

Public consultation on amendments to Core intraday capacity calculation methodology

Fields marked with * are mandatory.

Introduction

This public consultation aims to gather stakeholders' feedback on the proposed amendments to the common capacity calculation methodology for the electricity intraday timeframe (ID CCM) in the Core capacity calculation region.

The TSOs calculate the optimal level of cross-zonal transmission capacity based on a forecast of electricity flows. The TSOs do it in a coordinated manner according to regional methodologies developed for each capacity calculation region and for each timeframe, from long term to real time. Since June 2022, the TSOs of the Core region use a flow-based approach to calculate and allocate cross-zonal capacities in the day-ahead timeframe. The flow-based approach has not been fully implemented in the intraday timeframe yet. At present, the TSOs use a less efficient transitional solution which is compatible with the day-ahead approach: the residual flow-based capacities after the single day-ahead market coupling are converted to available transmission capacities for the intraday allocation. The target solution for intraday, i.e. the flow-based approach, requires further implementation work. The present consultation concerns the amendments to align the intraday capacity calculation with parallel congestion management processes, and to enable the first intraday flow-based capacity calculation in Europe.

The amendments were proposed by the Core TSOs and currently subject to ACER's review and decision. Having assessed the proposals from the Core TSOs, ACER suggests a number of revisions to the proposed amendments. In order to further inform our decision, we seek stakeholders' views on the proposed amendments as well as ACER's suggested revisions. Following this consultation, we will consider stakeholder feedback and intend to take a decision on the proposed amendments by 4 October 2023.

This consultation is addressed to all interested stakeholders, including regulatory authorities, nominated electricity market operators and transmission system operators.

Stakeholders are invited to respond to this survey by **1 August 2023**, 23:59 hrs (CEST).

Data protection

ACER will process personal data of the respondents in accordance with [Regulation \(EU\) 2018/1725](#), taking into account that this processing is necessary for performing ACER's consultation tasks.

More information on data protection is available in ACER's [data protection notice](#) and on [ACER's](#)

[website](#).

ACER will not publish personal data.

Confidentiality

Following this consultation, ACER will make public:

- the number of responses received;
- company names, unless they should be considered as confidential;
- all non-confidential responses; and
- ACER's evaluation of responses. In the evaluation, ACER may link responses to specific respondents or groups of respondents.

You may request that the name of your company or any information provided in your response is treated as confidential. To this aim, you need to explicitly indicate whether your response contains confidential information.

You will be asked this question at the end of the survey.

I have read the information provided in this section.

Respondent's data

* Country

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta

- Netherlands
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- Norway
- United Kingdom
- other**

*** Name and surname**

50 character(s) maximum

This information will not be published.

*** Company**

50 character(s) maximum

*** Email**

This information will not be published.

Background information

Adoption of Core ID CCM

Core ID CCM was adopted by ACER in February 2019 ([Decision 02/2019](#)), following a referral from the Core regulatory authorities which could not reach an agreement on the rules proposed by the Core TSOs.

First amendment of Core ID CCM

Core ID CCM was amended in April 2022 ([Decision 06/2022](#)) to ensure the intraday capacity calculation in the Core region is aligned with the introduction of the flow-based market coupling in the day-ahead timeframe, which was planned for June 2022. This amendment has introduced a transitional solution, whereby the residual capacities after the single day-ahead market coupling process are converted to available transmission capacities for the intraday allocation.

Currently proposed amendments to Core ID CCM

To enable the implementation of the target solution, i.e. flow-based intraday capacity calculation, the Core TSOs submitted to the Core regulatory authorities further amendments to the Core ID CCM:

- The second amendment proposal, submitted by 24 October 2022, relates to the alignment of the intraday capacity calculation with the parallel regional operational security coordination process and, more specifically, the coordinated regional operational security analysis.
- The third amendment proposal, submitted by 15 March 2022, proposes an additional validation of calculated capacities based on available transmission capacity values.

On 4 April 2023, the Core regulatory authorities requested ACER to take a decision on both amendments proposed by the Core TSOs. ACER intends to collect stakeholders' views on this topic and keep working closely with the Core regulatory authorities and the Core TSOs in finalising its decision by 4 October 2023, in time for the go-live of the first intraday flow-based capacity calculation in 2024.

Links to the proposed amendments and explanatory documents, including TSOs' public consultation reports, are provided in the next section.

