Second amendment of the Intra-Day Capacity Calculation Methodology of the Core Capacity Calculation Region

in accordance with Articles 20ff. of the Commission Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on capacity allocation and congestion management

03-03-2022

Purpose:	☐ methodology draft ☐ for NRA approval	☒ for public consultation ☐ for final publication
Status:	☒ draft	☐ final
TSO approval:	☒ for approval	☐ approved
NRA approval:	☒ outstanding	☐ approved

Whereas

TSOs of the Core CCR ("Core TSOs"), taking into account the following:

(1) Based on further developments and alignments with Core NRAs after the decision by the Agency in 21st February 2019, Core TSOs deemed it necessary to introduce the following changes.
(2) The following changes fulfil the objectives set out in Article 3 CACM.
(3) The amendments performed with respect to the integration of the ROSC aligned business process in Article 2 ensure operational security and an optimised calculation of cross-zonal capacity in accordance with Article 3(c) and Article 3(d) of CACM by establishing a consistent use of remedial actions between the CROSA and the IDCC process, which will ensure remedial actions applied in CROSA remain effective after providing intraday capacity to the intraday market. Including already coordinated remedial actions during the intraday capacity calculation process will lead to a more accurate representation of the grid and a grid model which is as much as possible congestion-free, thereby also ensuring optimal use of the transmission infrastructure in accordance with Article 3(b) CACM. These will also prevent that the impact of activated XRAs is diminished by additional intraday cross-zonal trade, which could be detrimental to ensuring operational security as set out by Article 3(c) CACM.;
(4) The amendments performed with respect to the avoidance of disproportionate negative ATCs on distant Core borders in Article 3 ensure a fair and non-discriminatory treatment of TSOs and market participants in accordance with Article 3(e) of CACM as high negative ATCs would basically block border directions for the intraday market although the benefit from grid security perspective would be very limited.

Article 1
Amendments concerning definitions and interpretation

1. Article 2. Definitions and interpretation shall be amended accordingly:

a) Paragraph 1 shall be replaced and be read accordingly:

> "For the purposes of the intraday capacity calculation methodology, terms used in this document shall have the meaning of the definitions included in Regulation (EU) 2019/943, Directive (EU) 2019/944, Commission Regulation (EU) 2015/1222 as amended on 15 March 2021 by Commission Implementing Regulation (EU) 2021/280 of 22 February 2021, Commission Regulation (EU) 2016/1719 as amended on 15 March 2021 by Commission Implementing Regulation (EU) 2021/280 of 22 February 2021, Commission Regulation (EU) 2017/2195 as amended on 15 March 2021 by Commission Implementing Regulation (EU) 2021/280 of 22 February 2021, Commission Regulation (EU) 543/2013 as amended on 01 January 2020 by Regulation (EU) 2019/943, the definitions set out in Article 2 Annex I of the Decision No 02/2019 of the Agency for the Cooperation of the Energy Regulators of 21 February 2019 on the Core CCR TSOs' proposal for the regional design of the day-ahead and intraday common capacity calculation methodologies as amended on 10 May 2021 by the decision of the Core Regulatory Authorities on the first amendment of the day-ahead capacity calculation methodology of the core capacity calculation region and the definitions set out in Article 2 Annex I of the Decision No 33/2020 of the Agency for the Cooperation of the Energy Regulators of 4 December 2020 on the Methodology for Regional Operational Security Coordination for the Core Capacity Calculation Region. In addition, the following definitions, abbreviations and notations shall apply:"

b) Number 1. shall be replaced and be read accordingly:

> " 'AAC_{ID}' is the already allocated capacity which has been allocated in SIDC;"

c) Number 26, 35, 37, 38 & 40 shall be omitted

d) A new number 39a. shall be included and be read accordingly:

> " '$NP_{AAC,DA}$' means net position resulting from already allocated capacities in SDAC;"

e) A new number 39b. shall be included and be read accordingly:

" '$NP_{AAC,ID}$' means net position resulting from already allocated capacities in SIDC;"

f) Number 48. shall be replaced and be read accordingly:

" '$\mathbf{PTDF}_{f,DA}$' means a matrix of power transfer distribution factors describing the final day-ahead flow-based domain;"

g) Number 49. shall be replaced and be read accordingly:

" '$\mathbf{PTDF}_{f}$' means a matrix of power transfer distribution factors describing the final Intraday flow-based domain;"

h) A new number 54a. shall be included and be read accordingly:

" 'SDAC' means the single day-ahead coupling;"

2. Article 11. Update of intraday cross-zonal capacities remaining after the SDAC shall be amended accordingly:

a) In Equation 3 and paragraph 2 $\overrightarrow{RAM_f}$ shall be replaced with $\overrightarrow{RAM_{f,DA}}$

b) In Equation 3 $\mathbf{PTDF}_{f}$ shall be replaced with $\mathbf{PTDF}_{f,DA}$

c) In Equation 3 $\overrightarrow{NP_{AAC}}$ shall be replaced with $\overrightarrow{NP_{AAC,DA}}$

Article 2
Amendments introducing the ROSC aligned business process

1. Article 4. Intraday capacity calculation process shall be amended accordingly:

a) Paragraph 8 shall be replaced and be read accordingly:

"The Core RSCs shall deliver the CCC the latest available CGM, proposed and coordinated XRAs from the day-ahead and intraday CROSAs, in accordance with the CSAM. During the interim period until ROSC CROSA process is implemented in accordance of Article 37 of Core ROSC methodology, only the latest available CGM shall be delivered."

b) Step 3 of Paragraph 9 shall be replaced and be read accordingly:

"The CCC shall determine the final list of CNECs for subsequent steps of the capacity calculation pursuant to Article 16;"

c) Step 4 of Paragraph 9 shall be omitted

d) A new paragraph 11 shall be added and be read accordingly:

> "Based on the latest available information regarding the actual system state, each TSO in the Core region shall have the right to reduce available cross-zonal capacity on their own borders after submitting capacity to SIDC in accordance with paragraph 2. Such reduction shall be coordinated amongst the TSOs sharing the border."

d) A new paragraph 12 shall be added and be read accordingly:

> "Core TSOs aim at ensuring maximal coherence between operational processes run in Core CCR. In this context, the intraday capacity calculation shall take place only after the coordinated operational security analysis run within the scope of the ROSC ICS/CROSA processes on day-ahead and intraday . Considering the fact that these ROSC processes are key for planning remedial measures to ensure operational security, the intraday capacity calculation can only commence once the ROSC ICS/CROSA process is finalized and adequate up-to-date grid models are available. This implies, that in case the ROSC ICS/CROSA process cannot be finalized within the foreseen timeframe and more time is necessary to manage grid security, intraday capacity calculation and subsequent delivery of intraday capacities may be delayed. Core TSOs shall strive at ensuring that the delay in providing intraday capacity, according to the time of delivery mentioned in paragraph 2, is as small as possible."

2. Article 5. Definition of critical network elements and contingencies shall be amended accordingly:

a) In Paragraph 4 the last sentence shall be removed and be read accordingly:

> "Each Core TSO shall provide to the CCC a list of CNECs established pursuant to paragraph 3."

b) In Paragraph 7 a sentence shall be added and be read accordingly:

> "The proposed list of internal CNECs pursuant to paragraph 5 and 6 shall not include any internal network element with contingency with a maximum zone-to-zone PTDF below 5%, calculated as the time-average over the last twelve months. An exception is applied for CNECs that are added exceptionally in accordance with Article 16(2)."

3. Article 10. Methodology for remedial actions in intraday capacity calculation shall be amended accordingly:

a) Paragraph 3 shall be replaced and be read accordingly:

> "In accordance with Article 25(2) and (3) of the CACM Regulation, these RAs will be used for the coordinated calculation of cross-zonal capacities while ensuring operational security in real-time."

b) Paragraph 4 shall be replaced and be read accordingly:

> "RAs used for intraday capacity calculation will be aligned as much as technically feasible with the most recent ROSC CROSA. The latest version of coordinated RAs available at the time of starting step 2 according to Article 4(9) should be used. Such RAs will be only available once ROSC CROSA is implemented in accordance of Article 37 of Core ROSC methodology."

c) Paragraph 7 shall be replaced and be read accordingly:

> "In accordance with Article 25(6) of the CACM Regulation, all RAs taken into account for day-ahead capacity calculation are also considered during the intraday timeframe, depending on their technical availability."

d) Paragraph 9 shall be omitted

4. Article 15. Initial flow-based calculation shall be amended accordingly:

Paragraph 3 shall be replaced and be read accordingly:

> "The initial flow-based parameters shall be calculated pursuant to Article 12 and shall consist of the $\mathbf{PTDF}_{init}$ and $\vec{F}_{ref,init}$ values for each initial CNEC, as well as for additional elements part of the pre-defined static list of network elements with contingencies mentioned in Article 16(2)(a)."

