

**Statement of Facts**  
**regarding the**  
**Splitting of the German-Austrian Electricity Bidding Zone**

3/29/2019

Given the well-developed transmission capacities between Germany and Austria, a common bidding and electricity pricing zone was established back in 2002 to achieve sustainable competitive electricity prices in both countries. The common bidding and electricity pricing zone of Germany and Austria was a guarantor for more than 15 years of uniform electricity prices and unlimited electricity trading between Germany and Austria, serving as the foundation for successful cross-border market integration and thus enhancing prosperity. The successful German-Austrian model has the highest liquidity of any such market in the EU and has been an important model for EU legal provisions that have been developed in recent years to create an internal energy (i.e. electricity) market for the EU.

Following a complaint filed by the Polish regulator Urząd Regulacji Energetyki (URE) with the EU Agency for the Cooperation of Energy Regulators (ACER) in 2014, ACER analyzed possible transmission capacity congestion at the German-Austrian border. On 17 November 2016, ACER concluded that the existing German-Austrian bidding zone should be split and decided that the capacity calculation region has to be changed (CCR Decision<sup>1</sup>). ACER justified this decision by noting that the cross-border trading between Germany and Austria leads to structural congestion at the German-Austrian border, but also to structural congestion at other places in the European transmission system (DE-PL, DE-CZ).<sup>2</sup> It further argued that this congestion could only be remedied by splitting the bidding zone.<sup>3</sup>

The CCR Decision obliged the affected transmission system operators to introduce a capacity allocation method (pursuant to the CACM Guideline<sup>4</sup>) at the border.

Phase-shifting transformers were subsequently installed at the German-Polish and German-Czech borders, substantially alleviating the problems in the grids of those countries. Parallel to the preparations for the actual splitting of the German-Austrian bidding zone, a bidding zone review was conducted at European level as part of the CACM process of European Network of Transmission System Operators for Electricity (ENTSO-E). On 5 April 2018, the review concluded that the results of the analysis did not suffice to recommend a change in the bidding zones and that a change to the bidding zone borders could therefore NOT be recommended.

Nonetheless, the two affected energy regulators Bundesnetzagentur (BNetzA) and E-Control Austria (E-Control) agreed on 15 May 2017 to limit the long-term capacities at the border to 4,900 MW<sup>5</sup> from 1 October 2018 onward.

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<sup>1</sup> Decision of the Agency for the Cooperation of Energy Regulators No 06/2016 of 17 November 2016: [http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Pages/Individual-decision.aspx](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/Individual-decision.aspx).

<sup>2</sup> CCR Decision, margin reference number (56).

<sup>3</sup> CCR Decision, margin reference number (57).

<sup>4</sup> Guideline on Capacity Allocation and Congestion Management: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R1222&from=EN>.

<sup>5</sup> Long-term transmission rights (LTR) with long-term allocated capacities included (LTA-inclusion).

In the course of reaching agreement, both regulators communicated publicly multiple times that no major price deviations were expected to result from this split.

The agreement has the character of a recommendation to the two transmission system operators to adopt this capacity constraint in the application of the congestion management rules.

It was also agreed that the Austrian Power Grid (APG) would set aside, in Austria and at Austria's expense, reserve power station capacities of at least 1.0 GW (or 1.5 GW starting 1 October 2019) for redispatching<sup>6</sup> for the German market to support cross-border capacities. Any additional capacities generated by grid expansion should be made available for trading.

Notwithstanding the agreement with BNetzA, E-Control took all legally possible steps against the splitting of the common bidding zone resulting from the ACER decision<sup>7</sup>. An appeal procedure referenced T-333/17 is currently pending at the European Court of Justice (ECJ).

The split of the German-Austrian bidding zone was completed as of 1 October 2018. The trading results achieved have shown so far surprisingly large price effects, contrary to predictions. The price differences between the now split markets are much higher than foreseen by the pre-split forecasts. The price differences on the futures market and the day-ahead and intra-day markets vary but basically speaking, significant price differences do exist on all three markets, with much higher prices observed in each case for Austria as a place of delivery. The differences on the futures market are currently about EUR 4/MWh. In the interim, the price differences amounted to as much as EUR 9/MWh in January 2019. The reasons for these significant price increases for Austrian electricity customers are four-fold: the capacities actually available at the border, which are not always at 4,900 MW; the significantly reduced liquidity for the Austrian market (compared to the liquidity in the former common market); the higher hedging risk for market participants; and the actual capacity costs. These price differences occur against the backdrop of generally rising electricity prices.

