



Consultation Report Core CCR CCMs

Core day-ahead and intraday common capacity calculation methodologies

September 2017

Version	DA & ID CCM – Public Consultation Report	
Date	15/09/2017	
Status	<input type="checkbox"/> Draft	<input checked="" type="checkbox"/> Final

CONTENT

1.	Introduction	4
1.1.	Public consultation on Core DA and ID FB CCM.....	4
1.2.	General feedback	4
1.2.1.	Level of detail of the proposed CCMs	5
1.2.2.	Compliance with CACM Regulation	6
1.2.3.	Transparency	6
2.	Core day-ahead common capacity calculation methodology – consultation feedback.....	7
2.1.	Introduction	7
2.2.	General	7
2.3.	Methodology	8
3.	Core intraday common capacity calculation methodology – consultation feedback.....	25
3.1.	Introduction	25
3.2.	General	25
3.3.	Methodology	25

GLOSSARY

All definitions and abbreviations of the Core day-ahead common capacity calculation methodology Proposal and intraday common capacity calculation methodology Proposal apply accordingly.

1. INTRODUCTION

This document is the combined consultation report for the Core day-ahead and intraday common capacity calculation methodology (Core DA and ID FB CCM) Proposals. The Core DA and ID FB CCM Proposals are required by Article 20ff. of the Commission Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management (CACM Regulation).

Core TSOs would like to thank all parties involved in the public consultation for their interest in the Core DA and ID FB CCM Proposals. Core TSOs welcome the feedback received as it is valuable for the further development and detailing of both Core CCMS.

1.1. Public consultation on Core DA and ID FB CCM

Via the ENTSO-e consultation platform, the public consultation documents for both Core DA and ID CCM proposals were available to Core stakeholders from the 30th of June 2017 until the 31st of July 2017. In total, 13 stakeholders submitted their responses, 12 responses for the Core DA FB CCM and 11 for the Core ID FB CCM.

In addition, Core TSOs received via email a joint statement from 4 market participants associations, being EFET, EURELECTRIC, Nordenergi and Market Parties Platform (this statement can be found on the respective Associations' websites and is referred to herein after as "the Joint Statement"). The Joint Statement describes a set of key general principles applicable to the CCM proposals of the Channel, Core, Hansa, Nordic, and SWE CCRs. Also, specific feedback per CCR was provided. Two of the above mentioned stakeholders stated in their feedback via the ENTSO-e consultation platform to fully support the joint statement of EFET, EURELECTRIC, Nordenergi and Market Parties Platform.

Since the public consultation results should be processed in an anonymized manner, the identity of the respondents is not disclosed in this consultation report. Please note that all responses were however shared with the Core national regulatory authorities (NRAs) in a non-anonymised manner.

Main market views and recurring comments have been summarized in this report. The Core TSOs wish to clarify that the content of this document is intended to summarize the results obtained in the public consultation. The Core TSOs did their best to reply to all comments and concerns. However, Core TSOs cannot commit to comply with all reported concerns and requests before engaging in more in-depth discussions within the project and with (Core) stakeholders.

1.2. General feedback

In addition to specific observations (see chapter 2), Core stakeholders (including the Joint Statement) provided TSOs with general comments on the Core DA and ID FB CCMS. These general comments and TSOs' responses can be found below.

1.2.1. Level of detail of the proposed CCMs

All stakeholders question the level of detail of the proposed CCMs. It was indicated that mainly principles are described and that clear descriptions of methods are missing. In addition, stakeholders ask for 'proof of concept' of the CCMs proposed, e.g. summarized in an impact assessment or a feasibility report. Also, it is requested to have additional review opportunities when more details are known.

Core TSOs understand and acknowledge this feedback. Where possible, the CCMs have been updated with more details. Currently, the development and detailing of the CCM for DA FB has the highest priority. Experimentation is on-going to simulate the Core FB capacity calculation and market coupling processes. However, it is highly challenging for the 16 TSOs (13 countries) in the Core CCR to deliver a final CCM within 10 months after the ACER CCR decision that requested the establishment of the Core CCR in deviation from TSOs' proposal to merge the formerly existing regions CWE and CEE only in a second, later step.

Therefore, Core TSOs proposed the below approach to Core NRAs for the finalization of the Core DA FB CCM. This approach was agreed upon by the Core NRAs during the Core Implementation Group (Core IG) meeting on the 28th of August 2017 in Brussels. This approach is also more or less applicable to the further development of the Core ID FB CCM, since this methodology builds on the Core DA FB CCM.

