

European Network of Transmission System Operators for Electricity

All TSOs' Proposal for a Congestion Income Distribution (CID) methodology in accordance with Article 73 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management

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7 April 2017

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Annex la (for information only)

Congestion income distribution methodology

in accordance with Article 73 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management

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All TSOs, taking into account the following,

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Whereas

- (1) This document is a common proposal developed by all Transmission System Operators (hereafter referred to as "TSOs") regarding aestablishes the methodology for <u>Congestion Income ongestion</u> income distribution (hereafter referred to as "CID <u>Methodologymethodology</u>") in accordance with Article 73 of Commission Regulation (EU) 2015/1222 establishing a guideline on Capacity Allocation and Congestion Management (hereafter referred to as the "CACM Regulation"). This proposal is hereafter referred to as "CID Methodology Proposal".
- (2) The CID Methodology Proposal methodology takes into consideration the provisions on general principles of Congestion Income congestion income in Article 16 (6) of Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity (hereafter referred to as "Regulation (EC) No 714/2009").
- (3) This CID Methodology Proposalmethodology takes into account the general principles, goals and other methodologies set in the CACM Regulation. The goal of the CACM Regulation is the coordination and harmonisation of capacity calculation and Capacity Allocationcapacity allocation in the day-ahead and intraday cross-border markets, and it sets requirements for the Transmission System Operators (hereafter referred to as "TSOs") to co-operate on the level of capacity calculation regions (hereinafter referred to as "CCRs"), on a pan-European level and across bidding zone borders. The CACM Regulation sets also rules for establishing capacity calculation methodologies based either on the Coordinated Net Transmission Capacity Approach ("Coordinated NTC Approach") or the Flow-Based Approach ("FB Approachflow-based approach ("FB approach") or, subject to conditions specified therein, the coordinated net transmission capacity approach ("coordinated NTC approach").
- (4) In accordance with Article 73 of the CACM Regulation, the CID methodology should cover the congestion income distribution in both the day-ahead and the intraday timeframe. However, since the intraday capacity pricing methodology pursuant to Article 55 of the CACM Regulation is not defined yet, it is therefore currently not possible to devise the rules for the sharing of congestion income in the intraday timeframe. For this reason, the CID methodology covers only the distribution of congestion income in the day-ahead timeframe, whereas the scope of the CID methodology should be amended in order to extend the scope to intraday timeframe once sufficient clarity is gained on how congestion income in the intraday timeframe will be created.
- (5) The CID methodology is designed in three layers. First, for each CCR the congestion income generated by exchanges within a CCR is defined and collected. Second, the congestion income of a CCR is distributed among the bidding zone borders of a CCR. This is done using a harmonised approach based on the absolute value of a product between the commercial flow and the market spread on the bidding zone border. Third, the congestion income attributed to the bidding zone border is distributed among TSOs having interconnectors on that bidding zone border.
- (6) Regional application of congestion income distribution is needed for two main reasons. First, the congestion income from SDAC includes also the congestion income resulting from reallocated long-term transmission rights ("LTTR"), for which TSOs need to coordinate in capacity calculation and allocation, as well as guaranteeing their firmness and remuneration including

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model.