### Congestion at the German-Austrian border?

The analysis of ENTSO-E in connection with its bidding zone review did not yield sufficient evidence that shifting the bidding zone border would be able to improve the congestion situation, as ACER initially assumed. Moreover, in its Bidding Zone Configuration Technical Report 2018<sup>8</sup> of 15 October 2018, ENTSO-E also indicated the grid elements in Europe in which congestion actually occurred by the respective time horizon examined for the years 2015 - 2017.

The following graphs show the capacity calculation results for the day-ahead market for the years 2015 - 2017 for the region Central Europe (CE). Ellipses mark the identified congestions. For all three years, multiple congestions were observed in German grid areas. Congestion at the German-Austrian border was not observed for any year.

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<sup>6</sup> Redispatching refers to interventions by the transmission system operator to stabilize the grid in cases where it is not physically possible to reliably transmit the electricity flows desired by the market. It consists primarily of ordering adjustments to the injection by power plants and the use of grid reserve capacities or also of countertrading.

<sup>7</sup> Complaint against ACER CCR decision and an action for annulment against the ACER Board of Appeal decision.

<sup>8</sup> [https://www.entsoe.eu/Documents/Events/2018/BZ\\_report/20181015\\_BZ\\_TR\\_FINAL.pdf](https://www.entsoe.eu/Documents/Events/2018/BZ_report/20181015_BZ_TR_FINAL.pdf) and [https://www.entsoe.eu/Documents/Events/2018/BZ\\_report/181015\\_PUBLIC\\_TR\\_Annex1\\_list\\_of\\_congestions.pdf](https://www.entsoe.eu/Documents/Events/2018/BZ_report/181015_PUBLIC_TR_Annex1_list_of_congestions.pdf)

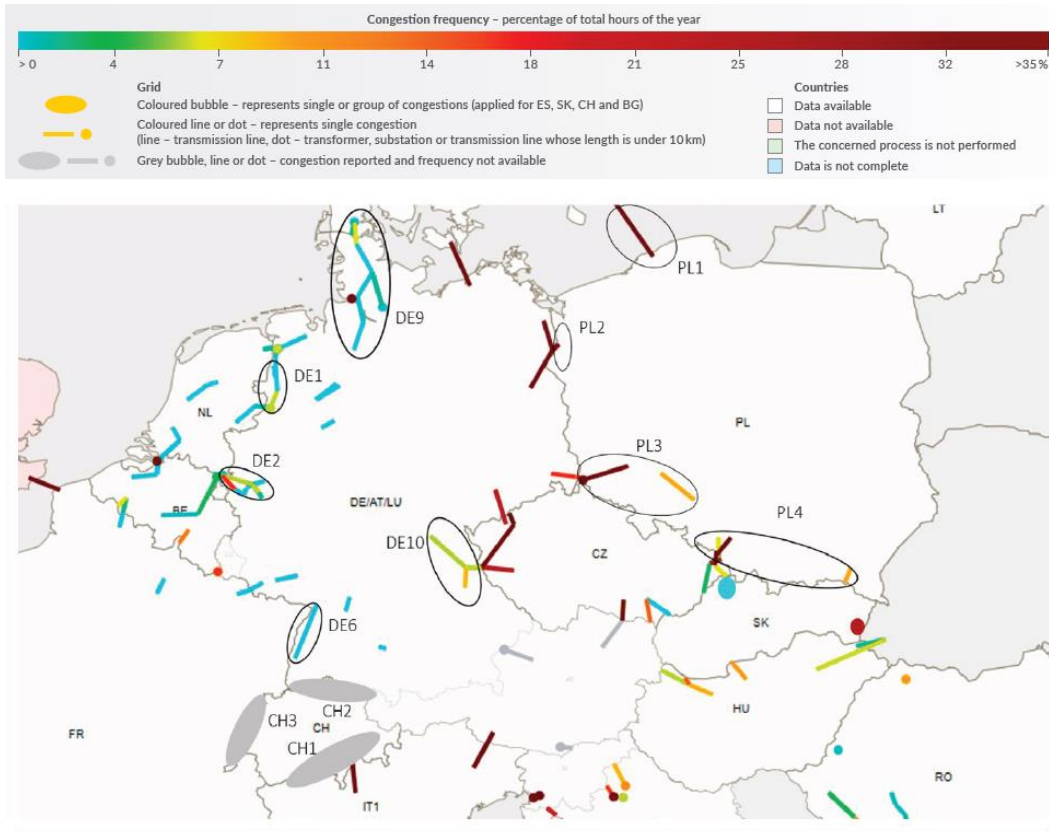


Figure 1: CCDA 2015 Central Europe, ENTSO-E Bidding Zone Configuration Technical Report 2018.

