

**DECISION OF THE AGENCY FOR THE COOPERATION OF ENERGY
REGULATORS No 07/2017**

of 14 December 2017

ON THE CONGESTION INCOME DISTRIBUTION METHODOLOGY

THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

HAVING REGARD to the Treaty on the Functioning of the European Union,

HAVING REGARD to Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators¹, and, in particular, Article 8(1) thereof,

HAVING REGARD to Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management², and, in particular, Article 9(12) thereof,

HAVING REGARD to the outcome of the consultation with the concerned regulatory authorities and transmission system operators,

HAVING REGARD to the favourable opinion of the Board of Regulators of 13 December 2017, delivered pursuant to Article 15(1) of Regulation (EC) No 713/2009,

WHEREAS:

1. INTRODUCTION

- (1) Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (the ‘CACM Regulation’) laid down a range of requirements for cross-zonal capacity allocation and congestion management in the day-ahead and intraday markets in electricity. These requirements also include the development of a methodology for distributing among the transmission system operators (‘TSOs’) the congestion income, i.e. the revenues received from the capacity allocation within the single day-ahead and intraday coupling in accordance with Article 73 of the CACM Regulation.
- (2) Pursuant to Articles 9(1), 9(6)(m) and 73(1) of the CACM Regulation, all TSOs are required jointly to develop a proposal for a congestion income distribution methodology (‘CIDM’) and submit it to all regulatory authorities for approval. Then, according to Article 9(10) of

¹ OJ L 211, 14.8.2009, p. 1.

² OJ L 197, 25.7.2015, p. 24.

the CACM Regulation, the regulatory authorities receiving the proposal for the CIDM should reach an agreement and take a decision on that proposal, in principle, within six months after the receipt of the proposal by the last regulatory authority. If the competent regulatory authorities fail to reach an agreement within the six-month period, or upon their joint request, the Agency is called upon to adopt a decision concerning the TSOs' proposal, pursuant to Article 9(11) of the CACM Regulation. However, if, pursuant to Article 9(12) of the CACM Regulation, the regulatory authorities request an amendment to approve the proposal, the relevant TSOs shall submit an amended proposal for approval within two months following the regulatory authorities' request. Subsequently, the regulatory authorities shall reach an agreement and take a decision on that proposal, in principle, within two months after the receipt of the amended proposal by the last regulatory authority. When the competent regulatory authorities fail to reach an agreement within the two-month period, or upon their joint request, the Agency is called upon to adopt a decision concerning the TSOs' proposal.

- (3) The present Decision of the Agency follows from the regulatory authorities' request that the Agency adopts a decision on the proposal for the CIDM (which the TSOs submitted to the regulatory authorities for approval). Annex I to this Decision sets out the CIDM, as decided by the Agency, pursuant to Article 73 of the CACM Regulation.

2. PROCEDURE

2.1 Proceedings before regulatory authorities

- (4) On 12 August 2016, ENTSO-E, 'on behalf of all TSOs', submitted to the Agency an '*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*' dated 29 June 2016 ('Original proposal'), together with an explanatory document. In parallel, all TSOs submitted the Original proposal to the regulatory authorities and it was received by the last of the concerned regulatory authorities on 18 August 2016. The Original proposal was published on ENTSO-E web page on 8 December 2016.
- (5) On 17 February 2017, all regulatory authorities submitted to all TSOs a request to amend the Original proposal. It was received by the last of the concerned TSOs on 21 February 2017. In their request, all regulatory authorities requested:
- a) to remove the process established in Article 5 of the Original proposal: '*General Provisions for specific sharing keys and additional rules*';
 - b) to remove the specific sharing keys in Article 6 of the Original proposal: '*Specific sharing keys*';
 - c) to amend the default arrangements in Article 4 of the Original proposal: '*Sharing keys*', in order to allow the sharing of congestion income according to the investment costs of the interconnector where an ownership arrangement exists on any particular bidding zone border in line with Point 6.3 of Annex I to Regulation (EC) No 714/2009, and has

been previously agreed with the respective regulatory authorities. The regulatory authorities requested that the above-mentioned provision for sharing on the basis of an ownership arrangement be used only if the ownership agreement is different from the default 50%-50% split or 100% sharing key as set out in the Original proposal;

- d) to remove the additional rules set out in Article 7 of the Original proposal: '*Additional rules for Congestion Income*'. In the case of flow-based market coupling regions, the regulatory authorities requested that the rules for flows or non-intuitive commercial flows be included only in default sharing arrangements if fully justified. The regulatory authorities also requested that rule relating to non-negative net border income be removed from the proposed methodology;
 - e) to remove the definitions that are repeated from Commission Regulation (EU) 2016/1719 establishing a guideline on Forward Capacity Allocation ('FCA Regulation').
- (6) On 21 April 2017, ENTSO-E published and, 'on behalf of all TSOs', submitted to the Agency the amended '*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*' dated 7 April 2017 ('Proposal'), together with the amended explanatory document. The Proposal was received by the last of the concerned regulatory authorities on 27 April 2017.

