All NEMOs' proposal for the back-up methodology in accordance with Article 36(3) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

3 November 2016

All NEMOs, taking into account the following

Whereas

Background

(1) This document is a NEMO proposal developed in cooperation with the relevant TSOs and in accordance with article 36 of Commission Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management (hereafter referred to as the "CACM Regulation") for the back-up methodology for single day-ahead coupling and for the single intraday coupling (hereinafter referred to as the "Back-up Methodology").

(2) According to paragraph (21) of the recitals of the CACM Regulation *"Despite the creation of a reliable algorithm to match bids and offers and appropriate back-up processes, there may be situations where the price coupling process is unable to produce results. Consequently, it is necessary to provide for fallback solutions at a national and regional level to ensure capacity can still be allocated."*

(3) According to Article 36(3) *"By 18 months after the entry into force of this Regulation, all NEMOs shall in cooperation with TSOs develop a proposal for a back-up methodology to comply with the obligations set out in articles 39 and 52 respectively".*

(4) According to Article 7(1)(h), NEMOs are responsible for establishing jointly with relevant TSOs back-up procedures for national or regional market operation in accordance with Article 36(3) if no results are available from the MCO functions in accordance with Article 39(2), taking into account of fallback procedures provided for in Article 44.

(5) For the purpose of this proposal, terms used in this document have the meaning of the definitions included in Article 2 of the CACM Regulation and Regulation 543/2013.

(6) According to Article 36 "*The proposal for a methodology shall be subject to consultation in accordance with Article 12*".

(7) The NEMOs proposal for a Backup Methodology will be prepared in cooperation with TSOs, taking into account the comments from the consultation, and will be submitted to the Regulatory Authorities for approval no later than 18 months after the entry into force of the CACM Regulation, i.e.14 February 2017.

Impact on the objectives of CACM Regulation

(1) The proposed Back-up Methodology takes into account the general objectives of capacity allocation and congestion management cooperation described in Article 3 of the CACM Regulation.

(2) By requiring NEMOs to develop, implement and operate appropriate back-up procedures for each step of the DA and ID market coupling process, the proposal aims at reducing the risk of market disruption associated with full or partial decoupling, and fulfils the

requirement of “promoting effective competition in the generation, trading and supply of electricity”.

(3) By requiring appropriate back-up procedures for the submission of cross-border capacity to the DA and ID MCO Function, and for appropriate NEMO and TSO validation of results, the proposed Back-up Methodology helps to promote the optimal allocation of cross-zonal capacity and to ensure the optimal use of the transmission infrastructure.

(4) By requiring NEMOs to develop, implement and operate appropriate back-up procedures for each step of the DA and ID market coupling process, the proposal fulfils the objective of “ensuring operational security” of the Single Day Ahead Coupling and Single Intraday Coupling.

(5) The proposal fulfils the objective of "ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants” by requiring all NEMOs that are operational to follow the common procedures required by this Back-up Methodology, and by identifying and ensuring appropriate delegation for those procedures that are best agreed and applied locally.

(6) By requiring NEMOs to develop, implement and operate appropriate back-up procedures for each step of the DA and ID market coupling process, the proposal aims at maintaining the operational integrity of the single day-ahead and single intraday coupling and fulfills the objective of “contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union”.

(7) The proposal fulfils the objective of “respecting the need for a fair and orderly market and fair and orderly price formation” by requiring NEMOs to develop, implement and operate appropriate back-up procedures for each step of the DA and ID market coupling process.

(8) The proposal fulfils the objective of “creating a level playing field for NEMOs” by requiring all NEMOs that are operational to follow the common procedures required by this Back-up Methodology.

(9) The proposal fulfils the objective “providing non-discriminatory access to cross-zonal capacity” by requiring all NEMOs that are operational to follow the common procedures required by this back-up methodology.

Article 1

Definitions

Common definitions

1. ***Market Coupling Operator (MCO) Function:*** mean the task of matching orders from the day-ahead and intraday markets for different bidding zones and simultaneously allocating cross-zonal capacities.

