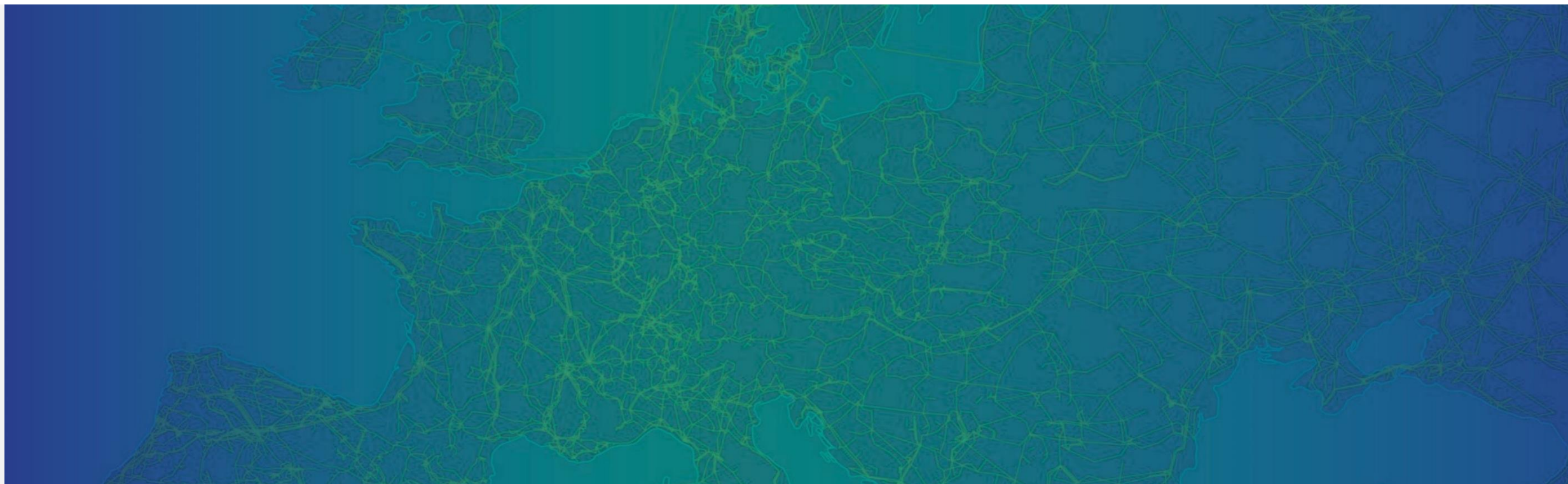


Workshop on Proposal for Amending Pricing Methodology

15 June 2021



Agenda

1. Background and Motivation (5min)
2. Reasoning to introduce adjusted maximum and minimum prices for balancing energy
 - All TSOs' reasoning (15 min)
 - External Report on Justification and Specification of Maximum and Minimum Balancing Energy Prices (30min)
3. Proposed level of maximum and minimum prices for balancing energy (10min)
4. Future Assessment of proposed level of prices for balancing energy (10min)
5. Planning (5min)

Discussion (45min)

Background and Motivation

- The implementation of the **EU target design for balancing energy markets** is strongly supported by all TSOs but means a **significant change** and evolutionary step from the existing local market designs for most Member States, which must be carried out thoughtfully and well-considered in order to succeed.
- Due to developments and observations on balancing energy markets across Europe, all TSOs identified that **adjusted maximum balancing energy prices are needed** for the efficient functioning of the market.
 - TSOs consider that fundamental and transitory risks are associated with significant changes of balancing energy market design
- High probability for exaggeratedly **high balancing energy bids** leading to a huge **risk for balancing responsible parties (BRP)** to be charged with an unusually and unreasonably **high imbalance settlement price**.
 - Imbalance settlement price is intended to reflect the real-time value of energy, which requires that balancing energy prices are true scarcity prices
- All TSOs consider it necessary to propose an **amendment of the Pricing Methodology**, namely an adjustment of the technical price limits and thus the maximum and minimum balancing energy prices.
- Ensure a **smooth transition** to European integrated balancing energy markets

Reasoning to introduce a maximum price for balancing energy (i)

All TSOs' reasoning

- Critical mass of **balancing service providers** (BSP) via the connecting / contracting TSOs on each balancing energy platform needed for **the market to function effectively and efficiently**
 - TSOs do not consider this requirement as fulfilled at the legal deadline for the implementation of the European FRR balancing platforms due to the expected derogations
 - Market will only function maturely after a certain period of time, when all relevant TSOs have joined the respective platforms
- Implementation of the **marginal pricing scheme** is a key feature of the European target design for balancing energy markets
 - Marginal price for activated balancing energy will not only be valid in a single bidding zone, but the same price (cross border marginal price) will be applied for a whole uncongested area, which may consist of several bidding zones for each market time unit
 - Activation of a balancing energy bid in one imbalance price area will set the imbalance settlement price in another imbalance price area.
- TSOs identified that **substantial risks are present** by default when applying the balancing energy market target design according to EB Regulation
- **Imbalance settlement price** shall guarantee a **reliable incentive** for BRPs to remain balanced by procuring the quantities on the energy markets to balance their balancing group.
 - Imbalance settlement price is intended to reflect the real-time value of energy which requires that balancing energy prices are true scarcity prices
 - Balancing energy prices that exaggerate the real-time value of energy do not give correct price signals and incentives to market participants.

