

**NON-PAPER OF ALL REGULATORY AUTHORITIES
AGREED AT THE ENERGY REGULATORS' FORUM**

ON

The amended All NEMOs' proposal for the price coupling algorithm and for the continuous trading matching algorithm, also incorporating TSO and NEMO proposals for a common set of requirements, in accordance with Article 37(5) of the Commission Regulation 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

15 February 2018

I. Introduction and legal context

This document elaborates the position of all Regulatory Authorities, agreed at and endorsed by the All Regulatory Authorities' Working Group (ARA WG) on 15 February 2018, on the amended **All NEMOs' proposal for the price coupling algorithm and for the continuous trading matching algorithm, also incorporating TSO and NEMO proposals for a common set of requirements, in accordance with Article 37(5) of the Commission Regulation 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management** (hereinafter: "the amended Algorithm Proposal"¹)

Through this document, and the letter of the ERF Chair to the ACER Director (dd. 30 January 2018), all Regulatory Authorities wish to inform ACER of their positions with regards to the amended Algorithm Proposal. All Regulatory Authorities request ACER to take a decision, following the provisions in Article 9(12) of Regulation 2015/1222, on the amended Algorithm Proposal. This document is intended to identify the positions of the Regulatory Authorities and the reasons preventing the Regulatory Authorities from approving the amended Algorithm Proposal.

The legal provisions relevant to the submission and approval of the original and amended Algorithm Proposals and this all Regulatory Authority agreement on the amended Algorithm Proposal, can be found in Articles 3, 9, 36, 37, 38, 39, 51 and 52 of Regulation 2015/1222.

Article 36 of Regulation 2015/1222:

1. *All NEMOs shall develop, maintain and operate the following algorithms:*
 - (a) *A price coupling algorithm;*
 - (b) *A continuous trading matching algorithm.*
2. *All NEMOs shall ensure that the price coupling algorithm and the continuous trading matching algorithm meet the requirements provided for in Articles 39 and 52 respectively*

Article 37 of Regulation 2015/1222:

1. *By eight months after the entry into force of this Regulation:*
 - (a) *all TSOs shall jointly provide all NEMOs with a proposal for a common set of requirements for efficient capacity allocation to enable the development of the price coupling algorithm and of the continuous trading matching algorithm. These requirements shall specify functionalities and performance, including deadlines for the delivery of single day-ahead and intraday coupling results and details of the cross-zonal capacity and allocation constraints to be respected;*
 - (b) *all NEMOs shall jointly propose a common set of requirements for efficient matching to enable the development of the price coupling algorithm and of the continuous trading matching algorithm.*
2. *No later than three months after the submission of the TSO and NEMO proposals for a common set of requirements in accordance with paragraph 1, all NEMOs shall develop a proposal for the algorithm in accordance with these requirements. This proposal shall indicate the time limit for the submission of received orders by NEMOs required to perform the MCO functions in accordance with Article 7(1)(b).*

¹ For practical purpose, the entire set of approval documents shall be referred to as "the amended Algorithm Proposal". Where appropriate, this document shall refer to "The DA Algorithm", "The ID Algorithm", "The DA Algorithm Requirements" and "The ID Algorithm Requirements", all of which, taken together, constitute "The Algorithm Proposal". Wherever necessary, the distinction between the original and amended proposals shall be made.

3. *The proposal referred to in paragraph 2 shall be submitted to all TSOs. If additional time is required to prepare this proposal, all NEMOs shall work together supported by all TSOs for a period of not more than two months to ensure that the proposal complies with paragraphs 1 and 2.*
4. *The proposals referred to in paragraphs 1 and 2 shall be subject to consultation in accordance with Article 12.*
5. *All NEMOs shall submit the proposal developed in accordance with paragraphs 2 and 3 to the regulatory authorities for approval by no later than 18 months after entry into force of this Regulation.*
6. *No later than two years after the approval of the proposal in accordance with paragraph 5, all TSOs and all NEMOs shall review the operation of the price coupling algorithm and continuous trading matching algorithm and submit the report to the Agency. If requested by the Agency, the review shall then be repeated every second year.*

Article 38 of Regulation 2015/1222:

1. *The price coupling algorithm shall produce the results set out in Article 39(2), in a manner which:*
 - (a) *aims at maximising economic surplus for single day-ahead coupling for the price-coupled region for the next trading day;*
 - (b) *uses the marginal pricing principle according to which all accepted bids will have the same price per bidding zone per market time unit;*
 - (c) *facilitates efficient price formation;*
 - (d) *respects cross-zonal capacity and allocation constraints;*
 - (e) *is repeatable and scalable.*
2. *The price coupling algorithm shall be developed in such a way that it would be possible to apply it to a larger or smaller number of bidding zones.*

Article 39 of Regulation 2015/1222:

1. *In order to produce results, the price coupling algorithm shall use:*
 - (a) *allocation constraints established in accordance with Article 23(3);*
 - (b) *cross-zonal capacity results validated in accordance with Article 30;*
 - (c) *orders submitted in accordance with Article 40;*
2. *The price coupling algorithm shall produce at least the following results simultaneously for each market time unit:*
 - (a) *a single clearing price for each bidding zone and market time unit in EUR/MWh;*
 - (b) *a single net position for each bidding zone and each market time unit;*
 - (c) *the information which enables the execution status of orders to be determined.*
3. *All NEMOs shall ensure the accuracy and efficiency of results produced by the single price coupling algorithm.*
4. *All TSOs shall verify that the results of the price coupling algorithm are consistent with cross-zonal capacity and allocation constraints.*

Article 51 of Regulation 2015/1222:

1. *From the intraday cross-zonal gate opening time until the intraday cross-zonal gate closure time, the continuous trading matching algorithm shall determine which orders to select for matching such that matching:*
 - (a) *aims at maximising economic surplus for single intraday coupling per trade for the intraday market time-frame by allocating capacity to orders for which it is feasible to match in accordance with the price and time of submission;*
 - (b) *respects the allocation constraints provided in accordance with Article 58(1);*
 - (c) *respects the cross-zonal capacity provided in accordance with Article 58(1);*
 - (d) *respects the requirements for the delivery of results set out in Article 60;*
 - (e) *is repeatable and scalable.*
2. *The continuous trading matching algorithm shall produce the results provided for in Article 52 and correspond to the product capabilities set out in Article 53.*

Article 52 of Regulation 2015/1222:

1. *All NEMOs, as part of their MCO function, shall ensure that the continuous trading matching algorithm produces at least the following results:*
 - (a) *the execution status of orders and prices per trade;*
 - (b) *a single net position for each bidding zone and market time unit within the intraday market.*
2. *All NEMOs shall ensure the accuracy and efficiency of results produced by the continuous trading matching algorithm.*
3. *All TSOs shall verify that the results of the continuous trading matching algorithm are consistent with cross-zonal capacity and allocation constraints in accordance with Article 58(2).*

Article 3 of Regulation 2015/1222:

This Regulation aims at:

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

Article 9 of Regulation 2015/1222

1. *TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to the competent regulatory authorities within the respective deadlines set out in this Regulation. Where a proposal for terms and conditions or methodologies pursuant to this Regulation needs to be developed and agreed by more than one TSO or NEMO, the participating TSOs and NEMOs shall closely cooperate. TSOs, with the assistance of ENTSO for Electricity, and all NEMOs shall regularly inform the competent regulatory authorities and the Agency about the progress of developing these terms and conditions or methodologies.*
2. (...)
3. (...)
4. (...)
5. *Each regulatory authority shall approve the terms and conditions or methodologies used to calculate or set out the single day-ahead and intraday coupling developed by TSOs and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 6, 7 and 8.*
6. *The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities:*
 - (f) (...)
 - (g) *the algorithm submitted by NEMOs in accordance with Article 37(5), including the TSOs' and NEMOs' sets of requirements for algorithm development in accordance with Article 37(1);*
 - (h) (...)
7. (...)
8. (...)
9. *The proposal for terms and conditions or methodologies shall include a proposed timescale for their implementation and a description of their expected impact on the objectives of this Regulation. Proposals on terms and conditions or methodologies subject to the approval by several or all regulatory authorities shall be submitted to the Agency at the same time that they are submitted to regulatory authorities. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within three months on the proposals for terms and conditions or methodologies.*
10. *Where the approval of the terms and conditions or methodologies requires a decision by more than one regulatory authority, the competent regulatory authorities shall consult and closely cooperate and coordinate with each other in order reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, within six months following the receipt of the terms and conditions or methodologies by the regulatory authority or, where applicable, by the last regulatory authority concerned.*
11. (...)