Approach for finalization of the Core DA FB CCM:

1. Submission of the updated approval package to NRAs on 17 September 2017
 - Updated Core DA FB CCM Proposal with the inclusion of all adaptations possible at this moment in time based on feedback received from Core stakeholders;
 - Clear process steps are included in the Proposal on how to determine the final values & methods for e.g. CNEC selection, harmonized risk level in the FRM calculation, generation shift key methodology and remedial action optimisation. These process steps include descriptions on how to close and approve the open points;
 - a. Core TSOs will provide a "Core TSO deliverable report" in Q1 2018 with detailed plans on how to finalize the open topics. Core TSOs shall conclude on finalization of the methodology, consult it with Market Participants and propose the updated methodology to NRAs;
 - b. NRAs shall approve the proposed update of the respective Articles in the Proposal.
2. In parallel of the NRA approval period (6 months until March 2018) Core TSOs will continue detailing the Proposal and Explanatory Note based on the results from experimentation and further alignment with NRAs and market parties:
 - Core TSOs shall organize co-creation workshops with NRAs and also with market parties to enhance the work on expert level. This will be in addition to the regular stakeholder meetings such as the Core IG and Core Consultative Group (Core CG) meeting.

Main reasons for Core TSOs to propose this approach:

- To be able to develop a Core DA FB CCM that meets stakeholders' and NRAs' expectations as reflected in the feedback received after public consultation;
- To secure the development of a solid Core DA FB CCM, supported by experimentation results and feasibility studies, being able to provide an acceptable level of capacity to the market while ensuring security of supply.

1.2.2. Compliancy with CACM Regulation

Stakeholders indicated that the proposed CCMs are not compliant with the requirements as set out in CACM and EU-Regulations.

All references made by stakeholders on obligations stemming from EU Regulations have been assessed by Core TSOs. Where possible at this moment in time, the Core TSOs updated the Articles as requested by the stakeholders. As expressed in the above paragraph, on some elements of the CCM, further detailing in the near future is required. This detailing will further improve the CCM. Core TSOs shall stay in close contact with stakeholders on the further development of the CCM.

1.2.3. Transparency

Core Stakeholders stressed the importance of transparency to the Market on the Core DA and ID FB CC process. In paragraph 2.2, a summary of stakeholders' feedback on publication of data can be found.

Core TSOs would like to highlight to their stakeholders that in alignment with Core NRAs, the CWE-level of transparency will also apply to the Core CCR, meaning amongst others:

- Non-anonymous CNEs and CNECs;
- Daily publication of detailed breakdown of RAM after final flow-based computation:
 - Fixed anonymous ID, human-readable CNE name, CNE EIC codes, F_{\max} , RAM, F_{ref} , FRM, FAV.

The final, exhaustive and binding list of all publication items, respective templates and the data-access points will be developed in dedicated workshops with the Core stakeholders and NRAs. The refinement shall keep at least the transparency level reached in the operational CWE flow-based market coupling if supported by the respective NRAs and allowed by national legislation. An agreement between Stakeholders, Core NRAs and Core TSOs shall be reached not later than three months before the go-live window.

2. CORE DAY-AHEAD COMMON CAPACITY CALCULATION METHODOLOGY – CONSULTATION FEEDBACK

2.1. Introduction

In this chapter, a summary is provided of all stakeholder responses received via the ENTSO-e Consultation platform and the Joint Statement. All responses are structured in a table showing the stakeholder response, the number of stakeholders asking for a specific adaptation, the action taken by Core TSOs and in addition a TSOs' answer to the stakeholders' response.

In the column "Number of stakeholders requesting", the Joint Statement is counted as 6, since two stakeholders who responded via the ENTSO-e Consultation platform highlighted to fully support the Joint Statement.