sharing of related costs in accordance with Article 61 of the Commission Regulation (EU)			
2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation			
(hereinafter referred to as the "FCA Regulation"). All these requirements are defined at a level			
of CCR and therefore sharing of congestion income must be kept at the same level in order to			
ensure revenue adequacy. Second, the definition of commercial flow is not harmonised across			
EU mainly because CCRs with coordinated NTC and FB approach allocate cross-zonal capacity			
in a fundamentally different way. In CCRs with coordinated NTC approach, the commercial			
flows can be set to equal allocated cross-zonal capacities, which are directly resulting from single			
day-ahead coupling ("SDAC") algorithm. In CCRs with FB approach, where SDAC algorithm			
does not calculate allocated capacities on bidding zone borders, the commercial flows need to be			
calculated additionally. This is done by first calculating, for each bidding zone, the net position			
resulting from exchanges within a CCR (i.e. the regional net positions) and then the physical			
flows resulting from the regional net positions are calculated for each bidding zone border of a			
CCR. ¹ For those bidding zones, where part of the its regional net position is physically realised			
through borders outside of CCR, the external flow is calculated such that the sum of calculated			
physical flows on internal borders and external flow is equal to the regional net position of a			
bidding zone.			
The congestion income from SDAC also contains the congestion income generated by non-			
nominated LTTRs (i.e. non-nominated PTRs or FTRs), which TSOs have the obligation to			
remunerate in accordance with the FCA Regulation. While the remuneration of LTTRs is outside			
the scope of this CID methodology, it is important to maintain the revenue adequacy of each			
TSO. Thus, in a situation where LTTRs have been issued in a coordinated manner by all TSOs			
of a-CCR, the costs for the remuneration of those LTTRs should be borne by those the same			
TSOs, which receive the congestion income in the day-ahead timeframe that is generated by the			
capacity corresponding to these non-nominated LTTRs. This principle should be reflected in the			
methodology for sharing costs incurred to ensure firmness and remuneration of long-term			
transmission rights in accordance with Article 61(3) of the FCA Regulation.			
According to Article 9 (9) of the CACM Regulation, the expected impact of the proposed CID		Formatted: English (United Kingdom)	
Methodologymethodology on the objectives of the CACM Regulation has to be described and is		Formatted: English (United Kingdom)	
presented below.			
_The proposed CID Methodologymethodology generally contributes to the achievement of the		Formatted: English (United Kingdom)	
objectives of Article 3 of CACM Regulation or the usage principles for Congestion			
Income congestion income set in Regulation (EC) No 714/2009. In particular, the CID		Formatted: English (United Kingdom)	
Methodologymethodology serves the objective of promoting effective competition in the trading		Formatted: English (United Kingdom)	
and supply of electricity, non-discriminatory access to cross-zonal capacity as it lays down			
	 sharing of related costs in accordance with Article 61 of the Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (hereinafter referred to as the "FCA Regulation"). All these requirements are defined at a level of CCR and therefore sharing of congestion income must be kept at the same level in order to ensure revenue adequacy. Second, the definition of commercial flow is not harmonised across EU mainly because CCRs with coordinated NTC and FB approach allocate cross-zonal capacity in a fundamentally different way. In CCRs with coordinated NTC approach, the commercial flows can be set to equal allocated cross-zonal capacities, which are directly resulting from single day-ahead coupling ("SDAC") algorithm. In CCRs with FB approach, where SDAC algorithm does not calculate allocated capacities on bidding zone borders, the commercial flows need to be calculated additionally. This is done by first calculating, for each bidding zone, the net position resulting from the regional net positions are calculated bid proves bodding zones, where part of the its regional net position