

**REQUEST FOR AMENDMENT BY THE CHANNEL
REGULATORY AUTHORITIES
OF**

**THE AMENDED CHANNEL TSO PROPOSAL FOR THE
COMMON CAPACITY CALCULATION METHODOLOGY**

27 July 2018

I. Introduction and legal context

This document elaborates an opinion of the Channel Regulatory Authorities, agreed on 27th July 2018, on the amended Channel TSO Proposal of common capacity calculation methodology for the day-ahead and intraday market timeframe in accordance with Article 20 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management (Regulation 2015/1222).

This agreed opinion of the Channel Regulatory Authorities shall provide evidence that a decision on the common capacity calculation methodology for the day-ahead and intraday market timeframe does not, at this stage, need to be adopted by Agency for the Cooperation of Energy Regulators (ACER) pursuant to Article 9(11) of the Regulation 2015/1222. It is intended to constitute the basis on which the Channel Regulatory Authorities will each subsequently make national decisions pursuant to Article 9(7)(a) of Regulation 2015/1222.

The legal provisions that lie as the basis for the common capacity calculation methodology and of this Channel Regulatory Authority agreed opinion can be found in Article 3, 9, 20 and 21 of Regulation 2015/1222. These Articles are set out below for reference.

Article 3 of Regulation 2015/1222:

This Regulation aims at:

- (a) Promoting effective competition in the generation, trading and supply of electricity;*
- (b) Ensuring optimal use of the transmission infrastructure;*
- (c) Ensuring operational security;*
- (d) Optimising the calculation and allocation of cross-zonal capacity;*
- (e) Ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants;*
- (f) Ensuring and enhancing the transparency and reliability of information;*
- (g) Contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union;*
- (h) Respecting the need for a fair and orderly market and fair and orderly price formation;*
- (i) Creating a level playing field for NEMOs;*
- (j) Providing non-discriminatory access to cross-zonal capacity*

Article 9 of Regulation 2015/1222

- 1. TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to the competent regulatory authorities within the respective deadlines set out in this Regulation. Where a proposal for terms and conditions or methodologies pursuant to this Regulation needs to be developed and agreed by more than one TSO or NEMO, the participating TSOs and NEMOs shall closely cooperate. TSOs, with the assistance of ENTSO for Electricity, and all NEMOs shall regularly inform the competent regulatory authorities and the Agency about the progress of developing these terms and conditions or methodologies.*

[...]

- 5. Each regulatory authority shall approve the terms and conditions or methodologies used to calculate or set out the single day-ahead and intraday coupling developed by TSOs and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 6, 7 and 8.*

6. *The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities:*
 - e. *the proposal for a harmonised capacity methodology in accordance with Article 21(4)*
7. *The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities:*
 - a. *the common capacity methodology in accordance with Article 20(2);*
(...)
8. (...)
9. *The proposal for terms and conditions or methodologies shall include a proposed timescale for their implementation and a description of their expected impact on the objectives of this Regulation. Proposals on terms and conditions or methodologies subject to the approval by several or all regulatory authorities shall be submitted to the Agency at the same time that they are submitted to regulatory authorities. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within three months on the proposals for terms and conditions or methodologies.*
10. *Where the approval of the terms and conditions or methodologies requires a decision by more than one regulatory authority, the competent regulatory authorities shall consult and closely cooperate and coordinate with each other in order reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, within six months following the receipt of the terms and conditions or methodologies by the regulatory authority or, where applicable, by the last regulatory authority concerned.*
11. (...)
12. *In the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions or methodologies within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraphs (6) and (7) within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009. If the relevant TSOs or NEMOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in paragraph 4 of this Article shall apply.*
13. (...)
14. *TSOs and NEMOs responsible for establishing the terms and conditions or methodologies in accordance with this Regulation shall publish them on the internet after approval by the competent regulatory authorities or, if no such approval is required, after their establishment, except where such information is considered as confidential in accordance with Article 13.*

Article 20 of Regulation 2015/1222:

Introduction of flow-based capacity calculation methodologies

1. *For the day-ahead market time-frame and intraday market time-frame the approach used in the common capacity calculation methodologies shall be a flow-based approach, except where the requirement under paragraph 7 is met.*

2. *No later than 10 months after the approval of the proposal for a capacity calculation region in accordance with Article 15(1), all TSOs in each capacity calculation region shall submit a proposal for a common coordinated capacity calculation methodology within the respective region. The proposal shall be subject to consultation in accordance with Article 12. The proposal for the capacity calculation methodology within regions pursuant to this paragraph in capacity calculation regions based on the 'North-West Europe' ('NWE') and 'Central Eastern Europe' ('CEE') as defined in points (b), and (d) of point 3.2 of Annex I to Regulation (EC) No 714/2009 as well as in regions referred to in paragraph 3 and 4, shall be complemented with a common framework for coordination and compatibility of flow-based methodologies across regions to be developed in accordance with paragraph 5.*

[...]