2.2 Proceedings before the Agency

- (7) In a letter dated 14 June 2017 and received by the Agency on the same day, the Chair of the Energy Regulators' Forum³, on behalf of all regulatory authorities, informed the Agency that all regulatory authorities agreed to request the Agency to adopt a decision on the Proposal, pursuant to Article 9(12) of the CACM Regulation, and indicated that the regulatory authorities were able to agree on the key elements of the Proposal to be addressed by the Agency's decision.
- (8) According to the letter, all regulatory authorities considered that the TSOs had not sufficiently and properly taken into account the regulatory authorities' request for amendment. In particular, TSOs did not address the request for amendment:
- (a) to remove the process established in Article 5 of the Original proposal ('*General Provisions for specific sharing keys and additional rules*'); and
 - (b) to remove the specific sharing keys in Article 6 of the Original proposal.

All regulatory authorities also agreed that the proposed CIDM should not include a number of additional provisions that were only introduced after the regulatory authorities' request

³ The regulatory authorities' platform to consult and cooperate for reaching a unanimous agreement on NEMO's and TSOs' proposals.

for amendment, and, therefore, were not addressed in the all regulatory authorities' initial request for amendment. These provisions include:

- (a) Article 3(3) of the Proposal, which contains elements that should be included in methodologies required under the FCA Regulation;
 - (b) Article 3(4) of the Proposal, which sets out the rule for application of 'relevant conditions' that may be taken into account during the calculation of congestion income; and
 - (c) Articles 4(1) and 5(3) of the Proposal, which establish a process for the development of a sub-methodology that requires subsequent regulatory approvals.
- (9) The letter of 14 June 2017 did not indicate that the regulatory authorities requested the TSOs to amend also the Proposal. In fact, there was no such request.
- (10) From July to September 2017, the Agency organised several web-conferences with all TSOs to discuss the issues raised by all regulatory authorities and subsequently by the Agency. This period of informal consultation continued with the formal consultation involving all TSOs and regulatory authorities lasting from 6 October until 20 October 2017. In the consultation document, the Agency proposed amendments to the Proposal. The summary and the evaluation of the responses received are presented in Annex II to this Decision. The main issues addressed in the responses are outlined in the Recitals (11) to (15) below.
- (11) All TSOs and a minority of regulatory authorities expressed concerns with regard to the treatment of external flows and proposed to define the rules for the allocation of the congestion income generated by external flows at a later stage. One regulatory authority explicitly supported the 50%-50% sharing rule for the external flows. These concerns are addressed in Section 5.2.4 below.
- (12) All TSOs proposed general rules for the sharing of the costs of remuneration of Long Term Transmission Rights ('LTTRs'), as well as rules for netting the day-ahead congestion income from the costs of remuneration of LTTRs. A few regulatory authorities expressed support for the inclusion of these additional rules. These points are addressed in Section 5.2.1 below.
- (13) A few regulatory authorities raised concerns with regard to non-intuitive flows. Two regulatory authorities supported the solution given by the Proposal to convert negative congestion income into a positive one, whereas one regulatory authority noted that such a solution is counter-intuitive. These concerns are addressed in Section 5.2.3 below.
- (14) All TSOs proposed that the CIDM should contain specific rules for the sharing of congestion income in relation to allocation constraints. This position was supported by one regulatory authority. This aspect is addressed in Section 5.2.2 below.

- (15) A few regulatory authorities expressed concerns regarding the rules on the sharing of congestion income on a bidding zone border. They asked for more clarity on the default rule and exceptions on specific borders. These concerns are addressed in Section 5.2.5 below.

3. THE AGENCY'S COMPETENCE TO DECIDE ON THE PROPOSAL

- (16) Pursuant to Article 9(12) of the CACM Regulation, where the regulatory authorities have requested the relevant applicants (i.e. NEMOs or TSOs) to amend the proposal and have not been able to reach an agreement on the amended terms and conditions or methodologies within two months after their resubmission, or upon the regulatory authorities' joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009.
- (17) Following the regulatory authorities' request to amend the Original proposal, the TSOs submitted the Proposal which included amendments. With regard to that Proposal, according to the letter of the Chair of the Energy Regulators' Forum of 14 June 2017, all regulatory authorities agreed to request the Agency to adopt a decision pursuant to Article 9(12) of the CACM Regulation.
- (18) Therefore, under the provisions of Article 9(12) of the CACM Regulation, the Agency became responsible to adopt a decision concerning the submitted Proposal by the regulatory authorities' joint referral of 14 June 2017.

4. SUMMARY OF THE PROPOSAL

- (19) The Proposal includes: (i) recitals describing, *inter alia*, the expected impact of the Proposal on the objectives set out in Article 3 of the CACM Regulation; (ii) general provisions, including on the subject matter and scope (Article 1) as well as on definitions and interpretation (Article 2); (iii) the provisions on collection and distribution of congestion income to the bidding zone borders (Article 3); (iv) the provisions on congestion income distribution on the bidding zone border (Article 4); and (v) final provisions, including on the publication and timeline for implementation (Article 5), as well as on the applicable language (Article 6).
- (20) The Proposal provides for the following three layers of congestion income distribution. In the first layer, the congestion income is collected from the central counterparties and separated into congestion income generated by electricity exchanges within each capacity calculation region ('CCR'). In the second layer, the congestion income of a CCR is allocated to each bidding zone border of the CCR (or to an external flow where applicable) based on the absolute value of the product of commercial flows and market spread. In this layer, the Proposal also provides for the deduction of the costs of remuneration of LTTRs from the congestion income allocated to a bidding zone border. Third, the congestion income on each bidding zone border is distributed to TSOs on the bidding zone border using the default 50-

50 % sharing key or using specific keys in case of different investment costs or ownership share of the interconnectors.