5. Article 16. shall be renamed to “Definition of final list of CNECs for intraday capacity calculation”

6. Article 16. Definition of final list of CNECs for intraday capacity calculation shall be amended accordingly:

a) In paragraph 1 the last sentence shall be replaced and be read accordingly:

> “The remaining CNECs shall constitute the pre-final list of CNECs.”

b) Paragraph 2 shall be replaced and be read accordingly:

> “Some additional cross-border relevant network elements with a specific contingency (XNECs) resulting from the most recently performed or running ROSC CROSA process, and not already part of the pre-final list of CNECs mentioned in paragraph 1, may be exceptionally turned into CNECs. The inclusion of such additional elements complies to Core ROSC methodology Article 31(3a) which emphasizes the need to prevent the effect of activated cross-border relevant RAs in ROSC CROSA process on operational security to be diminished by additional cross-zonal trades. The selection of the additional elements shall be based on the list of overloaded XNECs prior to the application of costly cross-border remedial actions during CROSA process, after application of two sequential filters:
>
> (a) The aforementioned overloaded XNEs must be part of a pre-defined static list of network elements with contingencies,
>
> (b) The sensitivity of the activated costly cross-border relevant RAs in CROSA process on the filtered elements that result from the previous step (a) must be over a dedicated agreed global threshold amongst Core NRA and Core TSOs based on experience once the ROSC CROSA process is implemented.”

c) Paragraph 3 shall be added and be read accordingly:

> “The final list of CNECs shall consist of both the pre-final list of CNECs from paragraph 1 and the selected network elements from the aforementioned process in paragraph 2.”

d) Paragraph 4 shall be added and be read accordingly:

> “Until the ROSC CROSA process is implemented in

accordance of Article 37 of Core ROSC methodology, the addition of network elements as referred to in paragraph 2 is not applied. The final list of CNECs will therefore be the equal to the pre-final list of CNECs during this interim period."

7. Article 17. Non-costly remedial actions optimisation shall be fully omitted

8. Article 18. Calculation of flow-based parameters before validation shall be amended accordingly:

a) In paragraph 1 letter (a) shall be replaced and be read accordingly:

"the calculation of F_{ref} and $PTDF_f$ as follows:

i. $PTDF_f = \mathbf{PTDF_{init}}$
ii. $\vec{F}_{ref} = \vec{F}_{ref,init}$"

b) In paragraph 1 letter (b) shall be replaced and be read accordingly:

"the calculation of RAM before validation as follows:

For all CNECs part of the pre-final list pursuant to Article 16(1):

$$\overrightarrow{RAM_{bv}} = \vec{F}_{max} - \overrightarrow{FRM} - \vec{F}_{ref}$$

Equation 12

Or for all CNECs part of the additional set of network elements pursuant to Article 16(2):

$$\overrightarrow{RAM_{bv}} = \max(0, \vec{F}_{max} - \overrightarrow{FRM} - \vec{F}_{ref})$$

Equation 12a

With

$\vec{F}_{max}$	Maximum active power flow pursuant to Article 6
$\overrightarrow{FRM}$	Flow reliability margin pursuant to Article 8
$\vec{F}_{ref}$	Flow resulting pursuant to paragraph 1(a)
$\overrightarrow{RAM_{bv}}$	Remaining available margin before validation"

9. Article 19. Validation of flow-based parameters shall be amended accordingly:

Paragraph 7 shall be replaced and be read accordingly:

"After individual validation adjustments, the remaining available margin before validation ($\overrightarrow{RAM_{bv}}$) shall be adjusted for the flows resulting from net positions or

already allocated capacities resulting from the SIDC in accordance with Article 4(5)(b). The final RAM_f shall be calculated by the CCC for each CNEC and external constraint according to Equation 13:

$$\overrightarrow{RAM_f} = \overrightarrow{RAM_{bv}} - \overrightarrow{IVA} - \mathbf{PTDF_f}\ \overrightarrow{NP_{AAC,ID}}$$

Equation 13

with

$\overrightarrow{RAM_f}$	final remaining available margin
$\overrightarrow{RAM_{bv}}$	remaining available margin before validation
$\overrightarrow{IVA}$	individual validation adjustment
$\mathbf{PTDF_f}$	final power transfer distribution factor matrix resulting from the intraday capacity calculation
$\overrightarrow{NP_{AAC,ID}}$	Core net positions resulting from SIDC which are not already included in the CGM"

10. Article 20. Intraday capacity calculation fallback procedure shall be amended accordingly:

The third sentence shall be replaced and be read accordingly:

"The latest (intraday or day-ahead) available flow-based domain, which may be corrected during local validation in accordance with Article 19, for the considered delivery hour is first converted to zero Core balance."