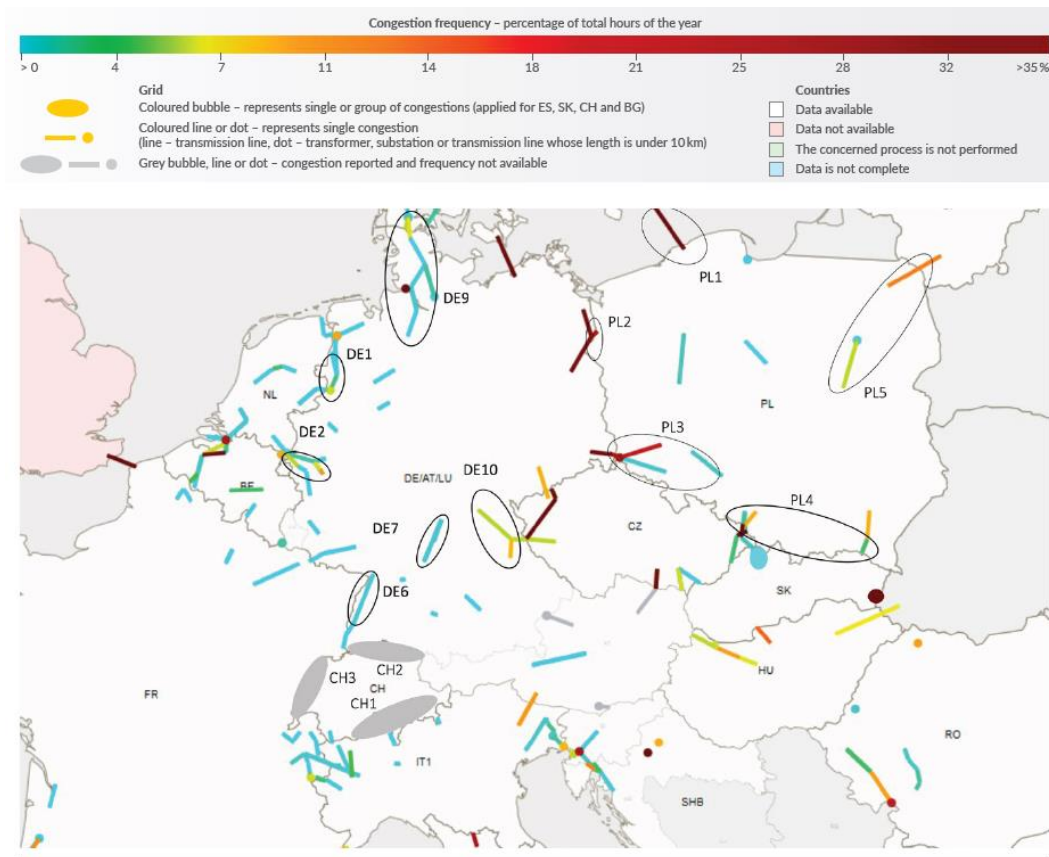


Figure 2: CCDA 2016 Central Europe, ENTSO-E Bidding Zone Configuration Technical Report 2018.