Article 21 of Regulation 2015/1222:

Capacity calculation methodology:

1. *The proposal for a common capacity methodology for a capacity region determined in accordance with Article 20(2) shall include at least the following items for each capacity calculation time-frame:*

- a. *Methodologies for the calculation of the inputs to capacity calculation, which shall include the following parameters:*

- (i) *a methodology for determining the reliability margin in accordance with Article 22;*

- (ii) *the capacity methodologies for determining operational security limits, contingencies relevant to capacity calculation and allocation constraints that may be applied in accordance with Article 23;*

- (iii) *the methodology for determining the generation shift keys in accordance with Article 24;*

- (iv) *the methodology for determining remedial actions to be considered in capacity calculation in accordance with Article 25.*

- b. *a detailed description of the capacity calculation approach which shall include the following:*

- (i) *a mathematical description of the applied capacity calculation approach with different capacity calculation inputs;*

- (ii) *rules for avoiding undue discrimination between internal and cross-zonal exchanges to ensure compliance with point 1.7 of Annex I to Regulation (EX) No 714/20017*

- (iii) *rules for taking in to account, where appropriate, previously allocated cross-zonal capacity*

- (iv) *rules on the adjustment of power flows on critical network elements or of cross-zonal capacity due to remedial actions in accordance with Article 25;*

[...]

- (vi) *for the coordinated net transmission capacity approach, the rules for calculating cross-zonal capacity, including the rules for efficiently sharing the power of flow capabilities of critical network elements among different bidding zone borders;*

- (vii) *where the power of flows on critical network elements are influenced by cross-zonal power exchanges in different capacity calculation regions, the rules for sharing the power flow capabilities of critical network elements among different capacity calculation regions in order to accommodate these flows.*
- c. *a methodology for the validation of cross-zonal capacity in accordance with Article 26*
2. *For the intraday capacity calculation time-frame, the capacity calculation methodology shall also state the frequency at which capacity will be reassessed in accordance with Article 14(4), giving reasons for the chosen frequency.*
 3. *The capacity calculation methodology shall include a fallback procedure for the case where the initial capacity calculation does not lead to any results.*
 4. *All TSOs in each capacity calculation region shall, as far as possible, use harmonised capacity calculation inputs. By 31 December 2020, all regions shall use a harmonised capacity calculation methodology which shall in particular provide for a harmonised capacity calculation methodology for the flow based and for the coordinated net transmission capacity approach. The harmonisation of capacity calculation methodology shall be subject to an efficiency assessment concerning the harmonisation of the flow-based methodologies and the coordinated net transmission methodologies that provide for the same level of operational security. All TSOs shall submit the assessment with a proposal for the transition towards a harmonised capacity calculation methodology to all regulatory authorities within 12 months after at least two capacity calculation regions have implemented common capacity calculation methodology in accordance with Article 20(5).*

II. The Channel TSO proposal

The common capacity calculation methodology for the day-ahead and intraday market timeframe proposal was consulted on by the Channel TSOs through ENTSO-E for over one month from 23 June 2017 to 31 July 2017, in line with Article 20 and Article 12 of Regulation 2015/1222.¹ The initial common capacity calculation methodology (hereinafter referred to as the “CCM”) proposed by Channel TSOs, was received by Channel Regulatory Authorities in September 2017. Channel Regulatory Authorities subsequently requested an amendment to the methodology. An amended CCM was submitted by Channel TSOs and received by the last Regulatory Authority on 28 May 2018. The methodology includes proposed timescales for its implementation and a description of its expected impact on the objectives of Regulation 2015/1222, in line with Article 9(9) of Regulation 2015/1222.