12. *In the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions or methodologies within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraphs (6) and (7) within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 719/2009. If the relevant TSOs or NEMOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in paragraph 4 of this Article shall apply.*

II. The Algorithm Proposal

In February 2017, all relevant designated NEMOs submitted for approval, to their Regulatory Authority, the original Algorithm Proposal. By six months following the receipt by the last Regulatory Authority concerned, all Regulatory Authorities decided to request a number of amendments to all NEMOs regarding the original Algorithm Proposal. This was done following the agreement between all Regulatory Authorities at the Energy Regulators' Forum on 24 July 2017.

All NEMOs consulted, through the Europex website, on the original Algorithm Proposal between 2 November and 3 December 2016 all relevant stakeholders. A consultation report including the views of the stakeholders and the assessment of NEMOs has been sent along, for information, with the approval documents for the original all NEMOs' proposals in February 2017.

As laid out in Article 9(12) of Regulation 2015/1222, all NEMOs were required to re-submit, within two months following the receipt of the request for amendment, an amended Algorithm Proposal. The amended Algorithm Proposal, dated 13 November 2017, was received by the last Regulatory Authority on 1st of December 2017. Article 9(10) of Regulation 2015/1222 requires all Regulatory Authorities to consult and closely cooperate and coordinate with each other to reach agreement, and make decisions within six months following the receipt by the last Regulatory Authority concerned. A decision on the amended Algorithm Proposal is therefore required by each Regulatory Authority by 1st of February 2018.

The amended Algorithm Proposal consists of three different documents:

- The "All NEMOs' proposal for the price coupling algorithm and for the continuous trading matching algorithm, also incorporating TSO and NEMO proposals for a common set of requirements, in accordance with Article 37(5) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management";
- the "Proposal for a common set of requirements for the DA price coupling algorithm"; and
- the "Proposal for a common set of requirements used for the continuous trading matching algorithm",

all dated 13 November 2017.

Each of these is subject to the all Regulatory Authorities approval process, as outlined in Article 9 of Regulation 2015/1222.

The amended Algorithm Proposal contains, as required by Article 9(9) of Regulation 2015/1222, a description of the timeline for implementation as well as a description of the expected impact of objectives of the Regulation as listed in Article 3.

The amended approval package contains, for information to all Regulatory Authorities and as requested in the request for amendment, two documents titled "EUPHEMIA Public Description" (dated December 2016) and "Continuous Trading Matching Algorithm - Public Description".

III. All Regulatory Authorities' position

All Regulatory Authorities requested that NEMOs modify the original Algorithm Proposal on 16 points. These amendments are listed in points (i) to (xvi) of chapter IV. Actions of the all Regulatory Authorities' request for amendment to the original Algorithm Proposal, dated 24 July 2017.

All Regulatory Authorities assess below the extent to which NEMOs did or did not fully take into account the request for amendment.

- (i) Regulatory Authorities consider that the amended Algorithm Proposal has shown some considerable improvements compared to the original regarding the standardization and consistency with other terms and conditions or methodologies. All NEMOs took also into account the informal guidance from Regulatory Authorities ("NRAs' Guidance on how to

draft proposals for terms and conditions or methodologies under Regulation 2015/1222”). However, Regulatory Authorities still see significant room for improvement.