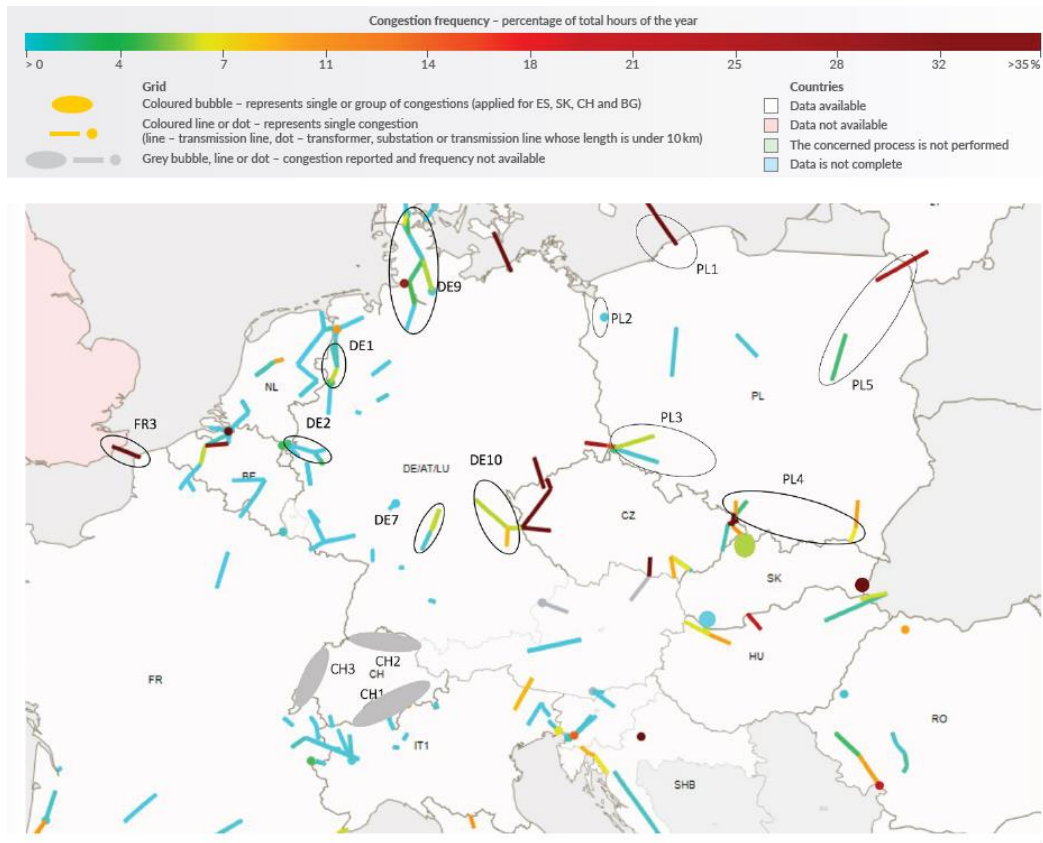


Figure 3: CCDA 2017 Central Europe, ENTSO-E Bidding Zone Configuration Technical Report 2018.

Moreover, from the Grid Development Plan and the Scenario Framework of the German Transmission System Operators (hereinafter: German TSOs)<sup>9</sup>, it can be deduced that structural congestions occur due to the existing requirements to transport large amounts of wind energy from northern to southern Germany and that the German TSOs would like to remedy these bottlenecks by undertaking necessary grid expansion projects. In the most recent draft, the German TSOs talk about an additional requirement, above and beyond the Federal Requirements Plan, for DC underground cables with a power rating of 4 GW and a length of 1160 km<sup>10</sup>. However, the German TSOs and also the distribution network operators see themselves facing the problem of major public opposition to the grid expansion measures, leading to significant delays in expansion often lasting many years. The accompanying steady expansion of non-controllable renewables-based power generation and the resulting mounting demands on the electricity grids result in a massive backlog of efforts to strengthen the German electricity grid. German policy makers have recognized this problem, which can also lead to problems with the security of supply in the medium term. To date, however, they have not found an adequate way to connect the demands and goals of the energy transition and the nuclear energy moratorium, on the one hand, with the security of supply and the idea of the EU internal market, on the other hand.

<sup>9</sup> <https://www.netzausbau.de/home/de.html>.

<sup>10</sup> <http://netzentwicklungsplan.de/de/netzentwicklungsplaene/netzentwicklungsplan-2030-2019>.

## Redispatch within Germany

As political requirements cannot change the physical circumstances of the electricity grid, TSOs must at least cooperate closely since joining together to form the European Union for the Coordination of Transmission of Electricity (UCTE) and coordinate their activities with each other in order, for example, to avoid a large-area blackout and to assure a constant frequency. The need for close regional coordination has further increased due to the large number of regulatory requirements, including, among others, the EU regulations and European network codes as well as the growing Europe-wide use of fluctuating generation sources. TSO Security Cooperation (TSC)<sup>11</sup> is a cooperation initiative of eleven European TSOs to improve the security of the extra-high voltage grids throughout Central Europe. It has, for example, a shared IT platform where all participants are simultaneously provided with real-time information and security calculations. This exchange of information is intended to enable the grid operators to coordinate their work more effectively with each other and to facilitate the further integration of renewable energies and increased cross-border trading in and transmission of electricity. Thus, TSC could and should help to reduce costly redispatching.

TenneT is the TSO for the largest control area in Germany, which extends from the North Sea to the German-Austrian border. In its annual “market review”<sup>12</sup> TenneT published, among other things, information on the costs and volumes of redispatching actions taken by TenneT, noting that 2017 saw them top the EUR 1 billion mark for the first time.