Article 9(10) of the Regulation 2015/1222 requires Channel Regulatory Authorities to consult and closely cooperate and coordinate with each other in order to reach an agreement. Further, in the event that Regulatory Authorities request an amendment to a methodology, Article 9(12) of the same Regulation requires the competent Regulatory Authorities to make a decision within two months following receipt of submission by the last Regulatory Authority concerned. A decision is therefore required by each Regulatory Authority by 28 July 2018.

The proposal contains the methodologies outlined in Article 21(1)(a) of Regulation 2015/1222. It is inclusive of the inputs for the day-ahead and intraday capacity calculations, a description of the capacity calculation approach required by Article 21(1)(b), a methodology for the validation of cross-zonal capacity in line with Article 21(1)(c) and a fallback methodology, required by Article 21(3).

¹ The public consultation held 23 June 2017 to 31 July 2017 is available on the ENTSO-e website: <https://consultations.entsoe.eu/markets/capacity-calculation-methodology-channel-ccr/>.

The Channel CCM proposal is based on a Coordinated Net Transmission Capacity (CNTC) approach for the day-ahead and intraday capacity calculation in the Channel Region. Channel Regulatory Authorities acknowledge that Channel TSOs make the case for the application of the CNTC approach within the Channel Region as opposed to the flow based approach in a separate methodology (CNTC methodology), submitted to Channel Regulatory Authorities. A decision on the CNTC methodology is due by 28 November 2018.

III. Channel Regulatory Authority position

As a general remark, the Channel Regulatory Authorities would like to stress the expectation that the Channel CCM needs to be developed and implemented by Channel TSOs in a manner that facilitates the objectives of Regulation 2015/1222; in particular:

- (b) ensuring optimal use of the transmission infrastructure;*
- (d) optimising the calculation and allocation of cross-zonal capacity;*
- (f) ensuring and enhancing the transparency and reliability of information;*
- (j) providing non-discriminatory access to cross-zonal capacity.*

Whilst Channel Regulatory Authorities acknowledge that the amended CCM addresses some of the relevant amendment requests, the proposal cannot be approved in its current form for the reasons specified in this section. Channel Regulatory Authorities therefore request Channel TSOs to amend the proposal pursuant to Article 9(12) of Regulation 2015/1222.

Article 5(1)(a)

Article 5 states that the cross-zonal capacity that will be proposed by the coordinated capacity calculator to the TSO for validation phase shall be equal to the Maximum Permanent Technical Capacity (MPTC) value unless a specific planned or unplanned outage with significant impact on the interconnector exists in one of the bidding zones to which that interconnector is connected. Article 5(1)(a) defines specific planned or unplanned outages with significant impact on the interconnector in three ways:

1. A planned or unplanned outage on one of the grid elements listed in the Annex 1 of the methodology. Any change on the content of the Annex 1 shall be subject to National Regulatory Authority (NRA) approval and shall be published on TSO website before its application.
2. Any other pre-determined conditions defined by the TSO, agreed with the relevant NRA and published on its website before its application; or
3. Any combination of planned and/or unplanned outage on grid elements not listed in Annex 1 of the methodology that may lead to N-1 violation in case of full use of the MPTC of the cables connected in the bidding zone. In such a case, the concerned TSO shall have to explicitly publish without delay on its website the list of concerned grid elements and the estimated duration of the application of this specific grid condition when known.

Channel Regulatory Authorities welcome the transparency that Annex 1 attempted to offer to market participants regarding the scenarios triggering a cross-zonal capacity calculation and consider that such level of transparency should be maintained. Channel Regulatory Authorities also welcome the principle stating that the cross-zonal capacity that will be proposed by the coordinated capacity calculator to the TSO for validation phase shall be equal to the Maximum Permanent Technical Capacity (MPTC), unless a specific planned or unplanned outage with significant impact on the interconnector exists in one of the bidding zones to which that interconnector is connected.

Nonetheless, Channel Regulatory Authorities do not believe that the inclusion of an Annex listing the grid elements for which a planned or unplanned outage may trigger a detailed day-ahead cross-zonal capacity calculation is suitable. First, the criteria by which the Channel TSOs evaluate whether

a grid element is or is not included in Annex 1 is unclear. This creates an uncertainty for market participants as to which grid elements may be added or removed from Annex 1 over the course of time. Second, the inclusion of an Annex specifying grid elements fails to provide the necessary flexibility required to accommodate future changes. Any future changes to Annex 1 will require an amendment to the CCM, causing an unnecessary administrative burden on Channel TSOs and Regulatory Authorities alike. Third, Definition 1 above proposes that “any change on the content of the Annex 1 shall be subject to National Regulatory Authority (NRA)”. This approach is not aligned with the intention of Regulation 2015/1222, which requires regional decision-making on such matters.