Day-ahead Definitions

2. ***Market Coupling Session:*** means the processes followed by the NEMOs to perform the day-ahead market coupling.
3. ***Operator:*** means a day-ahead NEMO that is setup to be able to perform the DA MCO Functions during the Market Coupling Phase, and which provides all connected Operators, including the Coordinator of the day, with the information needed for the calculation of the market coupling results. The Operator participates in the actions convened by the Coordinator, complies with commonly agreed decisions and accepts or rejects the market coupling results for its own results (plus those of any NEMO that it services).
4. ***Coordinator:*** means a day-ahead NEMO which, in addition to performing the tasks of an Operator, during the Market Coupling Session is responsible for coordinating the operation of the Market Coupling Session. The Operators share the Coordinator role according to a rotational scheme calendar.
5. ***Backup Coordinator:*** means a day-ahead NEMO which in addition to performing the task as an Operator, is responsible, if necessary, to take over the Coordinator role at any moment. The Operators share the Backup Coordinator role according to a rotational scheme calendar.
6. ***DA MCO Function Service Providers:*** mean external parties who provide technical services such as common communication system, common market coupling session service application, the algorithm and all approved common provided services.

Intraday Definitions

7. **Central Admin:** means the role of performing operational tasks on the SOB module on behalf of the NEMOs collectively
8. **ID Coordinator:** means the party that coordinates resolution of an operational incident on behalf of all NEMOs and TSOs
9. **Global Issue:** means an operational incident requiring resolution involving more than one party.
10. **Local Issue**: means an operational incident requiring resolution involving a single party.

Article 2

Implementation timeline of the proposal

1. The backup procedures for common coupling operations developed in accordance with this Back-up Methodology shall be applied with the implementation of the Single Day

Ahead Coupling (SDAC) and the Single Intraday Coupling (SIDC).

2. The resolution of the Global Issues shall be carried out by the common back-up methodologies developed in accordance with this Back-up Methodology. The resolution of the Local Issues will follow local NEMOs and TSOs procedures which are out of the scope of this Back-up Methodology.

Article 3

SDAC back-up procedures and steps

1. The SDAC is based on a decentralized solution with a rotating Coordinator as responsible for leading the DA MCO Function procedures and where a rotating Backup Coordinator shall take over the Coordinator role in any process of the Market Coupling Session. In addition, other Operators that are part of the Coordinator/Backup Coordinator rotation, are also able to take over any process in the Market Coupling Session, in order to minimise the possibility of interruption. In addition, a distinction is made between issues related to local and common coupling operations.

2. The procedures for the common coupling operation are supported by the common backup methodologies and led by the Coordinator. Every Operator who will act as both Coordinator and Backup Coordinator according to an approved rotational scheme calendar must ensure the needed ability and technical resources to be able to fully perform these roles. Requirements for these common backup methodologies are described in this Back-up Methodology.

3. The resolution of the Local pre-/post coupling issues will follow local/regional NEMOs and TSOs procedures which are out of the scope of this Back-up Methodology.

4. During the Market Coupling Session impacted parties may mutually agree derogations from the critical timelines in extreme circumstances if this can reasonably be expected to avoid a decoupling and to not jeopardize the nomination deadline. The deadlines established in CACM must be complied with, but the intermediate timelines can be rescheduled during the market coupling session if needed, in order to avoid a decoupling.

5. Article 39 of the CACM list the main elements that are part of the day-ahead price coupling algorithm solution.

6. They are combined in four groups:
    a. Information to be used by the Price Coupling Algorithm.
    b. Results to be produced by the Price Coupling Algorithm.

c. Procedures to be performed by NEMOs to ensure the accuracy and the efficiency of the results.
d. Procedures to be performed by TSOs to ensure that the results are consistent with cross-zonal capacity and allocation constraints.

7. The following requirements will apply to ensure that the information to be used by the day-ahead price coupling algorithm is available when something fails with the normal way of producing the information:

Requirement for back-up common communication system

1. This section describes how to solve technical problems that may occur in the communication system, common to all Operators.

2. In a normal Market Coupling Session Operators establish communication among each other through a main file exchange mechanism.

3. There must be at least one alternative connection among all Operators. If a problem occurs with the main file exchange mechanism the distribution of data files will be done with the primary back-up file exchange method. Confidential data will be exchanged in a secured way. If there is high risk of full decoupling, all Operators may decide that the exchange of confidential data files can be done without encryption.