is physically realised through borders outside of CCR, the external flow is calculated such that the sum of calculated physical flows on internal borders and external flow is equal to the regional net position of a bidding zone. The congestion income from SDAC also contains the congestion income generated by non-mominated LTTRs (i.e. non-nominated PTRs or FTRs), which TSOs have the obligation to remunerate in accordance with the FCA Regulation. While the remuneration of LTTRs is outside the scope of this CID methodology, it is important to maintain the revenue adequacy of each TSO. Thus, in a situation where LTTRs have been issued in a eoordinated manner by all CSM of a-CCR, the costs for the remuneration of hose LTTRs. This principle should be reflected in the methodology of sharing costs incurred to ensure firmness and remuneration of long-term transmission rights in	sharing of related costs in accordance with Article 61 of the Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (hereinafter referred to as the "FCA Regulation"). All these requirements are defined at a level of CCR and therefore sharing of congestion income must be kept at the same level in order to ensure revenue adequacy. Second, the definition of commercial flow is not harmonised across EU mainly because CCRs with coordinated NTC and FB approach allocate cross-zonal capacity in a fundamentally different way. In CCRs with coordinated NTC approach, the commercial flows can be set to equal allocated cross-zonal capacities, which are directly resulting from single dav-ahead coupling ("SDAC") algorithm. In CCRs with FB approach, where SDAC algorithm does not calculate allocated capacities on bidding zone borders, the commercial flows need to be calculated additionally. This is done by first calculating, for each bidding zone, then et position resulting from exchanges within a CCR (i.e. the regional net positions) and then the physical flows resulting from the regional net positions are calculated for each bidding zone border of a CCR. ¹ For those bidding zones, where part of the tix regional net position is physically realised through borders outside of CCR, the external flow is calculated such that the sum of calculated physical flows on internal borders and external flow is equal to the regional net position of a bidding zone.	sharing of related costs in accordance with Article 61 of the Commission Regulation (EU) 2016/T19 of 26 September 2016 establishing a quideline on forward capacity allocation (hereinafter referred to as the "FCA Regulation"). All these requirements are defined at a level of CCR and therefore sharing of congestion income must be kept at the same level in order to ensure revenue adequacy. Second, the definition of commercial flow is not harmonised across EU mainly because CCRs with coordinated NTC and FB approach allocate cross-zonal capacity in a fundamentally different way. In CCRs with FB approach allocate cross-zonal capacity of a fundamentally different way. In CCRs with FB approach, where SDAC algorithm does not calculate allocated capacities on bidding zone, but entry resulting from single day-abead coupling ("SDAC") algorithm. In CCRs with FB approach, where SDAC algorithm does not calculate allocated capacities on bidding zone borders. the commercial flows resel to be calculated additionally. This is done by first calculating, for each bidding zone, the net position resulting from the regional net positions are calculated for each bidding zone border of a CCR. ¹ For those bidding zones, where part of the its regional net position is physically realised through borders outside of CCR, the external flow is calculated such that the sum of calculated physical flows on internal borders and external flow is calculated such that the sum of calculated physical flows on internal borders and external flow is calculated such that the sum of calculated physical flows costs incurred to ensure firmess and remuneration of LTRs is outside the scope of this CID methodology, it is important to maintain the revenue adequacy of each TSO. Thus, in a situation where LTRs have been issued in a coordinated mamer by all TSOs eff-CCR, the costs for the remuneration of those LTRs should be borne by thesethe same TSOs, which receive the congestion income in the day-ahead timeframe that is generated by the capacity corresponding to