11. Article 21. Calculation of ATCs for SIDC fallback procedure shall be amended accordingly:

a) In paragraph 3 letter (a) $\mathbf{PTDF_f}$ shall be replaced with $\mathbf{PTDF_{f,DA}}$

b) In paragraph 5 letter (b) shall be replaced and be read accordingly:

"the remaining available margin at iteration zero is either equal to the final remaining available margin ($\overrightarrow{RAM_f}$) according to Article 19(7) or the updated remaining available margin for intraday cross-zonal capacities ($\overrightarrow{RAM_{UID}}$) according to Article 11(1):

$$\overrightarrow{RAM_{ATC}}(0) = \overrightarrow{RAM_f}$$
$$\text{or } \overrightarrow{RAM_{ATC}}(0) = \overrightarrow{RAM_{UID}}$$

Equation 14

with

$\overrightarrow{RAM_{ATC}}(0)$	remaining available margin for ATC calculation at iteration *k*=0

$\overrightarrow{RAM_f}$	final remaining available margin
$\overrightarrow{RAM_{UID}}$	updated remaining available margin for intraday cross-zonal capacities"

12. Article 22. Reviews and updates shall be amended accordingly:

Paragraph 4 shall be replaced and be read accordingly:

"The review of the list of RAs taken into account in the intraday capacity calculation, as defined in Article 10(4), shall include at least an evaluation of the efficiency of specific PSTs and the topological RAs considered from the CROSA process."

13. Article 23. Publication of data shall be amended accordingly:

a) In paragraph 2 letter (b)(vii) shall be replaced and be read accordingly:

"detailed breakdown of RAM for each CNEC of the final flow-based parameters before pre-solving: I_{max}, U, F_{max}, FRM, $F_{ref,init}$, $F_{0,\text{core}}$, $F_{0,\text{all}}$, IVA;"

b) In paragraph 2 letter (b)(xii) shall be omitted

14. Article 25. Monitoring, reporting and information to the Core regulatory authorities shall be amended accordingly:

In paragraph 4 letter (c) shall be omitted

Article 3
Amendments to avoid disproportionate negative ATCs on very distant Core borders

Article 21. Calculation of ATCs for SIDC fallback procedure shall be amended accordingly:

a) In paragraph 5 letter (c) shall be replaced and be read accordingly:

"Negative ATCs are calculated for CNECs with negative $RAM_{ATC}(0)$ according to the following procedure:

i. Per CNEC with negative remaining available margin for ATC calculation at iteration k=0 ($RAM_{ATC}(0)$) negative ATCs are calculated for all oriented bidding zone borders with positive PTDFs according to Equation 14a:

$$ATC_{A\rightarrow B,CNEC\ i} = \frac{pPTDF_{A\rightarrow B,CNEC\ i}}{\sum_{(A,B)\in\ Core\ contract\ paths\ with\ positive\ z2zPTDFs} PTDF^2_{A\rightarrow B}}\ RAM_{ATC,CNEC\ i}(0)$$

Equation 14a

with

$ATC_{A\rightarrow B,CNEC\ i}$	negative ATC for the oriented bidding zone border A to B determined by CNEC i
A, B	Core bidding zones
$RAM_{ATC,CNEC\ i}(0)$	remaining available margin for ATC calculation at iteration *k*=0 of CNEC i
$pPTDF_{A\rightarrow B,CNEC\ i}$	Final positive zone-to-zone PTDF of the oriented bidding zone border A to B

ii. In case for an oriented Core bidding zone border more than one negative ATC has been calculated according to Equation 14a then for each oriented Core bidding zone border the most negative ATC is determined over all CNECs with negative remaining available margin.

$$\overrightarrow{ATC}_{A\rightarrow B} = min\left(\overrightarrow{ATC}_{A\rightarrow B,CNEC\ i}\right)$$

