

Implementing and monitoring Article 16(8) of the recast Electricity Regulation

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✓ Legal framework and context

 ✓ Methodology for computing and monitoring the margin available for crosszonal trade (MACZT)





✓ The calculation and allocation of cross-zonal capacity is crucial for the internal electricity market. It should ensure the efficient management of network congestion, along with the management of remedial actions, network investment, and the definition of bidding-zones

✓ Although significant progress was achieved in this area over the years, the level of efficiency, transparency and non-discrimination expected by the European legal and regulatory framework has not fully been reached.

✓ The recast Electricity Regulation provides a new opportunity to improve congestion management methodologies.



- The recast Electricity Regulation introduces additional requirements to ensure that "Transmission system operators shall not limit the volume of interconnection capacity to be made available to market participants as a means of solving congestion inside their own bidding zone or as a means of managing flows resulting from transactions internal to bidding zones."
- ✓ According to the same Article, the above requirement is considered to be complied with, if *"…the following minimum levels of available capacity for cross-zonal trade are reached:*
 - a) for borders using a coordinated net transmission capacity approach, the minimum capacity shall be 70% of the transmission capacity respecting operational security limits after deduction of contingencies [...]
 - b) for borders using a flow-based approach, the minimum capacity shall be a margin set in the capacity calculation process as available for flows induced by cross-zonal exchange. The margin shall be **70% of the capacity respecting operational security** *limits of internal and cross-zonal critical network elements*, taking into account contingencies [...]"
- ✓ This Article also mentions that "The total amount of 30% can be used for the reliability margins, loop flows and internal flows on each critical network element."



✓ Member States (MSs) need to know how much margin they offer for cross-zonal trade (MACZT), to understand whether further action is needed before the entry into force of this provision on 1 January 2020.

→ need for quick guidance on how to compute MACZT, and an overview of the current situation

 During the March cross-border committee, the EC and MSs asked ACER to develop a common methodology to monitor this provision



✓ ACER and NRAs set up an expert group in close collaboration with the EC, ENTSO-E and TSOs

- ✓ The expert group focuses on
 - ✓ Setting up a methodology to compute MACZT
 - ✓ Measuring MACZT over 2016-2018
 - Defining monitoring principles to apply by 2020
 - ✓ Discussing prospective enforcement principles (e.g. whether being below 70% may be acceptable in some specific cases)



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- Compute MACZT at CNEC-level for both CNTC and FB CCRs
 - ✓ Allows for a uniform, robust approach, but requires defining CNECs within all CCRs

- ✓ MACZT is defined as
 - ✓ The margin offered within coordinated capacity calculation (including capacity reserved for balancing)
 - ✓ The flows induced by other cross-zonal exchanges (beyond coordinated capacity calculation)
 - ✓ The capacity nominated from previous (e.g. LT) timeframes is included
 - ✓ FRM (including uncertainty related to cross-zonal exchanges), loop flows and internal flows are excluded
- Main remaining open methodological points
 - ✓ How to take flows induced by exchanges with 3rd countries into account?
 - ✓ How to take contingencies into account?
 - ✓ How to assess allocation constraints?
 - ✓ How to monitor NTC bidding-zone borders



- MACZT should reach 70% of Fmax for every CNEC and market time unit in DA (but may exceptionally be shifted to ID)
 - ✓ 70% should be offered in the same timeframe by all TSOs/MSs to avoid undesired consequences on the market
 - ✓ MACZT would likely be monitored for both DA and ID, but ID would be less crucial

- ✓ Allocation constraints shall not limit MACZT below 70% on any CNEC
 - ✓ Allocation constraints may however restrict capacity allocation on CNECs with MACZT above 70%

- ✓ Additional information would be requested from TSOs for non-fulfilling CNECs, including
 - ✓ Network situation (including e.g. outages, exceptional circumstances...)
 - ✓ Flow decomposition
 - ✓ Impact on the market



ACER intends to compute MACZT for MSs/TSOs for 2016-2018 (see timeline at the end)

- ✓ Given that many data items are missing, the calculation will cover the synchronous area of Continental Europe, will be **simplified** and will rely on
 - ✓ One Fmax and PTDFs calculation from a representative CGM (with sensitivity analyses if time allows)
 - ✓ CNECs defined by TSOs
 - ✓ Hourly schedules, (CWE) RAMs, NTCs

(Missing CGM data prevents calculations for the Nordic and Baltic CCRs)

✓ ACER would need to receive CGM and CNEC data by mid July to ensure that results would be delivered by September



ACER intends to monitor MACZT for all TSOs/MSs

- ACER expects improvements compared to the 2016-2018 study, e.g. more (but likely not hourly) CGMs
- ✓ TSOs should provide the required data to ACER (many CCMs are likely to need to be updated)

✓ TSOs/NRAs may also monitor their own fulfilment in parallel with ACER monitoring

✓ ACER will regularly provide detailed information about non-fulfilment

✓ It would then be up to the enforcing authority to further investigate and decide whether the action was in breach of the Regulation



 \checkmark EC and NRAs are the enforcing authorities for Article 16(8)

- ✓ Some issues were raised within the expert group about
 - ✓ Would a pre-defined number of hours of non-fulfilment be acceptable?
 - ✓ How to handle the economic impact of non-fulfilment?
 - ✓ How to take network maintenance into account?
 - ✓ How to deal with forecast uncertainties?

✓ Additional investigations and experience from implementation are required in order to lead to robust enforcement principles



- 1. Recommendation by end of July
- 2. 2016-2018 MACZT values will be provided by ACER to the EC, MSs, NRAs and TSOs in September (e.g. through the cross-border committee)
- 3. MSs/NRAs to decide whether to go for action plan/derogation before the end of the year
- 4. NRAs/ACER will further discuss enforcement principles in parallel
- 5. The requirements will enter into force on 1 January 2020 (subject to derogations/action plans)





Thank you for your attention

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MMR link http://www.acer.europa.eu/en/Electricity/ Market%20monitoring/Pages/Currentedition.aspx