4. The alternative method to exchange input and output data amongst Operators will be established taking into account the technical solutions available.

5. This common backup methodology shall be followed by all Operators connected to the common communication system.

Requirement for back-up datacenter

6. This section describes how to solve technical problems that may occur in the main datacenter used by each Operator.

7. In a normal Market Coupling Session Operators will perform the MCO functions in a primary datacenter.

8. If a problem occurs with the primary datacenter a switch to the secondary datacenter if available will be done to continue with the Market Coupling Session in automatic mode. A Market Coupling Session with the secondary datacenter will require a change

of the common configuration parameters previously stablished by all Operators.

9. The secondary datacenter shall have the same performance as the primary datacenter. To ensure this it shall be tested and certified as the primary datacenter.

10. This common backup methodology shall be followed by all Operators who have the secondary datacenter available in the Market Coupling Session.

Requirement for Backup Coordinator

11. This section describes how to solve problems in the Market Coupling Session when the Coordinator is affected.

12. In a normal Market Coupling Session the MCO functions are led by one Operator who shall act as a Coordinator while another Operator shall act as a Back-up Coordinator.

13. At any moment during the SDAC process, in case of inability of the Coordinator to continue the SDAC process the Backup Coordinator will take the Coordinator role.

14. In case the Backup Coordinator cannot take the Coordinator role, any other Operator having the Price Coupling Algorithm implemented may take over the role. This mechanism guarantees that, at least one Operator is always ready to take over the Coordinator role.

15. This common backup methodology shall be followed by all Operators in the Market Coupling Session.

Requirement for cross zonal capacities for allocation

16. This section describes how to solve problems receiving the cross zonal capacities for allocation in the DA MCO function systems.

17. The cross zonal capacities for allocation are inputs that will be provided to Operators by corresponding TSOs. This step is decentralized on local level and therefore out of scope of this Back-up Methodology.

18. There must be at least one alternative connection between Operators and the DA MCO function systems. If a problem occurs with the cross zonal capacities for allocation file delivery

to DA MCO function systems, the distribution will be done with the back-up file exchange methods. This alternative method to deliver cross zonal capacities data to DA MCO function systems will be established taking into account the technical solutions available.

19. Every problem in this process will be analyzed and depending on the nature will be fixed locally or globally with the Coordinator.

20. This common backup methodology shall be followed by all Operators coupled in the Market Coupling Session.

Requirement for aggregated anonymized order books

21. This section describes how to solve problems regarding order books reception in the DA MCO function systems.

22. The anonymized aggregated order books per Bidding Zone and per NEMO are inputs that will be provided by Operators. The steps for bid reception and preparation of aggregated order books are performed by each Operator locally and therefore out of scope of this Back-up Methodology.

23. There must be at least one alternative connection between Operators and the DA MCO function systems. If a problem occurs with the aggregated order book delivery to DA MCO function systems, the distribution will be done with the back-up file exchange methods. The file needs to be exchanged in a secured way in order to ensure full confidentiality. This alternative method to deliver aggregated order books to DA MCO function systems will be established taking into account the technical solutions available.

24. Every problem in this process will be analyzed and depending on the nature will be fixed locally or globally with the Coordinator.

25. This common backup methodology shall be followed by all Operators in the Market Coupling Session.

Requirement for algorithm results

26. This section describes how to solve problems regarding the SDAC results.

27. In a normal Market Coupling Session the SDAC results will fulfil all the requirements described in the Algorithm Methodology.

28. Every problem will be analyzed and depending on the nature will be fixed locally or globally with the Coordinator and if needed with the relevant DA MCO Function service provider.

29. In any case when there is a critical problem, such as a risk of decoupling, a resolution is looked for during the ongoing Market Coupling Session. Depending on the nature of this analysis, the algorithm provider can propose to apply different solutions in order to solve the issue, which may include changing parameters in the algorithm configuration.

30. This common backup methodology shall be followed by all Operators in the Market Coupling Session and, if needed, the DA MCO Functions service provider.

Requirement for Operators results confirmation

31. This section describes how to solve problems regarding Operators results confirmation of the Price Coupling Algorithm results, in the Market Coupling Session.