Equation 14b

iii. After extraction of negative ATCs a scaling factor (*SF*) is calculated for each CNEC with negative remaining available margin:

$$SF_{CNEC\ i} = \left| \frac{RAM_{ATC,CNEC\ i}(0)}{\sum_{(A,B)\in\ Core\ contract\ paths\ with\ positive\ z2zPTDFs} PTDF_{A\rightarrow B,CNEC\ i}\ \ ATC_{A\rightarrow B}} \right|$$

Equation 14c

The final scaling factor (SF_{final}) is the maximum of all calculated scaling factors:

$$SF_{final} = max(SF_{CNEC\ i})$$

Equation 14d

iv. The final negative ATCs are calculated by scaling the negative ATCs with the final scaling factor:

$$\overrightarrow{ATC}_{negative,final} = \overrightarrow{ATC}_{A\rightarrow B}\ SF_{final}$$

Equation 14e"

b) In paragraph 5 a new letter (cc) shall be added and be read accordingly:

"Before starting the iterative method applied to calculate the positive ATCs for SIDC fallback all the remaining available margins for ATC calculation at iteration *k*=0 ($\overrightarrow{RAM}_{ATC}(0)$) shall be adjusted to be non-negative:

$$\overrightarrow{RAM}_{ATC}(0) = \max\left(0, \overrightarrow{RAM}_{ATC}(0)\right)$$

Equation 14f

with

$\overrightarrow{RAM}_{ATC}(0)$ remaining available margin for ATC calculation at iteration *k*=0

The iterative method applied to calculate the positive ATCs for SIDC fallback procedure consists of the following actions for each iteration step *k*:

i. for each CNEC and external constraint of the flow-based parameters pursuant to paragraph 3, calculate the remaining available margin based on ATCs at iteration *k*-1

$$\overrightarrow{RAM}_{ATC}(k) = \overrightarrow{RAM}_{ATC}(0) - \mathbf{pPTDF}_{zone-to-zone}\ \overrightarrow{ATC}_{k-1}$$

Equation 14g

With

$\overrightarrow{RAM}_{ATC}(k)$ remaining available margin for ATC calculation at iteration k

$\overrightarrow{ATC}_{k-1}$ ATCs at iteration k-1

$\mathbf{pPTDF}_{zone-to-zone}$ positive zone-to-zone power transfer distribution factor matrix

ii. for each CNEC, share $RAM_{ATC}(k)$ with equal shares among the Core oriented bidding zone borders with strictly positive zone-to-zone power transfer distribution factors on this CNEC;

iii. from those shares of $RAM_{ATC}(k)$, the maximum additional bilateral oriented exchanges are calculated by dividing the share of each Core oriented bidding zone border by the respective positive zone-to-zone PTDF;

iv. for each Core oriented bidding zone border, $\overrightarrow{ATC}_k$ is calculated by adding to $\overrightarrow{ATC}_{k-1}$ the minimum of all maximum additional bilateral oriented exchanges for this border obtained over all CNECs and external constraints as calculated in the previous step;

v. go back to step i;

vi. iterate until the difference between the sum of ATCs of iterations *k* and *k*-1 is smaller than 1kW;

vii. the resulting positive ATCs for SIDC fallback procedure stem from the ATC values determined in iteration *k*, after rounding down to integer values;

viii. at the end of the calculation, there are some CNECs and external constraints with no remaining available margin left. These are, together with the CNECs and external constraints with initially negative $RAM_{ATC}(0)$,

the limiting constraints for the calculation of ATCs for SIDC fallback procedure."

c) In paragraph 5 a new letter (e) shall be added and be read accordingly:

"The final ATCs per Core oriented bidding zone border are the minimum from positive and negative ATCs:

$$\overrightarrow{ATC}_{final} = \min\left(\overrightarrow{ATC}_{k}, \overrightarrow{ATC}_{negative,final}\right)$$

Equation 15b"

Article 4
Amendments to ensure a correct handling of HVDC interconnectors

1. Article 12. Calculation of power transfer distribution factors and reference flow shall be amended accordingly:

Paragraph 5 shall be replaced and be read accordingly:

"The maximum zone-to-zone $PTDF$ of a CNEC ($PTDF_{z2zmax,l}$) is the maximum influence that any Core exchange has on the respective CNEC, including exchanges over HVDC interconnectors which are integrated pursuant to Article 13:

$$PTDF_{z2zmax,l} = max\Big(\max_{A\in BZ}\left(PTDF_{A,l}\right) - \min_{A\in BZ}\left(PTDF_{A,l}\right), \max_{H\in HVDC}\Big(\left|\left(PTDF_{A,l} - PTDF_{VH\_1,l}\right) - \left(PTDF_{B,l} - PTDF_{VH\_2,l}\right)\right|, \left|PTDF_{VH\_1,l} - PTDF_{VH\_2,l}\right|\Big)\Big)$$