2.2. General

The main part of the stakeholders' responses to the below survey questions are covered in chapter 1:

- Survey question 1: After studying the consultation documents, do you have a clear understanding of the Core day-ahead flow-based capacity calculation methodology?
- Survey question 23: General comments

Some specific feedbacks were received on the following:

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders request to avoid undue discrimination between internal and cross-zonal exchanges, in line with CACM 21(1)(b)(ii). Stakeholders request to include a detailed description of rules to avoid undue discrimination. Undue discrimination may only be avoided if there is a clear justification for the selection of the internal network element as CNE.	7	See answer	In response to Article 21(1)(b)(ii) of the CACM Regulation, Core TSOs will ensure a minimum RAM for the CNECs determining the cross-zonal capacity before allocating commercial exchanges, in addition to applying the common maximum zone-to-to PTDF.
2	Stakeholders request a feasibility report / impact assessment as "proof of concept" of the CCM. Furthermore an additional opportunity for MPs to review the CCM ("re-consultation"), when more details are known is requested.	2	See answer	It is also Core TSOs aim to deliver a solid methodology supported by experimentation results and feasibility studies (see also chapter 1). Furthermore, TSOs plan to share the outcome of the experimentation phase with

				MPs. TSOs aim to enhance the work on further detailing of the CCM on expert level with MPs in dedicated meetings, besides exchanges on Core CG level.
3	Stakeholders of non-Core countries ask for active involvement in the development of the Core CCMs. According to these stakeholders, affected countries should have an observer status in the Core CCR.	2	See answer	Core TSOs understand the concerns raised by these stakeholders and will actively inform them on the further development and detailing of the Core CCM.

Feedback related to the introductory Articles in the Proposal (Whereas and Art. 1-4) and to Article 25

- No feedback was received on the Whereas section, Article 1 to 4 and Article 25 of the Proposal.

2.3. Methodology

Feedback on Article 5 – Methodology for critical network elements and contingencies selection

Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1 Stakeholders request further detailing of the CNE and Contingency selection methodology.	9	Update of the respective Article	Core TSOs have updated the Article by including some parts of the Explanatory Note in the Proposal. However, further detailing of the CNEC selection methodology is still required. Therefore, Core TSOs included an approach in the Proposal to further detail CNEC selection. This general approach is agreed upon by Core NRAs. See also chapter 1 of the Consultation Report.
2 Stakeholders ask to detail the link to the referred SO GL Art. 72.	8	Update of the respective Article	Core TSOs removed the link to the SO GL Art. 72 to avoid any confusion. Initially, It was

				only referring to operational security analysis and not to the determination of CNEs.
3	Stakeholders state that the possibility to select CNEs that are not tie-lines bears the risk that national congestions will be solved by reducing cross-zonal capacity which is in conflict with Article 16(3) and point 1.7 of Annex I of Regulation (EC) No 714/2009.	8	See answer	Article 16(3) of Regulation (EC) No 714/2009 and point 1.7 of Annex I thereto do recognise that, in certain cases, there might be justified reasons why cross-zonal capacities may be reduced because of a congestion inside bidding zones.
4	One stakeholder states that critical network elements should not be limited only to cross-border lines.	1	Update of the respective Article	The Core day-ahead common capacity calculation methodology allows to take into account other CNEs than tie-lines but these CNEs should have a max zone-to-zone PTDF higher than a common threshold.
5	One stakeholder states that the CNEs and contingencies should not be limited to the Core CCR.	1	Partially taken into account.	The list of CNEs takes only Core CNEs into account. The list of contingencies follows the SO Guideline principles and therefore includes contingencies outside the Core CCR. However, the concerned CNECs are still subject to the cross-border relevance threshold.
6	Stakeholders ask for a justification of the threshold for the selection of the CNECs based on a cost benefit analysis.	8	Update of the respective Article	Core TSOs have included an approach in the Proposal to further detail the common maximum absolute zone-to-zone PTDF and the minimum RAM values. This general approach is agreed upon by Core NRAs. See also chapter 1 of the Consultation Report.
7	One stakeholder asks for different thresholds per market time unit and to differentiate CNEs and	1	See answer	Core TSOs take note of the response and will investigate this further when finalizing the

	CNEs with Contingency.			methodology for CNEC selection, in alignment with NRAs and stakeholders.
8	Stakeholders indicate to welcome the Minimum Margin proposal and indicate this should be based on an efficient trade-off between cross-border capacity reduction & internal redispatch.	2	Update of the respective Article	Core TSOs have included an approach in the Proposal to further detail the common maximum zone-to-zone PTDF and the minimum RAM values. This approach is agreed upon by Core NRAs. See also chapter 1 of the Consultation Report.
9	One stakeholder asks for all the CNECs that are put in the capacity calculation to have the same publication principles (e.g. fixed ID, RAM, Fref).	1	See answer	The final, exhaustive and binding list of all publication items, respective templates and the data-access points will be developed in dedicated workshops with the Core stakeholders and NRAs. The refinement shall keep at least the transparency level reached in the operational CWE flow-based market coupling. An agreement between Stakeholders, Core NRAs and Core TSOs shall be reached not later than three months before the go-live window.