- (21) Article 3 of the Proposal proposes a flexible approach by which TSOs may take into account for the congestion income distribution, where relevant, (i) the allocation constraints within a CCR or between CCRs, (ii) the sharing of external flow value, (iii) the redistribution of congestion income for flow-based regions such that the sum of congestion income shares allocated to bidding zone borders in a CCR matches the total congestion income generated within a CCR and (iv) the assurance of non-negative congestion to ensure that no TSO's congestion income would become negative after paying out the costs of remuneration of LTTRs.
- (22) With regard to the sharing of congestion income on a bidding zone border, the Proposal first specifies that the congestion income shall be distributed between interconnectors on the bidding zone border based on their contribution to the allocated capacity. Then, the congestion income allocated to each interconnector is shared between the two TSOs on both sides of the interconnector using one of the following rules:
- (a) the 50%-50% sharing key;
 - (b) where an interconnector is owned 100% by one TSO, the relevant congestion income is allocated 100% to that TSO;
 - (c) specific percentage sharing may be applied between the TSOs on the interconnectors to reflect specific investment costs or ownership shares of the interconnector.
- (23) The Proposal provides that all TSOs shall implement the CIDM in accordance with the applicable national regulatory regime and at the latest within six months after the approval by all regulatory authorities or after the decision has been taken by the Agency. However, the Proposal also proposes to postpone the implementation until the capacity calculation and capacity allocation takes place based on the coordinated net transmission capacity approach or the flow-based approach in accordance with the CACM Regulation.

5. ASSESSMENT OF THE PROPOSAL

5.1 Legal framework

- (24) According to Article 73(1) of the CACM Regulation, the proposal for CIDM shall be developed by all TSOs, no later than 12 months after the entry into force of the CACM Regulation.
- (25) According to Article 73(2) of the CACM Regulation, the CIDM shall: (i) facilitate the efficient long-term operation and development of the electricity transmission system and the efficient operation of the electricity market of the Union; (ii) comply with the general principles of congestion management provided for in Article 16 of Regulation (EC) No 714/2009; (iii) allow for reasonable financial planning; (iv) be compatible across time-

frames; and (v) establish arrangements to share congestion income deriving from transmission assets owned by parties other than TSOs.

- (26) Moreover, the CIDM must be in line with the objectives of Article 3 of the CACM Regulation.
- (27) The CACM Regulation does not require any public consultation of the proposal. In fact, no such consultation has been made by all TSOs.
- (28) As a general requirement, Article 9(9) of the CACM Regulation requires that every proposal for terms and conditions or methodologies includes a proposed timescale for their implementation and a description of their expected impact on the above-mentioned objectives of Article 3 of the CACM Regulation.

5.1.1 Assessment against the requirements of Article 73(2) of the CACM Regulation

- (29) Neither the Proposal, nor the amended explanatory note accompanying the Proposal, contains the assessment against the requirements established in Article 73(2) of the CACM Regulation.
- (30) The Agency notes however that the requirement of Article 73(2)(a) of the CACM Regulation is in essence very similar to objective (g) of Article 3, against which the Proposal is assessed in Recital 6.
- (31) The Proposal only addresses the distribution of congestion income but not its use. Therefore, in the Agency's view, the Proposal alone is not deemed to have any negative impact on the general principles of congestion management provided for in Article 16 of Regulation (EC) No 714/2009.
- (32) The Proposal does not provide a stable and predictable framework for congestion income distribution and therefore does not enable a reasonable financial planning for TSOs and national regulatory authorities as required by the third objective of Article 73(2). This is because the Proposal suggests a discretionary application of specific rules by TSOs. The Proposal thus needs to be amended in several ways to replace this proposed discretion of TSOs by clear and directly applicable rules. The specific amendments related to this concern are presented in Sections 5.2.2 to 5.2.5 below.
- (33) The Proposal establishes the congestion income distribution methodology for the day-ahead and intraday timeframes. Its compatibility with the congestion income distribution methodologies for the forward and balancing timeframes cannot be evaluated at this stage as these latter methodologies are not yet developed. Nevertheless, the Agency does not see specific concerns, which would call into question the compatibility of the Proposal with the future methodologies. With regard to the compatibility of the Proposal between the day-ahead and intraday timeframe, the Agency decides to limit the scope of the Proposal to the

day-ahead timeframe only and to define the CIDM for the intraday timeframe at a later stage. This amendment is presented in Section 5.3 below.

- (34) With regard to the arrangements to share congestion income deriving from transmission assets owned by parties other than TSOs, the Proposal clearly identifies the cases where interconnectors may be owned by other parties and establishes that, in such cases, those parties shall be entitled to receive all or a part of the congestion income. The Proposal is therefore in line with this requirement.

5.1.2 Expected impact on the objectives of the CACM Regulation.

- (35) Recitals (4) to (9) of the Proposal describes the expected impact of the proposed CIDM on the objectives listed in Article 3 of the CACM Regulation.
- (36) Therefore, the Proposal complies with the requirement in Article 9(9) of the CACM Regulation.
- (37) As regards the substance of the described impact, the Agency generally agrees with the assessment of the expected impact on the objectives listed in Article 3 of the CACM Regulation.