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cross-border trade, how Interconnectionsinterconnections are used and where capacity should be

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increased. Via the possibility to consider investment costs in the sharing key, more certainty can be achieved for a more optimal sharing key for future investments and thus, long-term operation and development of the electricity transmission system and electricity sector in the European Union is supported.

- (7)(11) Furthermore, the CID Methodologymethodology ensures non-discriminatory treatment of all_affected parties, as it sets rules to be applied by all parties. Further, the methodology takes into account Congestion Income congestion income derived by Interconnectionsinterconnections on bidding zone borders owned by legal entities other than TSOs, preventing exclusion of such Congestion Income congestion income from the application of the CID Methodologymethodology as long as these Interconnectionsinterconnections, are operated by certified TSOs.
- (8)(12) Regarding the objective of transparency and reliability of information, the CID methodology provides clear rules and a solid basis for <u>Congestion Income congestion income distribution in a</u> transparent and reliable way.
- (9)(13) In conclusion, the proposed CID <u>Methodologymethodology</u> contributes to the general objectives_ of the CACM Regulation to the benefit of all market participants and electricity end consumers.

SUBMIT THE FOLLOWING CID METHODOLOGY TO ALL REGULATORY AUTHORITIES:

TITLE 1

General Provisionsprovisions

Article 1 Subject matter and scope

- 1. The CID <u>Methodology shall be considered as the common proposal of all TSOsmethodology is</u> <u>established</u> in accordance with Article 73 of <u>the</u> CACM Regulation and shall cover the <u>Congestion</u> <u>Incomecongestion income</u> distribution for:
 - a. all existing and future <u>Bidding Zonebidding zone</u> borders and <u>Interconnectorsinterconnectors</u> within and between Member States, to which the CACM Regulation applies and where <u>Congestion Income</u> is collected;
 - b. Interconnectors which are owned by TSOs or by other legal entities;
 - Congestion Incomeincome derived from Capacity Allocationcapacity allocation based on Coordinated NTC Approachapproach and FB Approachapproach; and
 - d. Congestion Income derived from Capacity Allocation capacity allocation in the Day-Ahead and Intraday Market Timeframesday-ahead timeframe.
- 2. Where <u>Congestion Income congestion income</u> derives from transmission assets owned by legal entities other than TSOs, these parties shall be treated in a transparent and non-discriminatory way. The TSOs operating these assets shall conclude the necessary agreements compliant with this CID <u>Methodologymethodology</u> with the relevant transmission asset owners to remunerate them for the transmission assets<u>assets</u> they operate on their behalf.

Article 2 Definitions and interpretation

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- For the purpose of the CID <u>Methodologymethodology</u>, terms used in this document shall have the meaning of the definitions included in Article 2 of the CACM Regulation, of the <u>Comission</u> <u>Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity</u> <u>allocation (hereinafter referred to as the "FCA Regulation"),FCA Regulation</u>, of Regulation (EC) 714/2009, Directive 2009/72/EC and Commission Regulation (EU) 543/2013.
- 2. In addition, in this CID Methodologymethodology the following terms shall apply:
 - "Commercial Flow" means the flow over a <u>Bidding Zonebidding zone</u> border resulting from <u>Single Day Ahead Coupling or Single Intraday CouplingSDAC</u> where it is distinguished as follows:
 - for CCRs applying Coordinated NTC Approach it means the allocated flows over the Bidding Zone border; and
 - ii. for CCRs applying the FB Approachapproach it means:
 - a)<u>i.</u> either<u>is</u> the additional aggregated flow (AAF) between two adjacent Bidding Zones where the AAF means the <u>and if applicable the external</u> flow between two Bidding Zones<u>as specified in Article 3</u>; and is calculated based on the FB parameters and the results of the Capacity Allocation within respective day-ahead or intraday market timeframe; or
 - b) a calculated value per Bidding Zone border where the sum of these values per Bidding Zone are equal to the respective net position of the same Bidding Zone to the extent this net position is a result of the Capacity Allocation based on the FB Approach;
 - ii. for CCRs applying coordinated NTC approach it means the allocated capacities on the bidding zone border.
 - <u>b.</u>—<u>"External Flowflow"</u> means the <u>calculated physical</u> flow resulting from exchanges within a CCR from the <u>Single Day Ahead Coupling and Single Intraday CouplingSDAC</u> that cannot be directly assigned to a <u>Bidding Zonebidding zone</u> border of that CCR and is <u>calculated as the flow needed in order to balance the net position resulting from exchanges within the CCR and the sum of AAFs over each Bidding Zone border within the CCR in case where:

 <u>AAF is used within a CCR applying the FB Approach; and</u>

 </u>
 - ii.b. at least two Bidding Zones are connected to an alternative current (AC)* Interconnectortherefore represents exchanges within a CCR, which, as indicated by the FB Approach, carries flows over Bidding Zone are physically realised through borders not included in the sameoutside of a CCR;
 - c. External Flow Value"Net border income" means the Congestion Income congestion income allocated to the External Flow or the External Flow times the Market Spread and it equals the difference between the Congestion Income available for the entire CCR and the Congestion Income allocated to each Bidding Zone border;
 - d.c. "Net Border Income" means the Congestion Income allocated per Bidding Zone Border per bidding zone border as defined in Article <u>4(2) and (3-4)</u> of this methodology.
- 3. In addition, in this CID Methodologymethodology, unless the context requires otherwise:
 - a. a <u>Bidding Zonebidding zone</u> border may consist of one or more <u>Interconnectorinterconnector(s)</u> for the purposes of the <u>Congestion Incomecongestion</u> <u>income</u> distribution;
 - b. unless specified otherwise, the terms used apply in the context of the SDAC;

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b.c. the singular indicates the plural and vice versa;

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e.<u>d.</u> the table of contents and headings are inserted for convenience only and do not affect the interpretation of this CID <u>Methodologymethodology</u>; and

d.c. any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force.