Equation 6

with

$PTDF_{A,l}$	zone-to-slack $PTDF$ of bidding zone A on a CNEC l
HVDC	set of HVDC interconnectors integrated pursuant to Article 13
BZ	set of all Core bidding zones
$\max_{A\in BZ}(PTDF_{A,l})$	maximum zone-to-slack PTDF of Core bidding zones on a CNEC l
$\min_{A\in BZ}(PTDF_{A,l})$	minimum zone-to-slack PTDF of Core bidding zones on a CNEC l
$PTDF_{VH\_1,l}$	zone-to-slack $PTDF$ of Virtual hub 1 on a CNEC l, with virtual hub 1 representing the converter station at the sending end of the HVDC interconnector located in bidding zone A
$PTDF_{VH\_2,l}$	zone-to-slack $PTDF$ of Virtual hub 2 on a CNEC l, with virtual hub 2 representing the converter station at the sending end of the

HVDC interconnector located in bidding zone B”

2. Article 13. Integration of HVDC interconnectors on bidding zone borders of the Core CCR shall be amended accordingly:

In paragraph 1 the last sentence shall be replaced and be read accordingly:

“According to this methodology, a cross-zonal exchange over an HVDC interconnector on the bidding zone borders of the Core CCR is modelled and optimised explicitly as a bilateral exchange in capacity allocation, and is constrained by the physical impact that this exchange has on all CNECs considered in the final flow-based domain used in capacity allocation and constraints modelling the maximum possible exchange of the HVDC interconnector.”

Article 5
Amendments to ensure consistency with the amended day-ahead capacity calculation methodology

1. Article 19. Validation of flow-based parameters shall be amended accordingly:

a) In Paragraph 3 a sentence shall be added and be read accordingly:

“If all available costly and non-costly RAs are not sufficient to ensure operational security on an internal network element with a specific contingency, which is not defined as CNEC and for which the maximum zone-to-zone PTDF is above the PTDF threshold referred to in Article 16(1), the competent Core TSO may exceptionally add such internal network element with associated contingency to the final list of CNECs. The RAM on this exceptional CNEC shall be the highest RAM ensuring operational security considering all available costly and non-costly RAs. $PTDF_{init}$ according to Article 15(3) shall be used to determine if the PTDF of the additional CNEC is above the PTDF threshold.”

b) In paragraph 10 letter (e) shall be omitted

c) In Paragraph 10 letter (f) shall be replaced and be read accordingly:

“if an internal network element with a specific contingency was exceptionally added to the final list of CNECs during validation: a justification why adding the network elements with a specific contingency to the list was the only way to ensure operational security, the name or the identifier of the internal network elements with a

specific contingency, the ID CC MTUs for which the internal network elements with a specific contingency was added to the list and the information referred to in points (b) and (c) above;"

5. Article 23. Publication of data shall be amended accordingly:

a) In paragraph 2 letter (d)(ii) shall be omitted

b) In paragraph 2 a new letter (f) shall be added and be read accordingly:

"The CCC shall include in its quarterly report as defined in Article 25(5) the flows resulting from net positions resulting from the SIDC on each CNEC and external constraint of the final flow-based parameters."

c) A new paragraph 7 shall be added and be read accordingly:

"Core TSOs shall provide Core regulatory authorities on a monthly basis the underlying capacity calculation and market coupling data related to the quarterly reports. The reporting framework shall be developed in coordination with Core regulatory authorities and updated and improved when needed."

6. Article 25. Monitoring, reporting and information to the Core regulatory authorities shall be amended accordingly:

In paragraph 5 a new letter (d) shall be added and read accordingly:

"according to Article 23(2)(f), Core TSOs shall report on flows resulting from net positions resulting from the SIDC on each CNEC and external constraint of the final flow-based parameters."

Article 6
Amendments to allow for capacity allocation for a market-based process in accordance with Article 41 of the Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing

Article 19. Validation of flow-based parameters shall be amended accordingly:

A new paragraph 7a shall be added and be read accordingly:

"In case cross-zonal capacity has been allocated on a market-based process, in accordance with Article 41 of the Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing, the final remaining available margin for all CNECs and external constraints shall be reduced accordingly."