5.1.3 Proposed timescale for implementation

- (38) Article 5(2) of the Proposal specifies that all TSOs will implement the CIDM in accordance with the applicable national regulatory regime and at the latest within six months after the approval by all regulatory authorities or after the decision has been taken by the Agency. However, Article 5(4) of the Proposal also proposes to postpone the implementation until the capacity calculation and capacity allocation take place based on the coordinated net transmission capacity approach or the flow-based approach in accordance with the CACM Regulation.
- (39) Formally, the Proposal complies with the requirement in Article 9(9) of the CACM Regulation.
- (40) As regards the substance of the implementation timescale, the Agency understands that the postponement pursuant to Article 5(4) of the Proposal would prevail in all cases as it is expected that the capacity calculation methodologies pursuant to the CACM Regulation will be implemented much later than the adoption of the CIDM by the Agency. As the proposed CIDM can only be applied once the capacity calculation methodologies pursuant to the CACM Regulation are implemented, the Agency amends the Proposal such that it clarifies that the CIDM shall be implemented once the relevant capacity calculation methodologies, developed and approved pursuant to the CACM Regulation, are implemented in a CCR. Actually, the changes introduced by the Agency do not change the effective implementation date, but clarifies it.

5.2 Recommendations from all regulatory authorities

- (41) Based on the letter from the Chair of the Energy Regulators' Forum, all regulatory authorities requested the Agency to evaluate and improve different elements of the Proposal. The Agency understands from the regulatory authorities' explanation that their recommendations reflected the following principles with which the proposed CIDM fails to comply:
- a) Principle 1: the CIDM should generally not allow for specific arrangements, unless they are duly justified. In such a case, these specific arrangements should be defined directly in the CIDM to ensure proper regulatory scrutiny of these specificities and give full effect to the requirement of approval by regulatory authorities under Article 9(6)(m) of the CACM Regulation.
 - b) Principle 2: the CIDM should not establish new approval procedures of sub-methodologies, by which some TSOs could develop some details of the methodology at a later stage and submit it for approval to their competent regulatory authorities. Indeed, Article 9(6)(m) and Article 73(1) of the CACM Regulation require the CIDM to be developed by all TSOs and to be approved by all regulatory authorities.
 - c) Principle 3: the CIDM should not establish rules and procedures which could be applied at the discretion of TSOs and which would provide TSOs with the flexibility of applying or not certain rules. Instead, in view of the requirement for legal certainty, the CIDM and its rules should be established in a manner that it is clear when, where and to whom they apply.

5.2.1 The remuneration of non-nominated LTTRs

- (42) The Proposal includes two provisions (Article 3(3) and Article 3(4)(d)) that aim to address the problem of sharing the costs related to the remuneration of non-nominated LTTRs (non-nominated either because they are Financial Transmission Rights or because they are Physical Transmission Rights that their holders decide not to nominate).
- (43) While the Agency understands and acknowledges the rationale behind these provisions, it notes that the sharing of costs of remuneration of non-nominated LTTRs cannot be decided in the framework of the CIDM's approval, because sharing of these costs is not within the scope of the CIDM, but instead within the scope of 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 (which will have to be submitted 12 months after the date of entry into force of this Decision).
- (44) Nevertheless, the Agency finds it important to clarify the interdependence of congestion income distribution in the day-ahead timeframe and the remuneration of the costs of LTTRs. For this reason, a new recital is included in the CIDM to clarify that, in a situation where TSOs of a CCR have issued LTTRs, the costs for the remuneration of those LTTRs should be borne by the same TSOs which receive the congestion income in the day-ahead timeframe that is generated by the capacity corresponding to the non-nominated LTTRs. The Agency also amends the CIDM to clarify that the final congestion income that a TSO receives in the

day-ahead timeframe is actually the net congestion income after the costs of remuneration of LTTRs have been paid.

5.2.2 The impact of allocation constraints on the congestion income distribution

- (45) Article 3(4)(a) of the Proposal specifies that TSOs may, where relevant, take into account the allocation constraints in the congestion income distribution. More specifically, Article 3(4)(a) of the Proposal specifies that: *“...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.”*
- (46) Article 3(4)(a) of the Proposal provides TSOs with the discretion of taking or not into account allocation constraints. In the Agency’s view, this is not in line with Principle 3 described in Recital (41).
- (47) Based on the additional explanations provided in the explanatory note and in the all TSOs’ contribution to the Agency’s consultation on CIDM, the Agency understands that these specific references to allocation constraints actually aim at addressing a specific type of allocation constraints that correspond to a simultaneous import or export limit across several bidding zone borders. Such an allocation constraint is currently applied by the Polish TSO on the Sweden 4 – Poland (SE4 – PL) and Lithuania – Poland (LT – PL) bidding zone borders. This allocation constraint complements the individual cross-zonal capacities offered on the two bidding zone borders and actually allows for a transit of electricity between Sweden and Lithuania even in the case where the total import or export to Poland is set to zero.
- (48) The Agency understands that the application of import/export limits in such specific case would have the effect that the single day-ahead market coupling (SDAC) clearing price in Poland becomes disconnected from the commercial flows on the SE4-PL and LT-PL borders. In case the import/export limits of Poland were to be set to zero, the commercial flows on these two borders would actually represent a direct transit between SE4 and LT. For such direct transit, the relevant market spread would then have to be calculated as the difference between the LT and SE4 clearing prices and the related congestion income should be distributed equally between the two borders. All TSOs therefore propose a solution by which the commercial flows on these two borders are split into direct commercial flows with Poland and a direct transit flow. For the former, the standard congestion income distribution rules would apply, whereas for the latter, the congestion income would be calculated for both borders together using the market spread between SE4 and LT and the resulting congestion income would be split equally between the two borders.