Related documents

Proposed amendments by the Core TSOs:

[Core ID CCM amendment proposal 2](#)

Core ID CCM amendment proposal 2 - [tracked version of the methodology](#)

Core ID CCM amendment proposal 2 - [explanatory document](#)

Core ID CCM amendment proposal 2 - [public consultation report](#)

[Core ID CCM amendment proposal 3](#)

Core ID CCM amendment proposal 3 - [tracked version of the methodology](#)

Core ID CCM amendment proposal 3 - [explanatory document](#)

Core ID CCM amendment proposal 3 - [public consultation report](#)

Related ACER decisions:

[Decision 02/2019](#) approving Core ID CCM

[Decision 06/2022](#) approving the [first amendment to Core ID CCM](#)

[Core ID CCM - current consolidated version](#) (including the first amendment)

Related legal acts:

[CACM Regulation](#) - Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management

[SOGL Regulation](#) - Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation

[Electricity Regulation](#) - Regulation (EU) 2019/943 on the internal market for electricity

[ACER Regulation](#) - Regulation (EU) 2019/942 establishing a European Union Agency for the Cooperation of Energy Regulators

Consultation questions

1. Alignment of intraday capacity calculation (IDCC) with the regional operational security assessment (ROSC) ([amendment proposal 2](#))

The TSOs are required to offer as much cross-zonal capacity to the intraday (ID) market as possible while, at the same time, ensuring system security. To this aim, the TSOs should take into account all cross-border relevant remedial actions (XRAs) agreed at the coordinated regional operational security analysis (CROSA) run in the evening of D-1. CROSA is part of regional operational security assessment (ROSC) pursuant to Article 76 of the [SOGL Regulation](#).

The most important outputs of the day-ahead CROSA are common grid models (CGM) with resolved congestions and the lists of applied remedial actions. The Core TSOs have proposed to use these CROSA outputs as an input to the intraday capacity calculation process which delivers capacities for the allocation by 22:00 of D-1 (IDCC1). The proposed alignment of the IDCC process with the ROSC outputs, including their timings and interdependencies, is explained in the TSOs' [explanatory document](#), updated following the TSOs' public consultation.

IDCC process originally foresaw the optimisation of non-costly remedial actions (nRAO). As a part of the alignment of the day-ahead CROSA process with IDCC1, the Core TSOs propose to exclude the nRAO from the IDCC1 process since the time to complete nRAO (approx. 2.5 hours) substantially exceeds the time to complete IDCC (approx. 1 hour). Also, the non-costly remedial actions are already considered in the day-ahead CROSA, however, only up to the level needed to resolve congestions, and not to maximise the intraday capacities. The Core TSOs further explain the proposed exclusion of nRAO in their [public consultation report](#).

Do you agree with the proposed alignment of ROSC and IDCC processes?

- Yes
- No
- I don't have a view

Please explain:

4000 character(s) maximum

Do you have any other comment regarding this topic?

4000 character(s) maximum

2. Recalculation of intraday capacities

Depending on the power system state and congestions resulting from the day-ahead trading, the duration of the day-ahead CROSA process could go beyond the deadlines of the IDCC1 process. This, in turn, could mean that the main CROSA outputs, i.e. decongested common grid models and the final list of remedial actions, may not be available in time for the subsequent IDCC1 process. This may result in significant precongestions which would set the intraday capacities to zero or even result in negative capacities, especially if many congestions were expected following the day-ahead market trading and

had to be resolved within the CROSA process.

In order to prevent a situation of precongestions, ACER proposes to recalculate intraday capacities, either on the basis of day-ahead CROSA (once it is completed), or on the basis of a new CROSA run during early morning of day D (once the new run is completed). Such recalculation would not be able to update the first 4-6 hours of the day D, but it is generally expected that they would be decongested already with preliminary day-ahead CROSA.

Do you agree with proposed recalculation of intraday capacities based on outputs of a completed CROSA?

- Yes
- No
- I don't have a view

Please explain:

4000 character(s) maximum

Do you have any other comment regarding this topic?

4000 character(s) maximum

3. Conversion of cross-border relevant network elements with contingencies (XNECs) from CROSA to critical network elements with contingencies (CNECs) ([amendment proposal 2](#))

The CROSA process aims to solve all congestions on all XNECs, regardless of whether these XNECs are CNECs considered in the intraday capacity calculation or not. In order to safeguard the CROSA outcome (resolved overloads on all XNECs), the Core TSOs have proposed a sub-process which would allow for the inclusion of additional XNECs in the list of CNECs to be considered in the intraday capacity calculation process. The TSOs are concerned that a loop of applying redispatch, increasing capacities and subsequent trade using these additional capacities may be expected. This would cause the need for more redispatch. If the TSOs run out of remedial actions, this would endanger grid security. The proposed conversion of XNECs to CNECs is further explained by the Core TSOs in their [explanatory document](#) and their response to the stakeholders in the [public consultation report](#).

ACER understands the TSOs' concern but is of the view that not all XNECs can be converted. Namely, the XNECs with a low sensitivity to cross-zonal exchanges (i.e. with zone-to-zone power transfer distribution factors (PTDFs) lower than 5%) should not be converted to CNECs. Zonal PTDFs describe the linear relationship between the physical flow in a network element and the net change position of a specific bidding zone. Article 29(3)(b) of the [CACM Regulation](#) explicitly requires to ignore in capacity calculation those critical network elements that are not significantly influenced by the changes in bidding zone net positions. Converting XNECs with PTDFs lower than 5% to CNECs would not only go against the CACM Regulation, but would be inefficient and may discriminate cross-border flows vis-à-vis internal flows.