- (ii) The metrics to monitor the performance of the DA and ID algorithms are included in, respectively, Articles 9(3) and 9(4) of the amended Algorithm Proposal. These metrics allow for the monitoring of the performance of the algorithms, related to the repeatability, scalability and optimality. However, these metrics are not clearly defined, and no minimum performance thresholds are included. These aspects shall be included and published only in the Algorithm Monitoring Procedures, following Article 8(2)(c).
- (iii) While no full mathematical description of the heuristic rules is included in the methodologies, NEMOs describe the stepwise approach in Articles 4(1) until 4(11). As discussed with Regulatory Authorities during the development of the amended Algorithm Proposal, a more detailed and technical description of the DA and ID algorithm heuristics are included in the accompanying documents (the “EUPHEMIA Public Description” and “Continuous Trading Matching Algorithm – Public Description” documents).
- (iv) The description of the way in which the DA and ID algorithms deliver the Initial and Future Requirements is described in Article 3(7) for the DA algorithm and Article 3(8) for the ID algorithm.
- (v) By amending the output of the DA algorithm as shown in Article 4(2) of the Algorithm Proposal, all NEMOs comply with Article 39(2) of Regulation 2015/1222. However, the notion of net position per scheduling area, introduced in the amended Algorithm Proposal, should be adapted to situations where there are several scheduling areas within one bidding zone while there is no active NEMO hub for at least one of those scheduling areas. This remark applies also to the all Regulatory Authorities’ position towards the draft Scheduled Exchange methodology of all TSOs.
- (vi) All NEMOs defined, in Articles 2(7) and 2(8), the existing solutions for the DA and ID Algorithm Solutions. References to specific projects are no longer included throughout the amended Algorithm Proposal.
- (vii) No (high-level) description of the interaction between the ID algorithm and the all TSOs’ proposal for intraday capacity pricing is described in the amended Algorithm Proposal. However, all Regulatory Authorities consider this not to be strictly within the scope of the ID Algorithm Proposal, even though a description would be desirable. All Regulatory Authorities therefore accept the decision by all NEMOs not to include this description in the amended Algorithm Proposal.
- (viii) The “price-time-priority” principle for the ID algorithm is described in Article 6(9) of the amended Algorithm Proposal. As defined by NEMOs, all products for single intraday coupling are treated on a first-come-first-served basis.
- (ix) All NEMOs deleted, in the amended Algorithm Proposal, all references to “local contracts”, as requested by all Regulatory Authorities.
- (x) NEMOs briefly indicate that the Algorithm Monitoring Procedure shall elaborate detailed rules for performance improvement of the DA algorithm in Article 9(4)(g). This is not repeated for the ID algorithm. All Regulatory Authorities consider however that these rules are implicitly described in the implementation timelines in Article 5 for the DA algorithm and Article 7 for the ID algorithm, as well as in the Preamble of the Algorithm Proposal.