- (49) Although that proposal may be able to address the specific situation on the two concerned bidding zone borders, this does not yet justify, in the Agency's view, to amend the general rules for congestion income distribution only for the specific problem, because:
- a) this proposal targets all allocation constraints in general, while the proposed solution is designed only for a specific type of allocation constraints (i.e. import and export limits) applied in a specific situation. All TSOs have not demonstrated that the proposed solution can be generalised to any allocation constraint and to any situation. Thus, the Agency is concerned of making a generic error in the rules which would require later amendments once all the information about allocation constraints is known; and
 - b) the described application of import/export limits on the SE4-PL and LT-PL borders makes the capacity allocation on these two borders interdependent. In such a situation, the concept and purpose of CCRs under the CACM Regulation, in view of the objectives of Article 3 of the CACM Regulation, requires that interdependent bidding zone borders should be coordinated and included within the same CCR. Interdependency of capacity allocation between bidding zone borders was indeed the main criterion by which the Agency assessed the TSOs' proposal on CCRs pursuant to Article 15(1) of the CACM Regulation and decided to merge the proposed CWE CCR and CEE CCR into a single CORE CCR⁴. For this reason, the Agency is of the opinion that allocation constraints may be applied only among the bidding zone borders within a single CCR and not among bidding zone borders belonging to different CCRs. This interpretation is also apparent from Articles 9(7)(a), 20(2), and 21(1) of the CACM Regulation, which require that the methodology for determining allocation constraints that may be applied in accordance with Article 23 of the CACM Regulation needs to be proposed by all TSOs of the concerned CCR and approved by all regulatory authorities of the concerned CCR. It follows from this that TSOs and regulatory authorities from the Baltic CCR cannot propose and approve an allocation constraint that is partly applicable to the bidding zone border SE4-PL because the relevant TSOs and regulatory authorities have no authority on defining congestion management rules for the bidding zone border outside of their CCR. Similarly, the TSOs and regulatory authorities from the Hansa CCR do not have the competence to propose and approve the allocation constraint that is partly applicable also to the bidding zone border LT-PL.
- (50) After the consultation with all TSOs and regulatory authorities, the Agency received from all TSOs and two regulatory authorities a new text proposal to address the issue of allocation constraints applied across bidding zone borders of different CCRs. This new proposal would allow for additional rules on the treatment of allocation constraints applied across different bidding zone borders, which would be defined regionally by TSOs and regulatory authorities and published on ENTSO-E web-page. While the Agency recognises that such a proposal would allow for some regulatory scrutiny, it notes however that the flexibility given to regional TSOs and regulatory authorities to define rules outside the CIDM framework is not

⁴ See the Agency Decision on the electricity transmission system operators' proposal for the determination of capacity calculation regions of 17 November 2016.
https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%202006-2016%20on%20CCR.pdf.

in line with Principle 1, as well as Principle 2 described in Recital (41) and thus cannot be accepted.

- (51) Given the above reasons, the Agency deems it appropriate that the specific problem is first addressed with adequate legal means, namely the inclusion of all interdependent bidding zone borders into a single CCR and an overall legal assessment of the justification of these allocation constraints. Further, if these allocation constraints are approved by the relevant regulatory authorities in accordance with the applicable legal proceedings pursuant to the CACM Regulation, all TSOs may propose amendments to the CIDM and specify the relevant exceptions directly in the CIDM.

5.2.3 Non-intuitive commercial flows

- (52) The second layer of the Proposal establishes a general rule by which the congestion income generated by exchanges within a CCR is distributed among bidding zone borders of a CCR based on the *absolute value* of the product of the commercial flow and the market spread.
- (53) The Agency understands that the purpose of using an absolute value is to address the issue of non-intuitive flows which also contribute to the optimal solution and maximisation of economic surplus at the CCR level.
- (54) A natural solution for non-intuitive commercial flows would have provided for the negative congestion income generated on the borders with non-intuitive flows to be paid by the TSOs who receive higher congestion income thanks to these non-intuitive flows. The Agency has explored and proposed this concept to all TSOs and all regulatory authorities. However, based on their responses, the Agency could not find a generic solution by which the beneficiaries of non-intuitive commercial flows could be clearly identified. In such a situation, the Agency finds the proposal from all TSOs, by which the negative congestion income is socialised between TSOs of a CCR, acceptable. Thus, despite the concerns expressed by the Agency and some regulatory authorities, the Agency approves the proposed solution for non-intuitive flows.
- (55) For the purpose of clarity, the Agency replaces Article 3(4)(c) of the Proposal with a new paragraph 3 in Article 4 which specifies a general rule for socialisation of negative congestion income. This paragraph generally applies a redistribution of congestion income any time the total sum of absolute value of the products between commercial flows and market spreads in a CCR is not equal to the total congestion income generated in the CCR. While the Agency understands that such a mismatch may occur only in case of non-intuitive commercial flows, other cases cannot be excluded at this point.

