the Florence Forum stressed the importance of balancing markets for a well-integrated and functioning internal energy market and encouraged the Commission to swiftly bring the Regulation establishing a Guideline on Electricity Balancing to Member States.

## C. Impacts of the preferred option

### What are the benefits of the preferred option (if any, otherwise main ones)?

Option 2.B in combination with Option 1.A can deliver **significant welfare benefits** through the more efficient use of the European electricity transmission infrastructure, leading to more liquidity and more competition. The proposed measures will help to channel generation investments to places where they are most efficient and reduce the need to invest in grid extension or backup capacities for intermittent energies.

In Option 2.B, TSOs are not only allowed to net their imbalances, but also to exchange standard balancing products. The exchange of standard balancing products results in a more cost-efficient utilisation of resources: the most expensive of the available units are used for downward regulation, while the cheapest ones provide upward regulation. The combined effect of imbalance netting and cross-border exchange of balancing energy result in savings of **around 479 M€ per year** compared with the baseline. Only option 2.C is able to capture almost all of these benefits, Option 2.A will fall short of doing so.

## What are the costs of the preferred option (if any, otherwise main ones)?

The total costs under Option 2.B in combination with Option 1.A are associated with two key aspects. The first set of costs is associated with the development of a common technical controller, and a settlement process and system for imbalance netting. The second set of costs pertains to establishing European-wide balancing platforms, including provisions for clearing process and algorithm, hosting, maintenance and support. Costs under Option 2.B are between **76.1 and 96.4** M€ of development costs, and between **1.8 and 4.6** M€ as additional annual operating costs. There may potentially be some additional costs for stakeholders through the change of some balancing procedures in the new system, but also cost savings, as there will be more harmonised products and services European wide.

#### What are the impacts on SMEs and competitiveness?

The Regulation will facilitate the participation of renewable energy sources and demand response in the balancing markets. It is expected to boost the future competitiveness of EU technology providers such as the electrical and electronic engineering industry, which consists mostly of SMEs.

#### Will there be significant impacts on national budgets and administrations?

The Regulation will aim to improve coordination among TSOs, by creating more transparent and harmonized rules. This is expected to reduce and simplify the participation in the balancing market.

#### Will there be other significant impacts?

We do not expect other significant impacts.

#### **Proportionality?**

Option 2.B in combination with Option 1.A achieves a balance between improving the overall competitiveness, efficiency and reliability of the electricity markets, enabling the transition towards a low carbon electricity production, while promoting European cooperation and leaving scope for national implementation.

### **D.** Follow up

## When will the policy be reviewed?

The Regulation contains specific provisions to monitor the success of the proposed measures. Based on this monitoring and taking into account further developments of the electricity markets and the establishment of European-wide balancing platforms, the Commission may decide to amend the proposed Regulation in future. Regulation (EC) 714/2009 provides for an explicit right for stakeholders to propose amendments.