Feedback on Article 6 – Methodology for operational security limits

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Some stakeholders request more transparency and strict rules on the determination of the power factor $\cos \varphi$.	6	Update of the respective Article	The power factor $\cos \varphi$ has been set to a common value of 1 and has thus been effectively eliminated from the determination of I_{max} .
2	One stakeholder asks for differentiation between permanent	1	Update of Article 22	The publication of the information on F_{max} for a

	and temporary current limits in the publication.			CNEC based on permanent or temporary limits has been added to Article 22 'Publication of data'.
3	One stakeholder requests the same with respect to the final adjustment value FAV and the weather dependency of I_{max} .	1	New Article on FAV added	The description of FAV has been extended, including a reference to the foreseen monitoring.
4	One stakeholder asks for differentiating between permanent and temporary current limits in the publication.	1	Update of the Explanatory Note	With regards to the dependency of I_{max} on weather conditions, an example has been added to the Explanatory Note. It should be noted that removing the possibility to deviate from seasonal values in exceptional cases would have to be compensated by lower seasonal values in the first place, in order to prevent network security risks.

Feedback on Article 7 – Methodology for allocation constraints

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	In general, several stakeholders indicate the methodology for the use of external constraints (maximum import and export constraints of bidding zones) is missing and should be described since it further limits the cross-zonal trade.	6	Update of the Proposal with Appendices	Core TSOs that will apply the external constraints in the Core DA FB CCM will give the clear methodology and justification of their use in the appendix of the Proposal.
2	More specific: Article 7(3) allows TSOs to use external constraints to avoid too large deviations from the reference flows. Such issues should be covered by the reliability margin.	6	See answer	Large deviations cannot be fully covered by the FRM values otherwise they will be too large and highly limit the level of cross-zonal capacity.
3	Some stakeholders ask for full justification by TSOs on the	3	See answer	The methodology and justification for the use of

	causes of the activation of external constraint.			external constraints are to be approved by the NRAs.
4	One stakeholder indicated that the application of external constraints should be possible only in exceptional circumstances during the capacity validation phase when specific problems occurs which could possibly lead to network stability problems and when alternative remedial actions are less cost-efficient than a limitation of XB exchanges.	1		Moreover, Core TSOs and Core NRAs will closely monitor the activation of the external constraints. Eventually, in exceptional circumstances, Core TSOs can apply external constraints during the validation step. In this case, the stakeholders and NRAs will be informed in due time and a justification will be provided to NRAs.

Feedback on Article 8 – Reliability margin methodology

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders ask for further detailing and harmonization of the risk level applied by each TSO. Stakeholders also ask for a justification of the risk level.	3	Update of the respective Article	Core TSOs have added more details to the Proposal. Also, a general approach to conclude on the FRM percentile justification has been added. This general approach is agreed upon by Core NRAs. See also chapter 1 of the Consultation Report.
2	Stakeholders ask for removal of the uncertainties coming from “controlled” remedial actions and from Net Positions deviations.	6	Update of the respective Article	The stakeholders’ request has been taken into account and the Article is updated accordingly.
3	Stakeholders state that only uncertainties linked to events occurring after Long-Term firmness deadline may be taken into account.	7	See answer	The CACM Regulation asks Core TSOs to “estimate the probability distribution of deviations between the expected power flows at the time of the capacity calculation and realised power flows in real time”. The expected power flows at the time of the capacity calculation are based on the

				D-2 CGM which is delivered before the day ahead firmness deadline as described in the CGMM.
4	One stakeholder asks for seasonal FRMs.	1	See answer	The Core TSOs take note of this request and will further investigate it when further detailing the reliability margin methodology.
5	One stakeholder asks to make the operational adjustment range explicit.	1	Update of the respective Article	Core TSOs have taken this request into account and updated the Article accordingly.
6	Stakeholders ask for transparency on the FRM analysis.	7	Update of the respective Article	Core TSOs have taken this request into account and updated the Article accordingly.