5.2.4 Calculation of external flow and sharing of related congestion income

- (56) In the Proposal, the commercial flow is equal to the allocated flow (i.e. cross-zonal capacities allocated in SDAC) in case the coordinated net transmission capacity approach applies⁵. In case the flow-based approach applies, the commercial flow is either the additional aggregated flow (AAF) or the external flow. The AAF is calculated for bidding zone borders within a CCR and represents the physical flow resulting from the net positions of bidding zones, which are the result of electricity exchanges within a CCR only (the Agency introduces in Article 3(1) of the CIDM the term ‘regional net position’ for this purpose). For a bidding zone where the sum of AAFs on its bidding zone borders within a CCR is not equal to the regional net position of such bidding zone, the difference is called ‘external flow’. The latter therefore represents a part of the regional net position of a bidding zone, which is physically realised through the borders of this bidding zone that are not part of a given CCR.
- (57) Further, the Proposal also defines the external flow value, which is defined as the congestion income allocated to the external flow and which is equal to the difference between the congestion income available for the entire CCR and the congestion income allocated to all bidding zone borders of a CCR. Finally, Article 3(4)(b) of the Proposal specifies that TSOs may, where relevant, allocate 50% of the external flow value to the TSOs of the CCR, which have external flows. The remaining 50% of the external flow value may be allocated among all bidding zone borders within the CCR, proportionally to the AAFs and external flows calculated for such CCR.
- (58) The Agency considers that the Proposal needs to be amended in three aspects.
- (59) First, the Agency agrees with all regulatory authorities (see Principle 3 in Recital (41) that the Proposal should not impose rules which allow for a discretionary application, such that the TSOs may, where relevant, decide to allocate 50% of external flow value using one rule and 50% using another rule. In the Agency’s view, the Proposal fails to clarify the default rule for allocating the congestion income generated by external flows.
- (60) Second, the Proposal does not provide a clear justification for allocating 50% of the external flow value using one rule and 50% using another rule. The amended explanatory note accompanying the Proposal only explains that with such a rule *“a fair treatment of all affected TSOs and incentives for investments in Interconnectors will be maintained.”* No further clarity is provided in the all TSOs’ response to the Agency’s consultation (See Annex II). That response only states that *“[A]ll TSOs believe the sharing of external flow value between different bidding zones may be justified for different reasons.”*
- (61) Third, the Agency finds the proposed definition of external flow value incomplete, because it does not specify how exactly the external flow value will be calculated for each external

⁵ Note that the Agency is using the term ‘allocated capacities’ (instead of the term ‘allocated flow’), since the allocated flow means the physical flow resulting from all cross-zonal exchanges.

flow. The proposed definition of external flow value is feasible only in a situation where there are only two bidding zones with external flows such as in the current Central West Europe region where external flows are flowing between the bidding zones of France and Germany-Luxembourg-Austria. In such a situation, it is clear that the two external flows are flowing between Germany and France and therefore the relevant market spread is the difference between the prices in Germany and France. However, in the CORE CCR, there will be many more bidding zones that will have external flows (i.e. France, Germany, Austria, Slovenia, Croatia, Hungary, Romania and Slovakia). While each of these bidding zones will have an external flow, one cannot identify the pairs of bidding zones and the corresponding market spread to calculate the external flow values (for example, one cannot identify how much of the external flow from France is flowing into Germany). The Proposal therefore fails to explain how the external flow value will be calculated for each of these external flows and which market spread is relevant for which external flow.

- (62) With regard to the first and second concern, the Agency finds it necessary that the CIDM defines an exact rule for allocating the congestion income generated by external flows. In that respect, the Agency notes that the AAFs and external flows are both understood as representing the physical flows which appear on the borders of bidding zones as a result of regional net positions. The only difference between AAFs and external flows is therefore that AAFs are commercial flows between two bidding zones in a CCR on their common bidding zone border, whereas external flows are commercial flows between two bidding zones of a CCR which are partly flowing through bidding zones or bidding zone borders that are not part of the CCR. Despite this difference, the congestion income generated by those flows is still determined by the volume of these flows and the market spread between the relevant two bidding zones. For this reason, the Agency finds it reasonable that the two bidding zones share the resulting congestion income using a 50-50% split. On the contrary, the Agency could not find a proper rationale or justification for TSOs that do not host the external flows to receive a part of the congestion income generated by those flows. Such a solution does not appear to be consistent with the Proposal's general approach to distribute congestion income based on commercial flows and market spread between relevant bidding zones. The amendments that the Agency introduces in the Proposal to address the first and second concern are presented in Recital (65).
- (63) To address the third concern in Recital (61), the Agency invited all TSOs during the consultation to provide an informal proposal to the Agency on how to generalise the calculation of commercial flow and market spread in case the external flow is used. As part of their consultation response, all TSOs proposed a solution which does not require to specify the commercial flows between the pairs of bidding zones having external flows in order to define the related market spread. This solution introduces a virtual hub, which represents a common source and sink of all external flows⁶. With this concept, the relevant commercial flow for congestion income distribution is equal to the external flow between a bidding zone

⁶ Note that the sum of all external flows is by definition equal to zero and therefore one can assume that all these external flows are netted in a virtual hub.

and the virtual hub and the relevant market spread is equal to the difference between the price of the relevant bidding zone and the price of the virtual hub. To calculate the price of this virtual hub, all TSOs proposed a solution by which this price is determined through an optimisation that minimises the sum of absolute values of the products between the external flows and the relevant market spreads. This optimisation in essence minimises the sum of non-intuitive external flows (i.e. external flows flowing in the direction of negative market spread).

