

Frequently Asked Question on ENTSO-E Technical Report 2018

WHAT IS THE BIDDING ZONE TECHNICAL REPORT?

The Technical Report provides transparent and factual information on congestions and its costs in the whole European grid for the period of 2015-2017.

WHY ENTSO-E IS PRODUCING THIS REPORT?

The Technical Report is part of the implementation of the CACM regulation. According to this regulation, ACER is required to assess the efficiency of the BZ configuration every three years. ACER requested ENTSO-E to prepare the Technical Report in January 2018. In parallel, ACER analyses the efficiency of the bidding zone configuration from a market point of view. Based on the results of both analyses, new bidding zone review can be launched.

WHY THE TECHNICAL REPORT IS IMPORTANT?

Technical Report increases the overall transparency on the grid constraints and TSOs congestion management processes. It provides facts and figures to facilitate understanding of the efficiency of the bidding zones from the grid perspective.

IS IT THE FIRST ENTSO-E TECHNICAL REPORT?

No. ACER already requested a Technical Report under the early implementation of the CACM Regulation before it entered into force. ENTSO-E produced its first Technical Report in 2014 covering only central EU.

WHAT IS NEW IN THE CURRENT EDITION OF THE TECHNICAL REPORT?

It is the first report executed under CACM Regulation. It contains information for the whole of Europe (even beyond EU). Details on the frequency of congestions and on their location are for the first time published.

WHAT TIMEFRAMES ARE CONSIDERED WHEN REPORTING CONGESTIONS?

Congestions are reported for the three following timeframes:

- Capacity calculation for the purpose of day-ahead allocation (CCDA). In this timeframe the main idea is to report grid elements limiting cross-zonal exchanges. Thus, grid elements limiting cross-zonal capacity which appeared as active market constraints in the Day Ahead (DA) capacity allocation are reported
- Day-ahead operational planning (D-1) timeframe covers grid elements which appeared to be congested during the short-term operational planning based. This D-1 congestion forecasts takes place after the DA market but before application of remedial actions (however, it is not excluded that some measures with longer lead times are taken into account)
- Real-time system operation (RT). In this timeframe congestions identified up to one hour before time of operation are reported.

WHAT ARE THE MAIN FINDINGS OF THE TECHNICAL REPORT?

Congestions in the European grid i.e. their frequency and location vary within the different timeframes.

- In the CCDA congestions are of higher frequency compare to D-1 and real time (RT). Congested grid elements appear mainly on borders and close to the borders.
- In the D-1 stage congestions are of lower frequency, however many grid elements are reported as congested, both internal and cross-border. This indicates the level of operational challenges faced by the TSOs.
- In the close-to-real time period (up to 1 hour before) the congestions are of lower frequency than in the D-1, however still many congestions are present despite adequate process on D-1 stage.
- The number of ICS events is very low, indicating that despite operational challenges faced by TSOs on D-1 and H-1 stage, TSOs are able to ensure secure system operations.

Power flows not resulting from capacity allocation remained stable over the last 3 years and the highest values are found on the following borders: FR-DE, DE-PL, PL-CZ, CH-FR, CZ-AT, BE-FR, NL-BE, DE-NL, SK-HU, DE-CH and HU-SHB.

The highest **congestion income revenues** are found in FR, GB and IT followed by DE and SE. Main driver of the total **firmness costs** are physical firmness costs considering the costs of countertrade and redispatch, where the highest costs are found in DE and GB. The highest financial firmness costs are in IT and GR - however these costs are of lower magnitude compare to physical firmness costs.

ARE THE FINDINGS DIFFERENT FROM THE 2014 TECHNICAL REPORT?

No. The findings are similar; however, this report includes more detailed information, with breakdown of congestions for the different market timeframes and more precise location.

WHY SOME COUNTRIES ARE COLOURED IN DIFFERENT COLORS – PINK, GREEN OR BLUE?

Pink colour means that data for this country is not available, most often due to national confidentiality restrictions.

Green colour means that there is no relevant process established, and therefore data cannot be collected (for example, there is no DACF process in Nordic and Baltic regions).

Blue colour for France indicates that the DACF data for France is not comparable with the rest of the countries as France provided only congestions solved by costly remedial action. Congestions managed by non-costly measures (for example topology switching) were not displayed.

Grey colour means that data has not been provided by country or is out of geographical scope of the Technical Report.

GB is presented in separate map, because real-time and day-ahead data is combined.

WHAT ARE THE COLOURED BUBBLES ON THE MAPS?

Due to confidentiality restrictions in national legislation, some countries cannot provide the precise geographical location, therefore coloured bubbles represent the single or group of congestions. The colours of bubbles, same as for lines, represent the frequency of congestions assessed in hours per year: light blue is very low frequency (close to zero), dark red means 35 % and higher. The precise congestion frequency is listed in Annex 1 of the Technical Report.

WHY REALTIME TIMEFRAME IS DIVIDED IN TWO MAP SETS "UP TO 1 HOUR" AND "ICS"?

During the data collection phase, it became apparent that some TSOs could not collect inclusive data up to one hour before real time or could not extract this data from their IT systems in a given time. For this reason, two sets of maps are shown. ICS refers to the ENTSO-E 'Incident Classification Scale Methodology.

The reported "ICS events" are those with ICS code ON1 (meaning N-1 violation) and ON2 (meaning N violation).

IS THE BIDDING ZONE TECHNICAL REPORT CALLING FOR A REVIEW OF THE CONFIGURATION?

The purpose of the Technical Report is to show transparently the current situation with respect to congestions, as well as entailed costs and revenues. In that respect, no recommendations are made. However, ACER can use the information provided in this report, jointly with ACER Market report being prepared in parallel by the Agency, to launch a new Bidding Zones review based on the findings.

WHAT WILL THE TECHNICAL REPORT BE USED FOR?

In terms of legal processes, ACER is running a parallel market report on bidding zone configuration. Based on both reports, ACER is able to assess the efficiency of bidding zones. If either the Market or

Technical Report reveals inefficiencies in the bidding zone configuration, ACER may request that TSOs launch a review of an existing bidding zone configuration. A bidding zone review (if launched) shall give recommendation on bidding zones reconfiguration. Several parties can request a bidding zone review launch.

The Technical Report is however useful on a wider basis as a reference point for facts & figures on the state of the European grid and its congestions. A lot of very useful data and national comments can be extracted from the report.

IS ENTSO-E GOING FURTHER THAN ITS LEGAL OBLIGATIONS WITH THIS TECHNICAL REPORT?

This report shows ENTSO-E and TSOs commitment to enhance transparency and reflect the reality of the grid. The report shows where the bottlenecks are, and the costs related and raise awareness of the current limitations of the grid. The existence of these grid constraints increases the need to have adequate capacity calculation processes that do not dismiss the physics.

ENTSO-E and the TSOs are committed to implement capacity calculation methodologies that reflect the reality of the grid and ensure proper and efficient coordination at a regional level (CACM), while transparently reporting on the grid limitations.