32. The confirmation/rejection is a validation that assures the compliance/non-compliance of the Price Coupling Algorithm calculation outputs which will be forwarded by all Operators. Each Operator is responsible for the validation of its own results in and linked to the bidding zones where they are active and have order books.

33. If a problem occurs regarding the Operators results confirmation it will be analyzed and depending on the nature will be fixed locally or globally with the Coordinator.

34. This common backup methodology shall be followed by all Operators in the Market Coupling Session.

Requirement for TSOs results confirmation

35. This section describes how to solve problems regarding TSOs results confirmation of the Price Coupling Algorithm results in the Market Coupling Session.

36. The confirmation/rejection is a TSO or market agent validation that assure the compliance/non-compliance of the algorithm calculation outputs.

37. If a problem occurs regarding the TSOs results confirmation it will be analyzed and depending

on the nature will be fixed locally or globally with the Coordinator.

38. This common backup methodology shall be followed by all Operators that ensures such confirmations from given TSOs in the Market Coupling Session.

Requirement for timings

39. Latest time to start following common backup methodology:
    a. Deadline established in the procedures to receive the capacity allocation information for all the interconnections needed.
    b. Deadline established in the procedures to receive the bids and offers.
    c. Deadline established in the procedures for algorithm results.
    d. Deadline established in the procedures for Operators results confirmation.
    e. Deadline established in the procedures for TSOs results confirmation.
    f. Deadline established in the procedures to publish the results.

40. These deadlines shall be agreed in accordance with the CACM Regulation.

Requirements for technical support

41. This section describes how to solve problems when DA MCO Function service providers in the Market Coupling Session if necessary to solve technical problems such as common communication system, common Market Coupling Session service application, the algorithm and all approved common provided services.

42. In a normal Market Coupling Session the Operator should be ready to carry out the DA MCO Functions of the SDAC without additional technical support for the common provided services.

43. If a problem occurs regarding any of the common provided services, the involved Operator will contact the relevant service provider.

44. This common backup methodology shall be followed by all Operators in the Market Coupling Session.

Article 4

Intraday timeframe price coupling algorithm back-up procedures and steps.

1. The ID continuous market is defined as a (mainly) centralized solution. This architecture, which differs from the DA architecture, results in a different set of back-up procedures compared to those in DA.

2. A distinction between Global Issues and Local Issues needs to be made. The resolution of the Global Issues shall be carried out according to the common back-up methodologies described in this Backup Methodology. The resolution of Local Issues will follow local NEMOs and TSOs procedures which are out of the scope of this Backup Methodology and the common backup methodologies described in it.

Requirement for back-up communications

3. This section describes how to solve technical problems that may occur in the main communication line between the related parties and the ID hosting service provider.

4. According to the centralized architecture of the ID continuous market, all NEMOs, their CCPs, and TSOs (from now on "parties") shall be connected to the central ID hosting service provider through both a primary and secondary communication line to ensure redundancy.

5. An automatic switch between primary and secondary communication line will be done by the affected party when an error is detected in the primary line.

6. Every problem will be analyzed and depending on the nature (Local or Global) backup procedures will apply.

7. For the Global Issues, the support of the Coordinator and/or the Central Admin will be requested. The support of the ID algorithm provider will be required in case it would be needed.

8. The affected parties will analyze the communication problem and will contact the communication service provider.

9. This common backup methodology shall be followed by the hosting entities of all parties connected to the central ID hosting service provider.

Requirement for back-up transaction processes and files exchange

10. This section describes how to solve technical problems that may occur in the transaction mechanism used by parties towards the central ID system and vice versa.

11. This section also describes how to solve technical problems that may occur related to the shipping and clearing files exchange mechanism sent by the central ID system to the parties.

12. Every problem will be analyzed and depending on the nature (Local or Global) backup procedures will apply.

13. For the Global Issues, the support of the Coordinator and/or the Central Admin will be requested. The support of the ID algorithm provider will be required in case it would be needed.

14. If a problem occurs between the central ID system and the Local Trading Solutions, then jointly agreed back-up methods and incident management process will apply.

15. This common backup methodology shall be followed by all parties connected to ID continuous market.

Requirement for capacity submission

16. This section describes how to solve network capacity submission problems in the ID continuous market.

17. The available capacity values for the interconnectors are inputs that will be provided by TSOs.

18. Every problem will be analyzed and depending on the nature (Local or Global) backup procedures will apply.

19. For the Global Issues, the support of the Coordinator and/or the Central Admin will be requested. The support of the ID algorithm provider will be required in case it would be needed.