- (64) Based on the informal proposal from all TSOs referred to in the previous Recital, the Agency amends the Proposal by adding a new Article 3, which specifies the following elements:
- (a) the calculation of the regional net position which is used as a basis for calculating the AAFs and external flows (Article 3(1) of the CIDM);
 - (b) the calculation of AAFs on bidding zone borders of a CCR (Article 3(2) of the CIDM);
 - (c) the calculation of external flows (Article 3(3) of the CIDM); and
 - (d) the calculation of market spreads for the purpose of calculating the congestion income from external flows (Article 3(4) of the CIDM).
- (65) Finally, it is important to note that the Agency removes the definition of external flow value from the CIDM on the grounds that the Agency deems it important that the general principle of allocating congestion income based on the absolute value of the product of commercial flows and market spread is applied also to external flows. From this perspective, the external flows should not have a specific treatment and no specific definition of external flow value is necessary. Nevertheless, it is important to emphasise that market spread used for the calculation of congestion income allocated to external flows represents only half of the relevant market spread between a pair of bidding zones having external flows. For this reason, the calculated congestion income allocated to external flows is already split between TSOs having external flows and therefore 100% of congestion income allocated to external flows should be attributed to the TSOs having external flows. The Agency provides this clarification in Article 5(2) of the CIDM.

5.2.5 Specific rules for sharing congestion income distribution on the bidding zone border

- (66) The Proposal establishes a default rule by which the congestion income on the bidding zone border is first shared between all interconnectors on the bidding zone border based on their contribution to the allocated capacities. The Proposal provides that rules describing the interconnector's contribution to the allocated capacities shall be agreed by the TSOs on the bidding zone border and approved by the relevant regulatory authorities. Subsequently, the congestion income attributed to each interconnector shared between the two TSOs on both sides of the interconnector based on:
- (a) the 50%-50% sharing key; or,
 - (b) 100% share to one TSO in case an interconnector is fully owned by one TSO only; or
 - (c) the sharing key reflecting the investment costs or the ownership share upon agreement between the relevant TSOs.

The Proposal also clarifies that, in case an interconnector is owned by entities other than TSOs, these entities, instead of the TSO, shall receive the respective congestion income.

- (67) The Agency considers that the Proposal needs several amendments to address the following concerns (raised both by the Agency and regulatory authorities):
- a) The parameters to determine the interconnector's contribution to allocated capacities are proposed to be included in a sub-methodology, which would be subject to additional approval procedure by regulatory authorities. The Agency notes that this is not in line with Principle 1 mentioned in Recital (41).
 - b) The sharing key to distribute congestion income on a specific interconnector provides three different options without providing sufficient clarity on the default rule and specific conditions under which exemptions may be used. This creates uncertainty with regard to the application of this sharing key. The Agency notes that this is not in line with Principle 3 mentioned in Recital (41).
- (68) To address the above two concerns, the Agency deems it necessary to amend the Proposal in a way that (i) clearly establishes a default sharing key, (ii) defines specific exemptions from the default rule and the reasons for exemptions and (iii) does not establish additional approval procedures by the involved regulatory authorities.
- (69) Therefore, first, the Agency amends the Proposal such that the sharing of congestion income between the interconnectors on the bidding zone border is applied only in exceptional cases when these interconnectors need different sharing keys or are owned by different TSOs. The amended Article 5(3) specifies that only in such cases, the congestion income on the bidding zone border is first distributed between the interconnectors on that border based on their contribution to the allocated capacity and subsequently between the TSOs on each side of each interconnector.
- (70) Second, the Agency amends the Proposal by establishing the 50%-50% sharing key as the default sharing key. This default sharing key is specified in Article 5(1) of the CIDM. Exceptions to the default rule may be allowed due, for example, to different ownership shares, different shares of investments costs or other reasons such as exemption decisions or decisions on cross-border cost allocation. While the Agency does not recognise a European interest in harmonising all existing agreements for specific interconnectors, it finds it necessary that, in accordance with Principle 1 described in Recital (41), these deviations are clearly defined and explained in an annex to the CIDM. For this reason, the Agency asked all TSOs to provide the Agency with the information on all such exemptions to the default sharing key. These exemptions are listed in Annex 1 to the CIDM, which constitute an integral part of the CIDM.
- (71) Third, in accordance with Principle 2 described in Recital (41), the Proposal is amended to remove the additional approval procedures by regulatory authorities. Instead, the Agency establishes that sharing keys deviating from the 50%-50% default rule be defined directly in an Annex to the CIDM. Nonetheless, the Agency finds it reasonable to establish more

flexibility for parameters defining the contribution of each interconnector to the allocated capacity. The Agency does not find it appropriate to define these parameters in the CIDM, since these parameters may need to change very often (e.g. in case of outages or maintenances) and it would thus require frequent changes in the CIDM which, if they were subject to regulatory approval, would not allow for a continuous and timely application of the CIDM. The Agency considers that the discretion given to TSOs in defining these parameters is rather limited and therefore establishes that they be rather transparently published on ENTSO-E web page and amended, when necessary, without additional regulatory approval.

- (72) Finally, the Agency amends the CIDM to combine all references to entities other than TSOs owning interconnectors into a single paragraph and to clarify that, in such cases, the references to TSOs are referring to those other entities.