Channel Regulatory Authorities therefore ask Channel TSOs to pursue alternative approaches to provide a clearer view on the nature of outages that would trigger the capacity calculation. For that, Channel TSOs should amend Article 5(1)(a)(i) so that Annex 1 is removed from the methodology and replaced with the principles that led TSOs to propose these critical network elements. Such principles could be linked to the flow sensitivity of critical network elements to cross-zonal exchanges corresponding to a maximum power transfer distribution factor (PTDF).

TSOs should also assess whether the level of the considered threshold supports the objectives of Regulation 2015/1222. More specifically, Channel Regulatory Authorities expect Channel TSOs to implement the Channel CCM in a way that facilitates the following objectives of Regulation 2015/1222:

- (b) ensuring optimal use of the transmission infrastructure;*
- (d) optimising the calculation and allocation of cross-zonal capacity;*
- (f) ensuring and enhancing the transparency and reliability of information;*
- (j) providing non-discriminatory access to cross-zonal capacity.*

To assure that the level of transparency is maintained compared to the current proposal, Channel Regulatory Authorities expect Channel TSOs to publish the list of critical network elements resulting from the proposed principles on their respective websites and to assure the link with the outage planning on the ENTSO-E transparency platform. Pursuant EC Regulation 543/2013 Article 10, Channel TSOs should at the same time provide the estimated impact of an unavailability on the cross zonal capacity per direction between the bidding zones.

Similar to the point made above regarding Definition 1, Definition 2 has the effect that a cross-zonal capacity calculation in the Channel Region may be triggered by “any other pre-determined conditions defined by the TSO, agreed with the relevant NRA”. As mentioned above, such an approach is not aligned with the intention of Regulation 2015/1222. Any such decision must be made at a Regional level, meaning all Channel Regulatory Authorities must be consulted and required to make a decision.

Channel Regulatory Authorities therefore request that Article 5(1)(a) of the methodology is amended such that it does not refer anymore to any amendment process. Such process is clearly established in the Regulation 2015/1222. In addition, Channel Regulatory Authorities ask that Definition 3 above, which also forms part of Article 5(1)(a)(ii) is amended to remove reference to Annex 1.

Article 5(1)(b)

Article 5(1)(b) states that “*In case of occurrence of a specific planned or unplanned outage defined in Article 5(1)(a) in the bidding zone of a TSO, the cross-zonal capacity for each day-ahead market time unit may be calculate[d]*”. Channel Regulatory Authorities share the opinion that the use of the word “may” creates ambiguity as to when exactly a cross-zonal capacity calculation will be triggered. Channel Regulatory Authorities request that the word “may” is replaced with “shall”. This will provide clarity to market participants as to which scenarios will trigger a capacity calculation.

Article 10

Article 10 of the CCM outlines the methodology for external constraints. Channel Regulatory Authorities do not believe it is necessary to differentiate between external and allocation constraints. Such distinction does not seem in line with the Regulation 2015/1222, which only mentions the possibility for TSOs to use allocation constraints.

Following discussions with Channel TSOs, it is understood that external constraints shall apply to one specific interconnector. Channel Regulatory Authorities are unclear why, if an external constraint can be allocated to a specific interconnector, the constraint cannot be detected and associated with a Critical Network Element or Elements. Channel Regulatory Authorities believe that such constraints can be transformed efficiently into maximum flows on critical network elements. Accordingly, Channel Regulatory Authorities do not believe that external constraints are compliant with Article 23(3)(a) of Regulation 2015/1222. In addition, the validation phase sets out that each TSO of the Channel Region may reassess the computed Net Transmission Capacities (NTC) on the interconnectors of their bidding zone if unforeseen changes in grid conditions have occurred during the qualification phase. For these reasons, Channel Regulatory Authorities do not believe the methodologies for external constraints described in Article 10 of the methodology is necessary nor compliant with the requirements of Regulation 2015/1222 and ask that the Article is removed from the methodology.