In the explanatory document, the TSOs note that the overloaded XNECs must have a minimum sensitivity, and propose to consider an appropriate threshold for the XNECs to be eligible for the conversion. In ACER's view, it would be more appropriate for the TSOs to consider the application of internal redispatching pursuant to ROSC's fast activation process (FAP) for the XNECs with low PTFDF. Assuming that these XNECs are mainly loaded with internal flows, internal or bilateral redispatching would be a more appropriate measure.

Do you agree with the proposed possibility of conversion of XNECs from CROSA to CNECs?

- Yes, as a permanent solution
- Yes, as a temporary solution
- No
- I don't have a view

Please explain:

4000 character(s) maximum

Do you have any other comment regarding this topic?

4000 character(s) maximum

4. Minimum capacity values and flow-based domain extension

In order to enable maximum level of intraday capacities pursuant to Article 16 of the [Electricity Regulation](#), ACER has asked the Core TSOs to consider in the capacity calculation:

- (1) the application of minimum capacity values (minimum RAM); or
- (2) the initial flow-based domain extension at the CNEC level (equivalent to an increase of available transmission capacity (ATC) by a certain amount on each border);

which can be either confirmed or reverted during the capacity validation, if there were no sufficient remedial actions to support it.

The initial reaction from the majority of the Core TSOs is that neither option can be implemented at the intraday level due to the short time available for validation and activation of potentially required remedial actions.

Do you have any view regarding this topic? If yes, please explain.

- Yes
- No

Please explain:

4000 character(s) maximum

5. ATC-based validation ([amendment proposal 3](#))

In the [amendment proposal 3](#), the Core TSOs propose to include validation based on available transfer capacity (ATC) values extracted from the calculated intraday flow-based domain. The Core TSOs propose to use the ATC-based validation mainly as temporary fallback in cases the CNEC-based validation fails, or in case there is no sufficient time to perform it. The proposed ATC-based validation is provided as Annex 6 to the methodology, and is further explained in the related [explanatory document](#) and the [public consultation report](#).

The Core TSOs provided ACER with a list of situations in which ATC-based validation may be applied and specified additional reporting obligations to explain and justify such cases. The Core TSOs also noted that the proposed ATC-based validation would be a temporary solution which would only apply until the intraday allocation process is able to accept the flow-based parameters as inputs (instead of ATCs converted from the flow-based domain).

ACER is of a view that the CNEC-based validation is an appropriate long-term validation solution for the flow-based approach as it is transparent and provides a full view of network situation, but may consider allowing ATC-based validation as a fallback solution on a temporary basis.

Do you agree with the ATC-based validation as proposed by the Core TSOs?

- Yes
- No
- I don't have a view

Please explain:

4000 character(s) maximum

6. Other proposed changes (included in [amendment proposal 2](#))

The Core TSOs also proposed other changes to the methodology as part of [amendment proposal 2](#), such as:

- applying intraday flow reliability margin (FRM) lower or equal to the day-ahead FRM: changes to Article 8(10) Core ID CCM;
- specifying a right to reduce the capacities provided for intraday trade in exceptional network situations: new Article 4(11) Core ID CCM;
- providing for a possibility to delay the delivery of intraday capacities: new Article 4(12) Core ID CCM;
- converting potential negative RAM values into negative ATCs: changes to Article 21 Core ID CCM.

These changes are further explained in the related [explanatory document](#) and the [public consultation report](#).

Do you have any comment regarding these proposed changes?

- Yes
- No

Please explain:

4000 character(s) maximum

Confidentiality question

* Does your response contain confidential information?

- Yes
- No

If your response contains confidential information, you have to claim confidentiality according to Article 9 of [ACER's Rules of Procedure](#).

How to do it:

1. download a PDF version of your response (see upper right corner of the page);
2. redact confidential information and provide descriptions* of the deleted information (e.g. use a PDF editor or print out your response and manually replace confidential information with descriptions);
3. upload the redacted (i.e. non-confidential) version of your response;
4. upload a separate document where you:
 - clearly identify which persons/undertakings should not have access to the deleted information;
 - provide reasons why the persons/undertakings should not have access to the information;

* Your descriptions of the deleted information must enable any party concerned with access to the file to determine whether:

- the information deleted is likely to be relevant to their defence; and
- there are sufficient grounds to request ACER to grant access to the information claimed to be confidential.

Please upload a redacted (i.e. non-confidential) version of your response:

The maximum file size is 1 MB. If your file is bigger, please send it to ACER-ELE-2023-010@acer.europa.eu

Please upload a separate document with the information listed in point 4 above:

The maximum file size is 1 MB. If your file is bigger, please send it to ACER-ELE-2023-010@acer.europa.eu

ACER will assess your confidentiality claim(s) in accordance with Article 9 of [ACER's Rules of Procedure](#).

If you do not comply with the above requirements, we may:

- assume that your answers do not contain confidential information and that you have no objections to the disclosure of your response in its entirety; or
- disregard your entire response because of non-compliance with the procedural requirements for confidentiality claims.

I have read the information provided in this section and Article 9 of [ACER's Rules of Procedure](#).