- (xi) The Algorithm Monitoring Principles, developed by all NEMOs in Article 9, lay out the rules for algorithm monitoring (cf. (ii)). The actual improvement of the algorithm performance is defined in the actual implementation timelines for the DA (Article 5) and ID (Article 7) algorithms. The actual implementation timelines discern between the “prototyping phase”, the “extended prototyping phase” and the “industrialization phase”. NEMOs commit to sharing the results of the prototyping phase experimentations (for performance improvements) with all Regulatory Authorities at least on a yearly basis. The Preamble of the amended Algorithm Proposal further elaborates on this aspect of the implementation of the Algorithm Proposal. NEMOs explain that, after the industrialization phase, the enduring solution for the algorithms shall be “adequately repeatable”, “adequately scalable” and “adequately maximizing economic surplus”. All Regulatory Authorities consider, furthermore, that the “extended prototyping phase” should not be considered as a standard step in the implementation process but rather as a contingency which may occur.
- (xii) The amended Algorithm Proposal still includes “usage ranges” linked to the adequate scalability. However, NEMOs explained that usage ranges are mainly used for testing. In case the effective usage exceeds the anticipated usage, corrective measures may be applied (on an ad-hoc basis), but non-discriminatory application will be guaranteed as a guiding principle (cf. art. 9(15) of the algorithm proposal).
- (xiii) The Initial and Future Requirements are mostly modified according to the request for amendment by all Regulatory Authorities. However, for the requirement related to the compliance of REMIT, all NEMOs explained that REMIT does not impose any direct obligation to the NEMOs. Neither the input of the algorithms, nor the output, is subject to REMIT reporting. All Regulatory Authorities accept this clarification and note that, in case of legislative changes to the REMIT Regulation, new Requests for Change may trigger that this becomes a requirement for the DA or ID algorithm and it should be consistent with solutions adapting the notion of net position per scheduling area in situations where there are several scheduling areas within one bidding zone while there is no active NEMO hub for at least one of those scheduling areas.
- (xiv) NEMOs describe, in Articles 4(18) and 6(13), the link between the algorithms and the scheduled exchange calculator functionality in the relevant TSO methodology. The actual calculation of scheduled flows is described briefly in Articles 4(4) and (5) for the DA algorithm and Article 6(4) for the ID algorithm. However, there is no link to Articles 43 and 56 in Regulation 2015/1222 regarding scheduled exchanges. Also the difference between “scheduled flows”, “scheduled exchanges” and “allocated flows” as used in the amended Algorithm Proposal lacks clarity.
- (xv) The Change Control Procedures developed by NEMOs for the benefit of NEMOs and TSOs is defined in Article 8(2)(d) and the principles are listed in Article 10 of the amended Algorithm Proposal. NEMOs explain that these procedures are fair and non-discriminatory, by imposing a set of constraints and developing the possibility for appealing to any decision with regards to Requests for Change. However the reference to a change of the method itself is regulated by Article 9(13) in Regulation 2015/1222. In addition, articles 10(8) and 10(9) of the amended Algorithm Proposal mentions costs (defining who should bear what and on which basis) whereas Regulation 2015/1222 already defines rules for cost sharing in its article 80. Any request for change (i.e. the markets impacted) should then precise if the costs are to be considered common, regional or national.
- (xvi) Articles 5, for the DA algorithm, and 7, for the ID Algorithm, describe the implementation timelines for the algorithms. Specifically, in accordance with the request for amendment by all Regulatory Authorities, NEMOs included:
 - a. A description of the links with other terms and conditions or methodologies
 - b. The timescale for the enduring solution, comprising of the “prototyping phase”, the “extended prototyping phase” and the “industrialization phase”, described in Article 5(2) and 7(2).
 - c. NEMOs state that, by the end of the “industrialization phase”, the algorithms shall be able to support all Future Requirements (cf. Articles 5(4)(v) and 7(4)(v)).

IV. Actions

Based on the above rationale, All Regulatory Authorities agree to request a decision from ACER on the amended Algorithm Proposal. This decision should, in the view of Regulatory Authorities, contain the following elements:

- (i) Further alignment and standardization of the Proposal with other terms and conditions or methodologies submitted by all NEMOs, pursuant to Article 36(3), Articles 40 and 53 and Articles 41(1) and 54(2) of the CACM Regulation. These amendments shall include but not be limited to:
 - a. Article 2 (Definitions):
 - Inclusion of a complete list of all defined terms used within the Algorithm Proposal
 - Adding of reference to SO GL for the definition of scheduling area
 - More detailed definition of the calculation of the anticipated and effective usage. All NEMOs state that the anticipated usage is based on a “formula commonly defined amongst all NEMOs”. The main principles of such formula shall be described
 - b. Consistent usage of definitions regarding other terms and conditions or methodologies submitted by all NEMOs or TSOs (e.g. NEMO trading hub)
 - c. No references to not approved proposals (e.g. products) but to the applicable CACM article
 - d. Establishment of consistency regarding the content of other terms and conditions or methodologies submitted by all NEMOs (e.g. Scheduled Exchanges methodology)
 - e. Inclusion of references to the CACM articles of other relevant terms and conditions or methodologies such as the back-up and fallback methodologies (e.g. Articles 4(15) and 4(16)) or the scheduled exchanges (Articles 4(4) and 4(5)) where necessary
 - f. For the sake of clarity algorithm shall always be “price coupling algorithm” or “continuous trading matching algorithm” depending on its time frame (DA or ID)
 - g. Whereas paragraphs should be numbered continuously so that a unique citation is possible
- (ii) The proposal needs substantial editing; there are incorrect references, denominations are not used consistently etc. Standardization of the overall usage of abbreviations and written-out words as well as the usage of capital/small letters for defined terms is needed
- (iii) Within the subject matter and scope, it should be clarified that the original NEMO proposal was a common proposal of all NEMOs in coordination with TSOs but not a common NEMO and TSO proposal.
- (iv) Clarification of Article 3(6) regarding the non-discriminatory proceeding for the combination of products in single bidding zones whose support cannot be guaranteed or allowed
- (v) Inclusion of a description of the respected allocation constraints for the ID algorithm such as it is also given for the DA algorithm in Article 3(7)(c)(iv.)
- (vi) Clarification of Article 3(7)(c)(v.) regarding the support of a “reasonable usage” of products and its non-discriminatory application
- (vii) Regarding the scope of scalability, the supporting of all bidding zones under the CACM regulation for the DA algorithm (Article 3(7)(c)(i.)) as well as the ID algorithm (Article 3(8)(d)) should be included. This shall include a reformulation of “EU plus Norway” accordingly.
- (viii) Further explanation on the stopping criteria “iteration” and ”solution” limits of the DA algorithm (Article 4(8)) and their definition