Feedback on Article 9 – Generation shift keys methodology

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders have added comments related to and request the use of a harmonized methodology for GSKs. One stakeholder however states that it might be more efficient that each TSO chooses the most relevant way to assess the GSK in its control area.	5	See answer	Due to the different country-specifics, the pros and cons of harmonization and differentiation have to be further elaborated. Short-term GSK- harmonization is not feasible. A general approach to conclude on GSK has been added to the Proposal. This general approach is agreed upon by Core NRAs. See also chapter 1 of the Consultation Report.
2	Request for more transparency in GSK determination	4	Update of the respective Article	TSOs intend to provide more information on GSK determination. In a first step Core TSOs will provide more information to the NRAs via the Deliverable Report (see also Chapter 1 of this Consultation Report) after

				alignment on the approaches the information will also be disclosed to the market.
3	<p>Detailed request and proposals related to the composition of the GSK:</p> <ul style="list-style-type: none"> especially highlighting renewables to be taken into account; mentioning FRM-minimization as target. 	2	Update of the respective Article	<p>Already in today's GSK used for the experimentation, for countries with significant renewable feed-in GSKs take renewables into account. However there is still room for improvements to be further developed.</p>

Feedback on Article 10 – Methodology for remedial actions in capacity calculation

Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer	
1	Stakeholders ask for a clarification why redispatch & countertrading are not taken into account	6	See answer	The (Legal) basis for the methodology for remedial actions in capacity calculation is Article 25 of CACM. In Article 25.5 it is clearly stated: "Each TSO shall take into account remedial actions without costs in capacity calculation". Hence TSOs using costly measures would bear high financial risks regarding cost-recovery / -acceptance.
2	Stakeholders indicate the method for remedial actions in capacity calculation is not described, e.g. lack of description of the objective function: what is the function that is optimized, what are the constraints of the optimizations, what is the optimized market direction.	7	See answer	Article 10 will be updated, once Cores TSOs have finalized the RAO methodology. A general approach for the finalization of the methodology has been added to the Proposal, in line with what has been agreed with Core NRAs.
3	Stakeholders want to know whether the optimized market direction (if that changes every	1	See answer	Core TSOs are keen to discuss the level of transparency on the RAO in

	day) will be part of the daily publication. Furthermore, stakeholders ask to publish the results of RAO (e.g. PST taps, topological measures used)			dedicated workshops between stakeholders and NRAs. See also chapter 1 of the Consultation Report.
4	Stakeholders ask for an explanation of the preventive & curative remedial actions	1	Update of the respective Article	An explanation of preventive and curative remedial actions has been added to the Proposal
5	Stakeholders ask for the use of HVDC as remedial action	1	See answer	Currently, no HVDC exists within the Core CCR. Foreseen cross-zonal HVDC will be used in Accordance with Article 15 of the updated Proposal (evolved flow-based).

Feedback on Article 11 – Provision of the inputs

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders state that Article 11 does not specify when inputs must be provided to the CCC.	6	See answer	The deadline for providing input to the CCC will be commonly agreed between the Core TSOs at a later stage of the methodology implementation. Once available, Core TSOs provide more information to Core stakeholders.

Feedback on Article 12 – Mathematical description of the capacity calculation approach

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	One stakeholder asks to set the zone-to-zone PTDF to 0.0 for all the zone-to-zone PTDF that are smaller to a given threshold (related to the decimal precision of	1	See answer	Core TSOs take note of this remark. Core TSOs believe that this dependency could be overcome with a proper Min RAM provision. Nevertheless,

	the PTDF computation). This since the CORE region covers a large geographical area and the methodology of article 5 requires only one zone-to-zone PTDF to be higher than the threshold to be qualified. This could lead to situations that CNE far away could block exchanges.			Core TSOs will monitor the effect of low zone-to-zone PTDF on the commercial exchanges during experimentations and parallel runs.
2	<p>One stakeholder states that if TSOs intend to use a sensitivity threshold for the selection of CNEs, TSOs should demonstrate that the selected threshold discriminates efficiently cross-border-relevant constraints.</p> <ul style="list-style-type: none"> • Optimum should be reached between cross-zonal capacity made available to the market and the system costs incurred to make this capacity available. • Threshold should be calculated for each CCR and for each MTU in order to reflect estimated real-time network conditions. • If PTDF thresholds are considered for selection of CNEs, those should be set at a higher level for critical outages, when the related constraints can be addressed curatively with the available costly remedial actions. 	1	Update of the respective Article.	Core TSOs have included an approach in the Proposal to further detail the common maximum absolute zone-to-zone PTDF and the minimum RAM values. This general approach is agreed upon by Core NRAs. See also chapter 1 of the Consultation Report.