Article 11

Article 11 of the methodology defines the generation shift keys (GSK) for the day ahead and intraday timeframes for the Belgian, French, Dutch and Great British (GB) bidding zones. The details provided in relation to the GB GSK are vague and, by comparison, less developed than those of the GSK's of the other bidding zones. Channel Regulatory Authorities request that a greater level of detail is provided in relation to the GB GSK, similar to the level already provided for the GSK for the other bidding zones.

Article 25

With regard to Article 25 of the methodology, Regulatory Authorities believe the description of the allocation constraints applied is still insufficient and does not provide an acceptable level of transparency. It should be clear in the methodology how such allocation constraints will be defined by TSOs, in order to be approved by Channel Regulatory Authorities. Also, the descriptions in the explanatory note should be significantly improved. They should be detailed enough to allow Channel Regulatory Authorities and an informed external party to understand and forecast the level of the constraint that will be defined by the TSO and how it will affect the capacity provided to the markets. Mathematical equations could support the description provided by TSOs. For the avoidance of doubt, the allocation constraint value(s) for the single day-ahead and intraday coupling processes should not be included in the methodology in order to ensure the necessary flexibility, should the value(s) change in the future.

Channel Regulatory Authorities understand that the levels of the allocation constraints will be determined following studies that have not been conducted at this stage. In Article 25(6), Channel TSOs commit to submit these system studies justifying the application of the allocation constraints to their NRA for monitoring. Such an approach is not aligned with the intention of Regulation 2015/1222. Monitoring of such actions must be made at a Regional level, meaning at least all Channel Regulatory Authorities must be consulted. Channel Regulatory Authorities request that TSOs amend Article 25(6) accordingly. In the interest of transparency, Channel Regulatory Authorities request that Channel TSOs clarify, in Article 25, when and how they will communicate the allocation constraint value(s) for the single day-ahead and intraday coupling processes to market participants. A suitable approach could be to publish the relevant value(s) on the TSOs individual websites.

Finally, Article 25(5) states that any criteria identified by a TSO and agreed by its NRA could be added to the list of allocations constraints defined in the methodology. Such an approach is not

aligned with the intention of Regulation 2015/1222. Any such decision must be made at a Regional level, meaning all Channel Regulatory Authorities must be consulted and required to make a decision. Channel Regulatory Authorities request that Article 25(5) of the methodology is amended such that it does not refer anymore to any amendment process as such process is clearly established in the Regulation 2015/1222.

Regulatory Authorities ask that Article 25 of the methodology as well as the explanatory note be amended according to all the remarks detailed above.

IV. Actions

Channel Regulatory Authorities agree to request a second amendment to the Channel CCM proposal and ask that TSOs take the steps below when amending the methodology:

1. Remove Annex 1 from the methodology. A suitable alternative is to link the trigger for a cross-zonal capacity calculation to a Power Transfer Distribution Factor (PTDF) threshold set for the Channel Region. This shall offer clarity on the principles based on which a cross-zonal capacity calculation will be triggered. Transparency towards the market is to be guaranteed by publication of the relevant outages resulting from these principles on the TSOs individual websites and on the ENTSO-E transparency platform together with the estimated impact of the (planned) outage on the available capacities.
2. Amend Article 5(1)(a)(ii) to ensure that any decision to be agreed with the relevant NRA explicitly states that the relevant NRAs are all of the Channel NRAs.
3. Amend Article 5(1)(a)(ii) to remove reference to Annex 1.
4. Substitute the word "may" with the word "shall" in Article 5(1)(b).
5. Remove the Article 10 regarding the methodologies for external constraints from the methodology.
6. Provide more detail in Article 11 regarding the formation of the GB GSK for the day ahead and intraday timeframes.
7. Include a greater description of how the allocation constraints shall be calculated. Improve the description such that it is detailed enough to allow Channel Regulatory Authorities and an informed external party to understand and forecast the level of the constraint that will be defined by the TSO.
8. Amend Article 25(5) of the methodology such that it does not refer anymore to any amendment process as such process is clearly established in the CACM regulation.
9. Amend Article 25 to detail when and how the allocation constraint value(s) for the single day-ahead and intraday coupling processes shall be communicated to market participants.
10. Amend Article 25(6) so that the system study shall be submitted to all Channel Regulatory Authorities.