- (ix) Detailed description of the minimum set of metrics and definition of thresholds to monitor the performance of the algorithms, with regards to its optimality, repeatability and scalability, including in the Algorithm Monitoring Procedure the timing and frequency of such monitoring proceedings.
- (x) Further descriptions and explanations regarding the rules for performance improvement of the DA and ID algorithm within the Algorithm Monitoring Procedure
- (xi) Further explanation and alignment regarding the calculation of scheduled exchanges pursuant to Articles 43(1) and 56(1) of Regulation 2015/1222:
 - a. Clarification and establishing of consistency for the terms “scheduled exchange”, “scheduled flow” and “allocated flows” in cooperation with TSOs.
 - b. The minimization problem described in Article 4(5) shall be clarified. If it is subject to the methodology elaborated by TSOs according to the above mentioned CACM articles it should be linked accordingly, if not, a detailed description of the calculation, including formulas, and an explanation of differences compared to the methodology elaborated by TSOs according to the above mentioned CACM articles shall be included.
 - c. The notion of net position per scheduling area needs to be adapted to situations where there are several scheduling areas within one bidding zone while there is no active NEMO hub for at least one of those scheduling areas, and be consistent with the scheduled exchanges proposal being developed by all TSOs.
- (xii) The elimination of all parts of the Algorithm Proposal which carry with them liabilities for TSOs or other third parties since the introduction of obligations/liabilities for any third parties cannot be part of any terms and conditions of all NEMOs. These amendments shall include but not be limited to Article 8 which describes the day-to-day management of the single DA and ID coupling pursuant to Article 10 of Regulation 2015/1222.
- (xiii) Explicit definition of the timing of the updating and consulting of public descriptions with relevant stakeholders as described in Article 11(2)
- (xiv) Costs aspects, as mentioned in article 10 of the amended Algorithm Proposal, are out of scope and should be removed. Any request for change (i.e. the markets impacted) should precise if the costs are to be considered common, regional or national, so that these costs can be allocated in the right category and be shared according to the rules applicable in Regulation 2015/1222.

In addition to the considerations listed above, CRU raised a red flag on the existence of an interim, non-CACM compliant solution. CRU, and all Regulatory Authorities welcome the efforts of the NEMOs to describe a roadmap towards a fully-compliant solution, however none of the involved parties (neither NEMOs, nor Regulatory Authorities) could identify what this compliant solution would look like as it would mainly depend on the results of the R&D development on the algorithm.

The CRU indicated its inability to approve an implementation plan towards a CACM compliant solution and is of the view that in this context of uncertainty approving a non-compliant (albeit interim) solution would expose Regulatory Authorities to the risk of legal proceedings from involved stakeholders.

The CRU is of the view that at this early stage of the development of a CACM compliant algorithm the Regulatory Authorities could only provide a non-formal, agreement/disagreement with the proposed way forward but cannot provide an approval under CACM of the amended proposal.

Furthermore, the CRU expressed a red flag against the proposed overall governance of the existing solution, and more specifically the imposition of corrective measures in the amended Algorithm Proposal. The CRU noted the particular vulnerability of the new market design (I-SEM) of the Irish market and its unique dependence of the proper functioning of day-ahead and intraday markets as a source of concern.