TITLE 2

Collection and distribution of <u>Congestion Income</u> to the <u>Bidding Zone</u> <u>Bordersbidding zone borders</u>

Article 3

Process and calculation of Congestion IncomeCalculation of commercial flow in FB approach

- 1. For the Day Ahead Market Time frame, the Congestion Income generated on a Bidding Zone border shall be calculated as the absolute values of the product of the Commercial Flow multiplied by the Market Spread. For the Intraday Market Time Frame, the Congestion Income shall be calculated as the sum of all revenues from the Capacity Allocation per market time unit (hereinafter referred to as "MTU"). The result of the calculation of the Congestion Income shall be the Net Border Income that reflects what is stipulated in paragraphs 3 and 4 of this Article, where appropriate.
- For CCRs applying the FB approach, the commercial flow shall be based on calculated physical flow on bidding zone borders of a CCR, which result from regional net positions of bidding zones in a CCR. These regional net positions shall be derived from the total net positions resulting from SDAC and subtracting the exchanges with bidding zones outside of a CCR.
- On the internal bidding zone borders of a CCR the commercial flow shall be equal to AAF, which is the calculated physical flow on internal bidding zone borders of a CCR resulting from the electricity exchanges within a CCR. AAF shall be calculated with the following formula:

$$AAF_i = \sum_{j,k \in i} NP_j \cdot PTDF_{j,k}$$

where:

 AAF_i is the AAF on the bidding zone border i;

NP_j is the regional net position of the bidding zone *j*;

<u>*PTDF*_{*i,k*} is the power transfer distribution factor for the bidding zone *j* on the interconnector *k* located on the bidding zone border *i*.</u>

3. For each bidding zone, which has the regional net position not equal to the sum of all commercial flows calculated on the internal borders of such bidding zone pursuant to paragraph 2, the external flow is needed as additional commercial flow in order to balance the regional net position of such bidding zone. The external flow of such bidding zone shall be calculated using the following formula:

$$EF_j = NP_j - \sum_{i \in M} AAF_i$$

where:

 EF_j is the external flows for the bidding zone j;

<u>*NP_i* is the regional net position of the bidding zone j;</u> *AAF_i* is the additional aggregated flow on the bidding zone border i;

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M is the subset of bidding zone borders within a CCR that are part of a bidding zone j.

4. For bidding zones, where additional commercial flow is calculated based on external flow pursuant to paragraph 3, the market spread of such commercial flow used in accordance with Article 4(2) shall be calculated as:

$$EMS_j = P_j - P_{hub}$$

and P_{hub} is the price that minimises the sum of external flows (calculated in accordance with paragraph 3) flowing in the opposite direction of EMS (i.e. non-intuitive external flows) using the following optimisation:

$$\min_{P_{hub}} \sum_{j=1}^{n} \left| \left(P_j - P_{hub} \right) \times EF_j \right|$$

where:

 EMS_i is the market spread for the external flow of a bidding zone *j*; P_i is the clearing price of a bidding zone *j* resulting from SDAC; P_{hub} is the price of a virtual hub, which represents a common virtual sink or source for all external flows;

n is the number of bidding zones having external flows.

If there is no unique solution for P_{hub} , then P_{hub} shall be calculated as the average of the maximum and the minimum value from a set of P_{hub} satisfying the formula above.

Article 4 Process and calculation of congestion income

2-1. In accordance with Article 68(7) and (8) of the CACM Regulation, the relevant Central Counter-Parties or Shipping Agentscentral counter parties or shipping agents shall collect the Congestion Incomecongestion income arising from the Single Day-Ahead Coupling and from the Single Intraday CouplingSDAC and shall ensure that collected Congestion Incomes arecongestion income is transferred to the TSOs or entities appointed by TSOs no later than two weeks after the date of the settlement.