Reasoning to introduce a maximum price for balancing energy (ii)

All TSOs' reasoning

- **Heterogeneous structures** of the energy markets in all EU Member States
 - May lead to different behavior of market participants
 - BSPs with market power are present, which poses the risk of market abuse and may lead to exaggeratedly high balancing energy bids.
- Currently defined level of **maximum balancing energy prices** may lead to balancing energy prices that **exaggerate the real-time value of energy** and thus do not give correct price signals and incentives to market participants.
 - BRPs may be driven into bankruptcy through no fault of their own
 - Does not represent an efficient functioning of the market
- **Transitory effects** may result from extensive **changes of local balancing energy market design** and an adaption phase for all market participants as well as TSOs implementing the new market design nationally and cross-border
 - Transitory effects may result in materialisation of the fundamental risks more frequently during the upcoming transition period of several years.
 - Significant risk of materialisation of artificial scarcity situations, e.g. resulting from insufficient liquidity on the platforms caused by an IT issue.
- TSOs consider the **risks identified being uncontrollable and unpredictable** when participating in the cross-border exchange of balancing energy via the balancing energy platforms
 - Risks have to be limited to a reasonable level
 - Adjusted maximum price for balancing energy is a measure that sufficiently mitigates the mentioned fundamental and transitory risks and thus gives comfort to each market participant to anticipate the new market design and connect to the platforms.

Reasoning to introduce a maximum price for balancing energy

External Report on Justification and Specification of Maximum and Minimum Balancing Energy Prices

Presentation of the research study

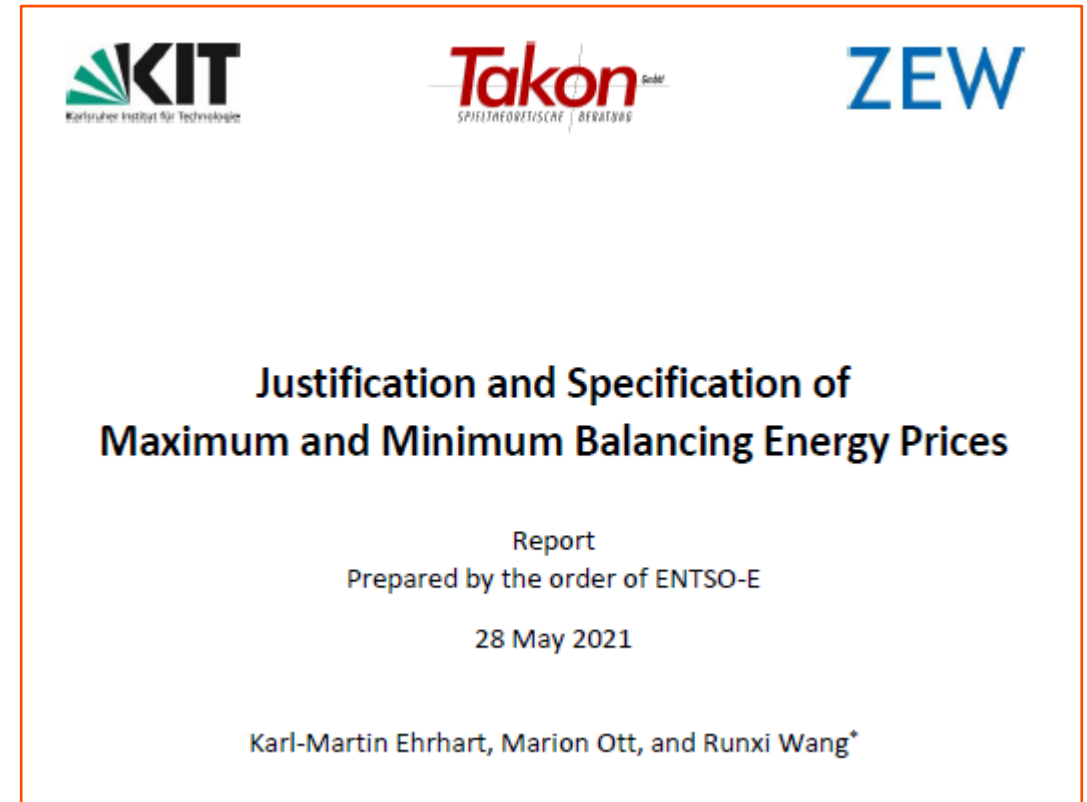
Justification and Specification of Maximum and Minimum Balancing Energy Prices

performed by

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ECON, Karlsruhe Institute of Technology (KIT) and Takon