Feedback on Article 13 – Long term allocated capacities (LTA) inclusion

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders ask Core TSOs to take note of their request that LTAs especially have to be coordinated in line with Regulation	1	See answer	In case of delays in the implementation of the respective FCA methodology, (guaranteeing coordinated

	(EC) No. 714/2009.			LTAs) TSOs intend to develop an interim solution compliant with coordination obligations as described in Regulation (EC) No. 714/2009.
2	Stakeholders ask for a reconfirmation by the Core TSOs to focus on CZC optimization / maximization throughout all time-frames	2	Update of the respective Article	TSOs will optimize as obliged by Regulation (EC) No. 714/2009, FCA and CACM. Both approaches for LTA inclusion (RAM increase and virtual constraints) generally maximize capacities. As measure for capacity maximization a request for a minimum import capacity is added to this Article.

Feedback on Article 14 – Rules on the adjustment of power flows on critical network elements due to remedial actions

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders state that the Article deals with the optimisation of remedial actions (RAO). But the objective function for this optimisation is not given. The CCM merely repeats what is already laid down in CACM Regulation without providing actual methods.	6	See answer	Core TSOs have included an approach in the Proposal to further detail the RAO methodology. This general approach is agreed upon by Core NRAs. See also chapter one of the Consultation Report.
2	Stakeholders ask for publication of the RAO results.	1	See answer	Core TSOs are keen to discuss the level of transparency on the RAO in dedicated workshops between stakeholders and NRAs. See also chapter 1 of the Consultation Report.
3	Stakeholders ask for optimization of remedial actions in the allocation phase in order to avoid	1	See answer	Core TSOs do not consider the stakeholders' proposal at the moment. The feedback

	errors in the market forecast			will however be evaluated in the future, if the need becomes apparent.
--	-------------------------------	--	--	--

Feedback on Article 15 – Integration of HVDC interconnectors located within the Core

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders ask for a clear description of the evolved flow-based methodology.	6	See answer	Core TSOs updated the Article and described more clearly the evolved-flow-based methodology. Furthermore, Core TSOs refer to the Explanatory Note where a detailed description of the evolved flow-based methodology can be found.
2	Stakeholders indicate it is unclear whether the 'HVDC interconnectors' as mentioned in this article refer to actual tie-lines between two bidding zones and/or whether these are HVDC-lines within a bidding zone.	6	See answer	This Article refers to the “interconnectors”, meaning the tie-lines between two bidding zones.
3	One stakeholder states that taking into account the HVDC in the way is described in the CCM is the right methodology.	1	n.a.	n.a.

Feedback on Article 16 – Capacity calculation on non-Core borders

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders ask how non-Core exchanges are being determined and what the impact is. They ask for sharing of power flow capabilities, if an element is impacted by multiple regions.	6	Update of the respective Article	Stakeholders' feedback has been taken into account and the Article is updated accordingly.
2	Stakeholders state that the CCM explains how to model and take	3	See answer	Core TSOs are aware of impacting neighbouring grids,

	<p>into account flows originating from non-Core TSO grids but neglects the vice versa impact on these non-Core TSOs' grid.</p> <p>Stakeholders propose to change the approach towards a full-scale coordination and integration of the grid security constraints of neighbouring non-Core countries in the security and capacity calculations.</p>			<p>what is immanent for meshed grid systems and the regional approach. TSOs aim to find an appropriate level of coordination and cooperation with TSOs being significantly impacted.</p>
3	<p>One stakeholder asks for publication of the assumptions regarding the non-Core exchanges taken into account as soon as they are known.</p>	1	See answer	<p>This information is published in D+2.</p>
4	<p>One stakeholder welcomes the willingness of TSOs to advance towards the implementation of an 'Advanced Hybrid Coupling' mechanism to ensure the interface between the Core DA FB CC with the other neighbouring regions. However, no explicit reference to this target model is made and an implementation plan is missing.</p>	1	Update of the respective Article	<p>The first point of the stakeholders' feedback has been taken into account and the Article is updated with a reference to advanced hybrid coupling. However, at this moment in time, it is too early to include an implementation plan. The feasibility of AHC will be studied in accordance with Article 24(5) of the CCM, and in close cooperation with adjacent involved CCRs.</p>
5	<p>One stakeholder highlights that CNECs considered at the same time in Core CCRs and in the neighbouring CCRs should be subject to the same parameters in terms of FRMs, F_{ref}, and F_{max}.</p>	1	See answer	<p>With the CGM methodology, all TSOs will base their capacity calculation on the same grid model. Therefore the same F_{ref} will be used. Moreover the operational security limits will be the same. Finally as the FRM takes into account each CCR methodology uncertainties, this parameter cannot be necessarily consistent between CCRs.</p>