5.2.6 Amendments related to transparency of information

- (73) The Proposal establishes a new definition of commercial flow which is based on allocated capacity in case the coordinated net transmission capacity approach applies and on calculated physical flows resulting from regional net positions in case the flow-based approach applies. Based on the all-TSO proposal on methodology for calculating scheduled exchanges⁷, the commercial flow will essentially be equal to a scheduled exchange in case of coordinated net transmission capacity approach, because allocated capacities are used as a basis for both. However, the Agency understands that, in case the flow-based approach applies, this will not be the case, since the methodology for the calculation of scheduled exchanges does not propose to calculate scheduled exchanges based on physical flows resulting from regional net positions as is the case for commercial flows in the CIDM.
- (74) The development and the adoption of CIDM and the methodology for the calculation of scheduled exchanges is therefore leading to a divergence between commercial flows and scheduled exchanges, which were traditionally considered as the same. Such a divergence provides more confusion to the market and the Agency regrets that the scheduled exchanges as proposed by all TSOs will no longer mean the same as commercial flows and that they will not represent a physical realisation of cross-border trade in the SDAC.
- (75) To minimise the confusion introduced by different approaches to calculate commercial flows and scheduled exchanges, the Agency deems it important to add additional requirements on transparency on commercial flows used and other information used in the congestion income distribution. The Agency therefore introduces a new Article 6 in the CIDM on transparency of congestion income distribution. This new Article provides an obligation for TSOs to publish the commercial flows which were used as a basis for the congestion income

⁷ All TSOs' proposal for a Methodology for Calculating Scheduled Exchanges resulting from single day-ahead coupling in accordance with Article 43 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management. This proposal was consulted from 3 November to 3 December 2017. See ENTSO-E web page for details: <https://www.entsoe.eu/>

distribution. These commercial flows carry an important information on the physical realisation of net positions of bidding zones, which disclose the extent to which different interconnectors are hosting the physical flows resulting from the SDAC. Such information is currently not available to the general public in the Union.

5.3 Assessment of other points of the Proposal

- (76) In Recital (3) of the CIDM, the Agency clarifies that a flow-based approach and a coordinated net transmission capacity approach are not equivalent approaches to capacity calculation. Instead the flow-based approach is mandated by Article 20(1) of the CACM Regulation as a default approach, whereas the coordinated net transmission capacity approach may be applied if specific conditions are met.
- (77) The Agency amends the CIDM to add a new Recital (4) which clarifies that the CIDM applies only to the congestion income collected within the context of the SDAC and not the SDIC. Since the SDIC will not provide any congestion income until the approval and implementation of the intraday capacity pricing methodology pursuant to Article 55 of the CACM Regulation, it therefore does not make sense to define rules for sharing such congestion income until sufficient clarity is obtained about how the congestion income is generated within the context of the SIDC. The CIDM will therefore be amended at a later stage to extend the scope also to the intraday timeframe.
- (78) The Agency amends the CIDM to add a new Recital (5), which clarifies the overall construction of the congestion income distribution. This Recital explains that the CIDM 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 the CCR. Third, the congestion income attributed to the bidding zone border is distributed among TSOs having interconnectors on that bidding zone border.
- (79) The Agency amends the CIDM to add a new Recital (6), which provides a justification for the second layer in the congestion income distribution. The first part of the justification is based on the regional nature of remuneration of non-nominated LTTRs. All TSOs in a CCR need jointly to calculate long term cross-zonal capacities and guarantee the remuneration of non-nominated LTTRs using the congestion income from SDAC. Skipping this regional step and sharing the EU-wide congestion income directly to bidding zone borders would not ensure revenue adequacy for each CCR and TSO to remunerate non-nominated LTTRs. The second justification is based on non-harmonised definition of commercial flows in the flow-based approach and the coordinated net transmission capacity approach.
- (80) Based on a proposal from all TSOs received by the Agency after the consultation with all TSOs and regulatory authorities, the Agency added a new sentence in Article 4(2) of the CIDM to address the issue related to congestion income allocated to bidding zone borders or interconnectors where transmission losses are taken into account in capacity calculation

and allocation. This additional provision clarifies that the congestion income allocated to such bidding zone border or interconnector is lower than the absolute value of the product between the commercial flow and the market spread. In such a case, the relevant market spread for the calculation of congestion income shall be reduced to take into account the costs of network losses on such bidding zone border or interconnector.

- (81) The Agency amends the CIDM to delete Article 5(3) of the Proposal. In line with Principle 1 described in Recital (41), TSOs should not be allowed to change the sharing key outside of the applicable CIDM, because such changes should only be allowed through an amendment of the CIDM in accordance with Article 9(13) of the CACM Regulation.
- (82) Finally, the Agency amends the CIDM to remove the reference to certified TSOs in Recital (7) of the Proposal. The removal was proposed by one regulatory authority in order to ensure that their TSO, which does not need to be certified in accordance with Directive 2009/72/EC, is not excluded from the scope of the CIDM.

5.4 Conclusion

- (83) For all the above reasons, the Agency considers the Proposal in line with the requirements of the CACM Regulation, provided that the amendments described in this Decision are integrated in the Proposal, as presented in Annex I to this Decision.
- (84) Therefore, the Agency approves the Proposal subject to the necessary amendments and editorial amendments. To provide clarity, Annex I to this Decision sets out the amended Proposal as approved, including the above mentioned amendments,

HAS ADOPTED THIS DECISION:

Article 1

The congestion income distribution methodology, pursuant to Article 73 of Regulation (EU) 2015/1222, is adopted as set out in Annex I to this Decision.

Article 2

This Decision is addressed to all TSOs.

Done at Ljubljana on 14 December 2017.

For the Agency:


Alberto Pototschnig
Director

Annexes:

Annex I – 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

Annex Ia – 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 in track change compared to the Proposal (for information only)

Annex II - Evaluation of responses to the consultation of all regulatory authorities and all TSOs on the Proposal