Dr. Marion Ott

ZEW – Leibniz Centre for European Economic Research



Level of maximum and minimum prices for balancing energy + Timeline

Level of the adjusted maximum and minimum balancing energy prices

- Shall not restrict the rational calculation of balancing energy bids for the BSPs in an unsustainable manner
- Shall limit BRPs' risk of being charged with existential imbalance settlement prices to an acceptable level
- Shall ensure the correct incentives for BRPs to remain balanced by market actions
- Maximum balancing energy price shall be above the maximum clearing prices for DA+ID timeframes
 - Lowest possible maximum balancing energy price of 10,000 EUR/MWh

In general, **free price formation** is possible at the balancing energy market.

- May be affected by a price-inelastic demand side (majority of TSOs are price takers as they will not submit a price-sensitive demand to the FRR balancing energy platforms) and an oligopolistic supply side (limited and small number of BSPs per Member State).

TSO consider slightly **higher price limits than on DA and ID markets** as reasonable.

- Ensures both, the correct incentives to BRPs to remain balanced and a rational bidding calculus of BSPs.
- Trade-off minimises the fundamental and transitory risks from the implementation of the balancing energy market design foreseen by EB Regulation in an appropriate manner.

TSOs consider it as inefficient from a market/welfare point of view to activate bids with a price significantly higher than local VoLL.

- Upper bound representing the maximum financial risk that can be charged to BRPs
- ENTSO-E considers 15 000 €/MWh VoLL as a base case

➤ All TSOs conclude that a **maximum balancing energy price of 15 000 €/MWh** is appropriate and does not unduly limit the efficient functioning of the market.

a) Paragraph 3 shall be amended and be read accordingly:

«3. The maximum price for all balancing energy product bids and the maximum value of the CBMP shall be **15 000 €/MWh**. The minimum price for all balancing energy product bids and the minimum value of the CBMP shall be **-15 000 €/MWh**. »

Future Assessment of proposed level of prices for balancing energy

- All TSOs will **regularly assess** the efficient functioning of the market as included in the proposal for amendment.
 - Proposed timeline respects the accession of a large number of TSOs to the respective platform after the legal deadline.
- The report resulting from the report obligation included in the amendment proposal shall **justify whether the proposed maximum and minimum balancing energy prices should be maintained or amended** for the respective balancing energy product.
 - All TSOs will propose a further amendment as soon as they identify that the applied level either limits BSPs to rationally calculate their bids or the market is mature enough to deal with the risks identified
- **No automatic increase** is foreseen, if maximum price is hit, since TSOs consider fundamental risks to be always existent
 - Connection to maximum intraday clearing prices ensures relations in BSPs' bid calculation and BRPs' balancing efforts

b) A new paragraph 8 shall be included and be read accordingly:

«8. **No later than 18 months after the participation of all respective TSOs in the respective FRR balancing energy platform is mandatory**, including the expiration of all respective derogations according to Article 62(2)(b) EB Regulation, all TSOs shall prepare a report and invite stakeholders to submit comments. The report shall justify whether the maximum and minimum balancing energy prices defined in Paragraph 3 of this Article for the respective balancing energy products should be maintained or amended. The final report shall be submitted to ACER **no later than 2 years after the participation of all respective TSOs in the respective FRR balancing energy platform is mandatory**, including the expiration of all respective derogations according to Article 62(2)(b) EB Regulation. »

c) A new paragraph 9 shall be included and be read accordingly:

«9. If the maximum balancing energy price defined in Paragraph 3 of this Article is reached by the harmonised maximum clearing price for single intraday coupling in accordance with Article 54(1) of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management, the **maximum price for balancing energy shall be set to 5 000 €/MWh higher than the harmonised maximum clearing price for single intraday coupling** in accordance with Article 54(1) of Commission Regulation (EU) 2015/1222.»

Planning

- Start of the public consultation on 02 June 2021
- End of public consultation on 02 August 2021
 - Consultation shall be at least two months according to Art. 10(2) EB Regulation
 - Stakeholders' Feedback is welcome even before consultation deadline
- Submission of finalised proposal for amendment foreseen by End of August at latest.
 - 6 months decision period by ACER
- Accession of TSOs to FRR platforms in Q1 2022
 - aFRR: 02/2022
 - mFRR: 03/2022

Discussion