20. This common backup methodology shall be followed by all TSOs connected to the ID central system.

Requirement for order submission

21. This section describes how to solve problems regarding order submission to the ID continuous market.

22. The order submission is an input that will be provided by NEMOs through their Local Trading Solutions to the central ID system.

23. Every problem will be analyzed and depending on the nature (Local or Global) backup procedures will apply.

24. For the Global Issues, the support of the Coordinator and/or the Central Admin will be requested. The support of the ID algorithm provider will be required in case it would be needed.

25. This common backup methodology shall be followed by all NEMOs connected to ID market.

Requirement for Explicit Participants

26. This section describes how to solve capacity request problems in the ID continuous market coming from the Explicit Participants.

27. The explicit capacity request is an input that will be provided by Explicit Market participants through the TSO's local solutions to the central ID system.

28. Every problem will be analyzed and depending on the nature (Local or Global), backup procedures will apply.

29. For the Global issues, the support of the Coordinator and/or the Central Admin will be requested. The support of the ID algorithm provider will be required in case it would be needed.

30. This common backup methodology shall be followed by all TSOs connected to the ID central system.

Requirement for results delivery

31. This section describes how to solve different problems and potential imbalances due to data inconsistency of the output information between different modules of the ID system, such as

trades, capacity allocation, shipping and clearing information.

32. Every problem will be analyzed and depending on the nature (Local or Global) backup procedures will apply.

33. For the Global Issues, the support of the Coordinator and/or the Central Admin will be requested. The support of the ID algorithm provider will be required in case it would be needed.

34. This common backup methodology shall be followed by all parties involved and connected to the ID continuous market.

Requirement for back-up operational processes

35. This section describes how to solve problems resulting from operational processes.

36. Every problem will be analyzed and depending on the nature (Local or Global) backup procedures will apply.

37. For the Global issues, the support of the Coordinator and/or the Central Admin will be requested.

38. This common backup methodology shall be followed by all Parties connected to ID market.

Requirement for operational roles

39. This section describes how to solve problems resulting from the inability of parties to perform the operational role(s) assigned to them.

40. If the party who takes over the role experiences an unsolved problem which could block the resolution of the Global Issue, then the back-up procedures for this purpose will apply.

41. This common backup methodology shall be followed by all parties in case the participation of one or more Coordinators and/or Central Admins of the ID system are requested for solving and incident.

Requirement for Closing & Restarting Areas

42. This section describes how to mitigate and solve the different situations and problems in the

ID continuous market when an issue occurs.

43. The support of the Coordinator and/or the different Admins will be requested. The support of the ID algorithm provider will be required as well in case it would be needed.

44. This common backup methodology shall be followed by all parties affected.

Requirement for back-up system unavailability processes

Requirement for trading algorithm (Shared Order Book)

45. This section describes how to solve the case in which the Continuous Trading Matching Algorithm is down and no further trading will be possible. It also covers the cases where, even if active, the Continuous Trading Matching Algorithm module is malfunctioning or has connectivity problems which affect some or all NEMOs.

46. The support of the Coordinator and/or the different Admins will be requested. The support of the ID algorithm provider will be required as well in case it would be needed.

47. This common backup methodology shall be followed by all NEMOs connected to the ID continuous market.

Requirement for capacity allocation (Capacity Management Module)

48. This section describes how to solve the case in which the capacity allocation functionalities are down or malfunctioning and no further cross border trading or capacity allocation will be possible.

49. The support of the Coordinator and/or the different Admins will be requested. The support of the ID algorithm provider will be required as well in case it would be needed.

50. This common backup methodology shall be followed by all parties connected to the ID continuous market.

Requirement for shipping and clearing information (Shipping Module)

51. This section describes how to solve the case in which the ID shipping and clearing information module is down or malfunctioning. It also covers the late delivery of this information to the related parties.

52. The support of the Coordinator and/or the different Admins will be requested. The support of the ID algorithm provider will be required as well in case it would be needed.

53. This common backup methodology shall be followed by all parties connected to the ID continuous market.