ENTSO-E BIDDING ZONE TECHNICAL REPORT

15/10/2018



ENTSO-E **BIDDING ZONE CONFIGURATION TECHNICAL REPORT 2018**



Regular Reporting on Bidding Zone Configuration 15 October 2018



What is it?

> Part of regular reporting (every 3 years) on the bidding zone configuration

What is IN it?

- > Transparent & factual information on congestions in the whole European grid
- > **Data** from 2015 to 2017 on congestions & unscheduled flows AND on costs of congestion
- **Evolution** of congestions in the next 10 years What is NEW?
- Covers whole Europe
- > Geographical location and frequency is reflected in maps/list

What is <u>NOT</u> in Technical report?

> No **recommendation** nor conclusion on the bidding zone configuration change (*≠* a bidding zone review)



Technical report structure





Transparent information on congestions in European grid



Congestions: zooms central Europe (CCDA 2015)



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Congestions: zooms central Europe (CCDA 2016)





Congestions: zooms central Europe (CCDA 2017)



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Congestions: zooms Spain (D-1, 2015-2017)



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Congestions: zooms Italy (RT, 2015-2017)



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Main findings: congestions

- For the Capacity calculation for the purpose of day-ahead allocation timeframe congestions represented by active constraints are observed on a limited number of grid elements for most cases on or close to the borders.
- In the D-1 and Real time timeframe, the congestions become considerably more widespread, occurring both internal to the bidding zones and at the borders.
- There are many low frequency congestions and relatively few high frequency ones.



Flows not resulting from the capacity allocation (loopflows and unscheduled flows)



- Commercial transactions are physically realised by power flows distributed in the grid as per the law of physics
- Those power flows also include loopflows and unscheduled flows which cannot be ignored

Main findings: Flows not resulting from capacity allocation

- The highest magnitude of the indicator can be observed on borders between FR-DE, DE-PL, PL-CZ, CH-FR, CZ-AT, BE-FR, NL-BE, DE-NL, SK-HU, DE-CH and HU-SHB
- From the general perspective the magnitude of the reported flows 'not resulting from the capacity allocation mechanisms' are generally stable over the 3 years reported.



Transparency on costs related to congestions



Main findings: Congestion income and firmness costs

- **Congestion income -** FR, GB and IT have congestion income considerably above other countries, followed by SE, DE and NL.
- Total **financial firmness costs** are dominated by curtailments caused by emergency grid security or safety issues, with the exception of force majeure curtailment on the DE-DK border in 2017. No trends can be identified. Overall GR and IT had the highest financial firmness costs.
- Total physical firmness costs: the highest costs are incurred by DE and GB. For PL, PT, ES and NL physical firmness costs are also significant, though of lower magnitude. Results show significant variation year on year and no trends are identified.

What is next?

- > TR and ACER's Market Report provide facts for ACER's assessment of the efficiency of bidding zones.
- If inefficiencies are detected, new bidding zone review may be launched to develop recommendation on bidding zones reconfiguration.