3. Before the Congestion Income, calculated in accordance with paragraph 1 and, where appropriate, taking into account the conditions set out in paragraph 4, is allocated to each Bidding Zone border pursuant to paragraph 2, any remunerations of Long Term Transmission Rights (LTRs) to be paid by the relevant TSOs in accordance with Article 61(3) the FCA Regulation shall be deducted from the income of the relevant Bidding Zone border.

4. Where relevant, in the calculation of the Congestion Income the following may be taken into account:

a. Allocation constraints within a CCR and between CCRs: an allocation constraint which covers the interdependencies of capacity allocation across different bidding zone borders, and which is taken into account in the capacity allocation of cross zonal capacity shall be taken into account in calculating the Congestion Income by allocating the relative impact of this capacity allocation constraint among the affected TSOs.

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- b. External Flow Value: A 50% share of the External Flow Value that may be allocated to the TSOs of the CCR which use the External Flow to balance their net position resulting from exchanges within the CCR and the sum of AAFs over each Bidding Zone border within the CCR. This Exernal Flow Value shall be taken into account in calculating the Congestion Income by allocating this External Flow Value proportionally (pro rata) to the External Flows hosted by each TSO (in MW). The remaining 50% of the External Flow Value may be allocated among all Bidding Zone borders within the CCR, proportionally (pro rata) to the Commercial Flow on each Bidding Zone border within the CCR.
- c. Non intuitive Commercial Flow: Under the FB Approach where AAF has been used to determine the Commercial Flow applied within a CCR, the Non-intuitive Commercial Flow shall be taken into account in calculating the Congestion Income by proportionally adjusting the absolute values of all Congestion Incomes for all Bidding Zone borders and External Flow Values to ensure that their sum matches the Congestion Income which is available for distribution within the entire CCR.
- d. Non negative Net Border Income: to avoid a situation where the remuneration for Long Term Transmission Rights would exceed the Congestion Income assigned to a Bidding Zone border, the Non-negative Net Border Income within a CCR—and where relevant, between CCRs—shall be taken into account in calculating the Congestion Income by allocating the share of the remuneration of Long Term Transmission Rights—which exceeds the Congestion Income of a Bidding Zone border—among the relevant TSOs proportionally to their Net Border Income from the respective CCR, in order to ensure that all Net Border Incomes within the same CCR are non negative under the following conditions:
 - the determination of offered long term cross-zonal capacity has been eoordinated and agreed by the TSOs within the CCR; and
 - the amount of long term cross zonal capacity which is subject to remuneration (for example FTRs or PTRs with UIOSI) does not exceed the day ahead capacity for the respective MTU.
- 2. For the day-ahead market time-frame, the congestion income attributed to a bidding zone border shall be calculated as the absolute value of the product of the commercial flow multiplied by the market spread. The relevant market spread shall be reduced to reflect the costs of network losses in case these are considered in capacity calculation and allocation on the given bidding zone border or interconnector.

The adjustment shall be such that the product of the commercial flow multiplied by the market spread shall equal the actual congestion income on the given bidding zone border or interconnector.

3. In case the sum of congestion income attributed to all bidding zone borders within a CCR (and external borders where relevant) pursuant to paragraph 2 is not equal to the total congestion income generated by electricity exchanges within a CCR, the congestion income attributed to the bidding zone borders within a CCR (and external borders where relevant) pursuant to paragraph (2) shall be adjusted proportionally in order to match the total congestion income generated by electricity exchanges within a CCR.

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TITLE 3

Congestion Income Distributionincome distribution on the Bidding Zonebidding zone border