The data released by TenneT clearly shows the correlation between high wind feed-in in the north in the winter months and redispatch requirements. During the unusually frigid cold spell in January 2017, TenneT had to resort much more often than usual to the grid reserve capacities, namely up to 3 TWh a month. The TSO said it did so to enable power exports to France. However, TenneT does not explain in detail the fact that a substantial part of redispatch occurs strictly nationally and before consulting with the foreign transmission system operators.

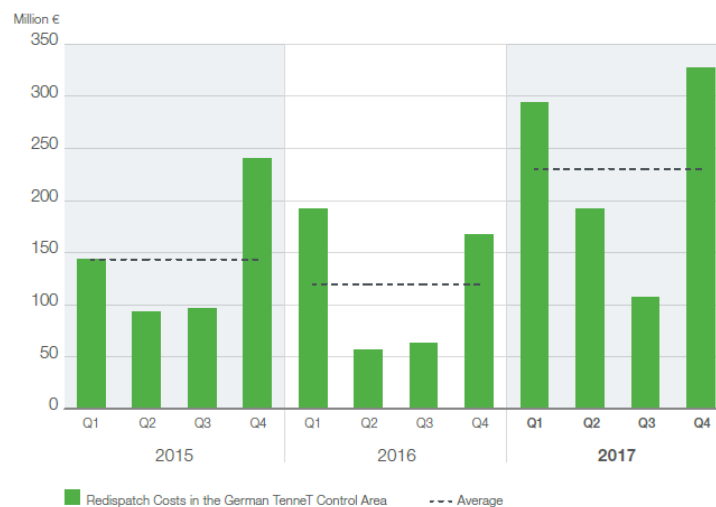


Figure 4: TenneT Redispatch costs in the TenneT control area between 2015 -2017, TenneT Market Review 2017.

<sup>11</sup> <https://www.tscnet.eu>.

<sup>12</sup> TenneT market review 2017:

[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiW3\\_3R0JDhAhUlzYUKHaDwCH4QFjAAegQIAxAC&url=https%3A%2F%2Fwww.ensoc.nl%2Ffiles%2F20180405-market-review-2017-bron-tennet.pdf&usq=AOvVaw1CWormJP7qYfHVH6XqHzCf](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiW3_3R0JDhAhUlzYUKHaDwCH4QFjAAegQIAxAC&url=https%3A%2F%2Fwww.ensoc.nl%2Ffiles%2F20180405-market-review-2017-bron-tennet.pdf&usq=AOvVaw1CWormJP7qYfHVH6XqHzCf).

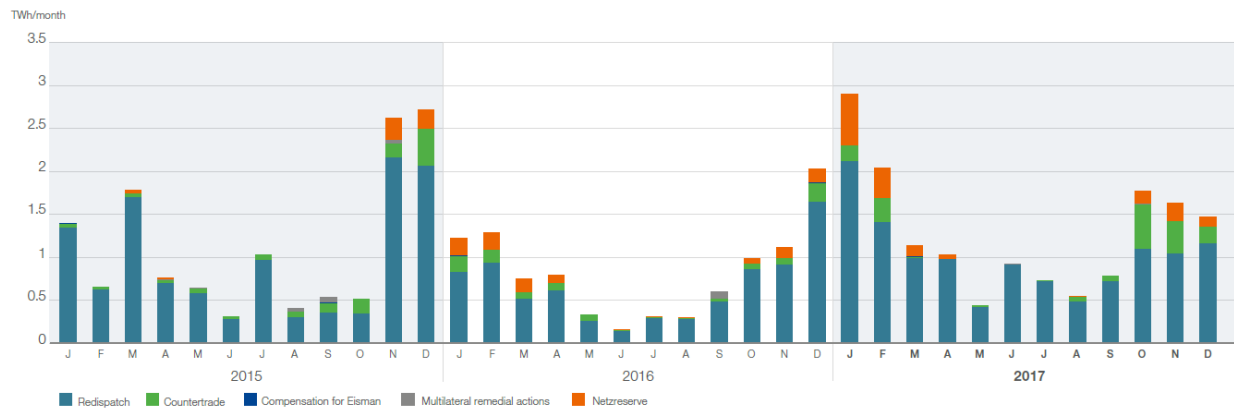


Figure5: TeneT Redispatch volumes in the German TeneT control area 2015 - 2017, TeneT Market Review 2017.