Feedback on Article 17 – Calculation of the final flow-based domain

Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Several stakeholders state the CCM does not contain a procedure to compare the calculated flows with actual metered flows.	6	See answer The Core TSOs do not include a specific procedure to compare the calculated flows with actual metered flows in the Proposal. However, a similar approach will be undertaken for the FRM calculation. Core TSOs are keen to discuss the level of transparency on the FRM assessment in dedicated workshops between stakeholders and NRAs.
2	A stakeholder states that RA-selection carried out within the CC-phase depends on TSOs assumptions of the relevant market direction of power flows that may differ from the actual flows in real time. TSOs should envisage in the medium term to select RAs during the capacity allocation process rather than in CC-phase. The selected RAs should, in any case, be previously validated during the CC- phase.	1	See answer Core TSOs are keen to discuss the level of transparency on the Net Position forecast process in dedicated workshops between stakeholders and NRAs.

Feedback on Article 18 – Pre-coupling backup and default processes

- No feedback was received on Article 18 of the Proposal.

Feedback on Article 19 – ATC for Shadow Auctions

Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	One stakeholder asks for forecasts and auction results to be established in a proper timeframe to allow for additional possibilities	1	See answer Core TSOs will follow the “Core CCR TSOs’ Fallback Procedures Proposal in accordance with Article 44 of

	of trading on the exchanges. The auctions (day-ahead and intraday) should be centralised as much as possible and/or based on equal access standards.			the Commission Regulation (EU) 2015/1222”.
--	--	--	--	--

Feedback on Article 20 – Capacity validation methodology

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders ask for (binding) transparency on application of reductions and its justification to NRAs.	8	See answer	Core TSOs will publish any trigger of reduction to Market Parties. This reduction has to be justified to NRAs. This is now also described in Article 22 of the Proposal on publication of data and Article 23 on Monitoring and information to NRAs.
2	Stakeholders request detailing of 'exceptional situations'	7	Update of the respective Article	<p>The Article is updated. Exceptional situations in which cross-zonal capacities can be decreased by Core TSOs are now listed in Article 20. These situations are:</p> <ul style="list-style-type: none"> • an occurrence of an exceptional contingency; • an exceptional situation where sufficient redispatch or countertrade potential, that is needed to ensure the minimum RAM on all CNECs and/or to ensure the requested minimum import capacity pursuant to Article 13(4), may not be available; • a mistake in input data, that leads to an overestimation of cross-zonal capacity from an operational security perspective.

Feedback on Article 21 – Reviews and updates

- There is no specific feedback received from stakeholders on this Article. General comments on other Articles show the need and request for a high level of transparency related to updates. Based on the NRA Shadow Opinion, a process for reviews and updates has been added to the Article.

Feedback on Article 22 – Publication of data

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Stakeholders propose to change 23(3) into: "Monitoring data shall be disclosed to the public, with the exception of confidential data".	6	See answer	When selecting publication and monitoring data, TSOs have already limited monitoring data to confidential data.
2	Stakeholders indicates that NRAs should have the possibility to disclose monitoring data if they feel that this can provide insights and thus improve the monitoring. NRAs should obviously assess which data should be treated confidential.	2	See answer	TSOs will discuss with NRAs, if single selected items could be published. However each selection has to be in line with EU and national legislation, especially when it comes to deserving protection of infrastructure.
3	One stakeholder indicates that publication of data at D-1 10:30 is too late considering that several cross border balancing auctions are planned to have a GCT as soon as D- 08:30 (e.g. aFRR cooperation GCT 08:30 from 2019 on).	1	See answer	Due to LT-nominations at 8:30, needed computation and validation time for LT-adjustment of the FB-domain, an earlier timing is not feasible.
4	One stakeholder asks Core TSOs to increase transparency principles compared to the actual CWE one and asked explicitly for the publication of the Core Static Grid model data	1	Update of the respective Article	The Core Static Grid model has been added to the list of transparency items of Article 22: "In compliance with national regulations, publication of the static grid model"
5	Several stakeholders ask for additional transparency (i.e. exceeding CWE):	7	Ongoing exchange with MPs and NRAs	The final, exhaustive and binding list of all publication items, respective templates