Article 4<u>5</u> Sharing keys

- After the calculation of the Net Border Income to be shared by relevant TSOs on the Bidding Zone border, the TSOs on both sides of the Bidding Zone borders shall assign the Net Border Income first to the respective Interconnectors on that Bidding Zone borderFor the bidding zone borders where congestion income was calculated based on a parameter which takes into account the Interconnector's contribution to the allocated capacity. This parameter will be agreed by the TSOs on the Bidding Zone border and approved by the relevant National Regulatory Authorities (hereafter referred to as "NRAs").
- After the assignment of Congestion Income to each Interconnectorallocated capacities or AAF, the TSOs on each side of the Bidding Zonebidding zone border shall receive their share of this Congestion Incoment border income based on:
 - a.—_a 50%-50% sharing key; or
 - b. if an Interconnector is 100% owned by a single TSO, the TSO shall retain 100% of the Congestion Income assigned to that Interconnector. If an Interconnector is 100% owned by another legal entity and is operated by a TSO or if this Interconnector has an exemption in accordance with Article 17 of Regulation (EC) No 714/2009, the owner of such an Interconnector shall retain 100% of the Congestion Income assigned to that Interconnector; or
- e-1.. In specific cases the concerned TSOs may also use a sharing key reflecting the different from 50%-50%. Such cases may involve, but are not limited to, different ownership shares or different investment costs or the ownership share upon agreement between the relevant TSOs and the owners of an Interconnector. If there is a difference in the investment costs borne by the owners of an Interconnector or the ownership share, the Congestion Income assigned to the respective Interconnector may be distributed to the owners of the Interconnector proportionate to their share in investment costs or ownership. The percentages for these specific cases, as well as the underlying reasons are defined in Annex 1 to this methodology.
- The congestion income calculated based on external flow shall be attributed to TSO(s) of a bidding zone for which the associated external flow was calculated and have interconnectors through which the external flows are realised.
- 3. In case the bidding zone border consists of several interconnectors with different sharing keys, or which are owned by different TSOs, the net border income shall be assigned first to the respective interconnectors on that bidding zone border based on each interconnector's contribution to the allocated capacity. The parameters defining the contribution of each interconnector will be agreed by the TSOs on the bidding zone border. They shall be published in a common document by ENTSO-E on its web page. The congestion income assigned to each interconnector shall subsequently be shared between the TSOs on each side of the interconnector using the principles described in paragraph 1 whereas the exemptions for specific interconnectors are also defined in Annex 1 to this methodology.
- 4. The final congestion income attributed to each TSO shall consist of congestion income calculated pursuant to paragraph 1 to 3 reduced by the costs for remuneration of long term transmission rights

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to be paid in accordance with Article 61 of the FCA Regulation. This reduction shall cover only the costs for remuneration of those long-term transmission rights, which have been offered for reallocation at the day-ahead timeframe.

 In case specific interconnectors are owned by entities other than TSOs, the reference to TSOs in this article shall be understood as referring to those entities.

TITLE 4

Transparency of information

<u>Article 6</u> <u>Publication of data</u>

1. No later than at the time of the time of implementation of this methodology all TSOs shall publish the following information required for the transparency of congestion income distribution:

a) for CCRs applying the FB approach:

 power transfer distribution factors showing the influence of the change in the net position of each bidding zone on the physical flows on each interconnector on each bidding zone border within a CCR;

- regional net position of each bidding zone within a CCR;
- price of the virtual hub, which represents a common virtual sink or source for all external flows; and
- price for each bidding zone within a CCR.

b) for all CCRs:

- commercial flows and the corresponding market prices used for the purpose of congestion income distribution in accordance with this methodology.
- 2. The information pursuant to paragraph 1 shall be published with market time unit resolution and at least on a monthly basis.

TITLE 5

Final provisions

Article 5

<u>7</u> Publication and <u>Implementationimplementation</u> of the CID <u>Methodologymethodology</u>

- The TSOs shall publish the CID <u>Methodologymethodology</u> without undue delay after all <u>NRAs have</u> approved the proposed <u>CID Methodology or athe</u> decision has been taken by the Agency for the <u>Cooperation of Energy Regulators</u>-in accordance with Article 9(11) and 9(12) of the CACM Regulation.
- The TSOs of each capacity calculation region shall implement the methodology at the date of implementation of the capacity calculation methodology within their respective CCR in accordance with the applicable national regulatory regime and at the latest within six (6) months after the approval as referred to in paragraph 1<u>Articles 20 and 21 of the CACM Regulation</u>.