	<ul style="list-style-type: none"> • Publishing real GSK values • Breakdown of vertical load into final load & RES • CGM/IGM data • Outages for significant CNEs • Inclusion of qualitative transparency measures in legal binding document (e.g. alerting market on seasonal changes Fmax, SPAICs) • Request for transparency on I_{max} values used (temp/perm). • Request for transparency of FAV application • Request for justification & transparency on activation of ECs • Request for Transparency on application of "Operational Adjustment". 			<p>and the data-access points will be developed in dedicated workshops with the Core stakeholders and NRAs. The refinement shall keep at least the transparency level reached in the operational CWE flow-based market coupling. An agreement between Stakeholders, Core NRAs and Core TSOs shall be reached not later than three months before the go-live window.</p>
--	---	--	--	---

Feedback on Article 23 – Monitoring and information to regulatory authorities

Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Several stakeholders ask to disclose the monitoring data to the public, except confidential information.	6	<p>See answer</p> <p>TSOs will further discuss publication and monitoring data with stakeholders and NRAs in dedicated workshops.</p> <p>A process for reaching the final monitoring and publication list is added to the Proposal:</p> <p>The final, exhaustive and binding list of all monitoring items, respective templates and the data-access point shall be developed in dedicated workshops with the NRAs. An agreement between the Core NRAs and Core TSOs shall be reached not later than three months</p>

				before the go-live window
--	--	--	--	---------------------------

Feedback on Article 24 – Timescale for implementation of the Core flow-based day ahead capacity calculation methodology

Stakeholder response		# of Stakeholders requesting	Considered action taken	TSOs answer
1	One stakeholder requests to make the deadline for implementation successive and gradual in order to ease the transition for organisers and users.	1	See answer	<p>The Core DA FB CCM will be implemented in the Core Region at once. Core TSOs do not foresee a successive and gradual implementation. All stakeholders will be informed on a regular bases on the status of the Core project, e.g. via :</p> <ul style="list-style-type: none"> ● ENTSO-e website (dedicated section on Core CCR) ● Core Consultative Group meeting ● Dedicated workshops with MP experts to further develop the CCM and to prepare for the external parallel run

3. CORE INTRADAY COMMON CAPACITY CALCULATION METHODOLOGY – CONSULTATION FEEDBACK

3.1. Introduction

In this chapter, a summary is provided of all stakeholder responses received via the ENTSO-e Consultation platform and the Joint Statement. All responses are structured in a table showing the stakeholder response, the number of stakeholders asking for a specific adaptation, the action taken by Core TSOs and in addition TSOs' answer to the stakeholders' response.

In the column "Number of stakeholders requesting", the Joint Statement is counted as 6, since two stakeholders who responded via the ENTSO-e consultation platform highlighted to fully support the Joint Statement.

3.2. General

All stakeholders asked Core TSOs to apply feedback provided on the Core DA FB CCM to the Core ID FB CCM where relevant as well. Core TSOs responses to the Core DA FB CCM can be found in Chapter 2. In Chapter 3, the intraday specific stakeholder responses are presented, see paragraph 3.3 Methodology.

3.3. Methodology

Feedback on Article 5 – Intraday capacity calculation

	Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer
1	Several stakeholders indicate that Article 5 does not specify the frequency of reassessment of the capacity in the intraday timeframe. This is not compliant with Article 21(2) of the CACM Regulation.	8	Update of the respective Article	The Article has been updated with a description of the target solution. Furthermore, a step-wise approach / process has been included on how to reach the target solution and to have recomputations throughout the day in the future.
2	Several stakeholders mention that in case the ID allocation mechanism uses ATCs for each BZB, TSOs should provide sufficient details on how they derive ATC values from the coordinated flow-based	7	See answer.	Core TSOs will take MPs feedback into account when further detailing the Core ID FB CCM.

	parameters.		
--	-------------	--	--

Feedback on Article 23 - Timescale for implementation of the Core flow-based intraday capacity calculation methodology

Stakeholder response	# of Stakeholders requesting	Considered action taken	TSOs answer	
1	One stakeholder asks to properly take into account the influence of adjacent CCRs	1	See answer	Core TSOs want to emphasize that the main focus is on further development of the Core DA FB CCM. However, the TSOs will continue working on the development of the Core ID FB CCM. The influence of neighbouring CCRs will certainly be taken into account in the further detailing of the CCM.