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- 3. In case TSOs agree to change the sharing key they have originally implemented in accordance with Article 4 due to a change in the circumstances, they shall submit such an agreement to the relevant NRAs within six (6) months after their decision.
- 4. The implementation dates mentioned in paragraphs 2 and 3 of this Article shall be postponed and existing CID sharing keys between the relevant TSOs shall remain applicable on Bidding Zone borders until the capacity calculation and Capacity Allocation takes place based on the Coordinated NTC Approach or the FB Approach in accordance with the CACM Regulation.

Article 6 Language

<u>Article 8</u> Language

The reference language for this CID <u>Methodologymethodology</u> shall be English. For the avoidance of doubt, where TSOs need to translate this CID <u>Methodologymethodology</u> into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 9 (14) of the CACM Regulation and any version in another language the relevant TSOs shall, in accordance with national legislation, provide the relevant NRAs with an updated translation of the CID Methodology.

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Pursuant to Article 5 of the Congestion income distribution methodology, this annex outlines the specific sharing keys applied for sharing congestion income among TSOs on the bidding zone border. Two types of specific keys are defined: a) Specific sharing keys pursuant to Article 5(1) of the Congestion income distribution methodology describing a specific sharing key for the whole bidding zone border (which applies to all interconnectors on that border); and b) Specific sharing keys pursuant to Article 5(3)

of the Congestion income distribution methodology describing a specific sharing key for specific interconnectors of a bidding zone border.

The involved TSOs and entities may differ from those specified in the definition of capacity calculation regions for a specific bidding zone border when entities other than TSOs are present in the border. Formatted: Left: 2.54 cm, Right: 2.54 cm, Top: 2.54 cm, Bottom: 2.54 cm, Width: 29.7 cm, Height: 21 cm, Header distance from edge: 1.25 cm, Footer distance from edge: 1.25 cm

Bidding Zone border	Interconnector	Involved TSOs/ Parties	Sharing key applied	<u>Reason</u>
DK2- DE/LU	<u>all</u>	Energinet.dk, 50Hertz, Vattenfall AB	Hours with congestion from DE/LU to DK2: Energinet.dk: 1/3 Vattenfall: 1/3	Ownership shares



GB-NLBritNedBritNed, TenneT TSO B.V. NGETBritNed, TenneT TSO B.V. NGETOwnership shares Ownership sharesGB-NLBritNedBritNed, TenneT TSO B.V. NGETBritNed, TenneT TSO B.V. NGETOwnership shares Ownership sharesGB-BENemo Link ² Elia, Elia, NGETElia, O%; NGETOwnership sharesSEM-GBInterconnector IE-GBEirGrid PIC, NGETEirGrid: 100%; Other entities: 0%Ownership shares Ownership sharesSEM-GBInterconnector GB-NI Moyle Interconnector Ltd;SONI Moyle Interconnector Ltd;Ownership shares Ownership shares Other entities: 0%Ownership shares Ownership sharesTT-ATInterconnector IE-A NGETTerma, APG, NGETEneco Valcanale; NGET NGETOwnership shares Other entities: 0%Ownership shares Ownership sharesFR-GBInterconnector IFA NGETRTE, NGET, NGETRTE, 50%; NGET, 0%Ownership shares Ownership sharesFR-GBInterconnector IFA2RTE, NGET, NG				50 Hertz: 1/3	
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NGET NCET. 00/			Eleclink Limited,	Eleclink Limited: 100%;	
			NGET	<u>NGET: 0%</u>	

² In accordance with Schedule 3 of the Tariffs methodology (Z) 141218-CDC-1109/7, issued by CREG, and dated 18 December 2014, as amended from time to time.



<u>SE4-</u>	Baltic Cable	Baltic Cable AB,	Baltic Cable AB: 100%,	Ownership shares
DE/LU ³		Svenska kraftnät,	Svenska kraftnät: 0%,	
		TenneT TSO GmbH	TenneT TSO GmbH: 0%	

³ The Baltic Cable AB is not yet certified as a TSO.

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