



Explanatory document to the Core CCR TSOs' Fallback Procedures in accordance with Article 44 of the Commission Regulation (EU) 2015/1222

26 January 2018

| | | |
|----------------|---|---|
| Version | CACM 44 Fallback Procedures Explanatory Document – Submitted to Core NRAs after RfA | |
| Date | 26/01/2018 | |
| Status | <input type="checkbox"/> Draft | <input checked="" type="checkbox"/> Final |

Disclaimer

This document is submitted by all Core transmission system operators (TSOs) to all Core NRAs for information purposes only accompanying the Core TSOs' proposal for the Core CCR TSOs' Fallback Procedures in accordance with Article 44 of Commission Regulation (EU) No 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management ("CACM Regulation").

Table of contents

| | |
|---|----|
| 1. Introduction | 3 |
| 2. Geographical scope and implementation timeline | 3 |
| 3. Legal requirements | 4 |
| 3.1 Additions to the compliance assessment with CACM targets..... | 5 |
| 3.2 Efficiency | 5 |
| 3.3 Robustness and reliability..... | 5 |
| 4. Shadow Auctions | 6 |
| 4.1 Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of MRC..... | 6 |
| 4.2 ATCs for Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of MRC..... | 8 |
| 4.3 Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of 4M MC | 8 |
| 4.4 ATCs for Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of 4M MC | 9 |
| 5. Evaluation of regional market coupling as possible fallback solution | 10 |

1. Introduction

Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (“CACM Regulation”) sets out rules to ensure optimal use of the transmission infrastructure, operational security and optimization of the calculation and allocation of cross-zonal capacity.

One of the steps to implement the CACM Regulation is to establish robust and timely fallback procedures to ensure efficient, transparent and non-discriminatory capacity allocation in the event that the single day-ahead coupling process is unable to produce results. Pursuant to Article 44 of the CACM Regulation, each transmission system operator (hereinafter “TSO”), in coordination with the other TSOs in a capacity calculation region (hereinafter “CCR”), is obliged to develop such fallback procedures no later than 16 months after the CACM Regulation entered into force, i.e. by 14 December 2016. Due to the delayed CCR definition process that led to the final CCRs definition by ACER decision 06/2016 on 17 November 2016, this deadline was prolonged until 17 May 2017.

In order to meet CACM requirements, TSOs of the Core CCR (“Core TSOs”) decided to develop common Core CCR TSOs’ fallback procedures. These fallback procedures are subject to a public consultation in accordance with Article 12 of the CACM Regulation. Therefore, Core TSOs held a public consultation from 27 March to 27 April 2017. The final Core CCR TSOs’ fallback procedures were submitted to Core NRAs for approval by 17 May 2017. On 03 October 2017 Core NRAs agreed at the Core Energy Regulators’ Regional Forum (“CERRF”) to request Core TSOs for an amendment of their fallback procedures based on Article 9(12) of the CACM Regulation. Thereby Core NRAs asked Core TSOs to inter alia improve the legal enforceability of their proposal as well as to provide more detail on the fallback procedures especially in the context of other procedures in the framework of the single day-ahead coupling. Tennet B.V. was the last Core TSO that received the respective NRAs’ national request for amendment on 01 December 2017.

The current Core CCR TSOs’ Fallback Procedures reflect the required changes. In order to ease the approval process of the Core CCR TSOs’ Fallback Procedures by all NRAs in the Core CCR, Core TSOs provide this explanatory document in order to give further background on their decisions and the procedures described.

2. Geographical scope and implementation timeline

According to Article 4(2) of the Core CCR TSOs’ Fallback Procedures the Core CCR TSOs’ Fallback Procedures shall be applied on all bidding zone borders, where the day-ahead market coupling operator function is implemented and operational. Due to the fact that there is no Core CCR wide single day-ahead market coupling in place yet, the first application of the Core CCR TSOs’ Fallback Procedures will be limited only to a subset of bidding zone borders of the Core CCR. The following table shows the status quo on which Core CCR bidding zone borders the Core CCR TSOs’ Fallback Procedures will be applied as of 01 January 2019, i.e. assuming that the MCO function is implemented by NEMOs then and taking into account the date of EIF of the Shadow Allocation Rules amended as Annexes 1 to 5 to the Core CCR TSOs’ Fallback Procedures¹:

¹ Alternatively the implementation date of the MCO function by NEMOs or other dates could have been chosen. However, in order to have a reliable harmonised “snapshot” available, Core TSOs decided to choose this date for the table 1.

Table 1: Planned applicability of the Core CCR TSOs' Fallback Procedures on Core CCR bidding zone borders as of 01 January 2019

| Core CCR TSOs' Fallback Procedures |
|---|
| applicable based on MRC SAR (cf. Annexes 1 and 2) |
| <ul style="list-style-type: none"> - Austria - Slovenia (AT-SI); - Germany/Luxembourg - Austria (DE/LU-AT)²; - Belgium - Germany/Luxembourg (BE-DE/LU); - Belgium - the Netherlands (BE-NL); - Croatia - Slovenia (HR-SI)³; - France - Belgium (FR-BE); - France - Germany/Luxembourg (FR-DE/LU); - The Netherlands - Germany/Luxembourg (NL-DE/LU) |
| applicable based on respective 4M MC SARs (cf. Annexes 3,4 and 5) |
| <ul style="list-style-type: none"> - Czech Republic - Slovakia (CZ-SK); - Hungary - Slovakia (HU-SK); - Romania - Hungary (RO-HU) |
| no applicable Fallback Procedures until the go-live of the Core FB MC |
| <ul style="list-style-type: none"> - Austria - Czech Republic (AT-CZ); - Austria - Hungary (AT-HU); - Croatia - Hungary (HR-HU); - Czech Republic - Poland (CZ-PL); - Germany/Luxembourg - Czech Republic (DE/LU-CZ); - Germany/Luxembourg - Poland (DE/LU-PL); - Hungary - Slovenia (HU - SI); - Poland - Slovakia (PL-SK) |

The applicability of the Core CCR TSOs' Fallback Procedures on the remaining Core CCR bidding zone borders will be given by the expansion of the single day-ahead coupling across the mentioned bidding zone borders, and thus by the application of the MCO function on a bidding zone border. This expansion is planned to be done by the concerned TSOs and NEMOs in course of the development of the Core day-ahead Flow-Based Market Coupling ("Core FB MC"). Core TSOs are going to prepare common harmonised fallback procedures for all bidding zone border in the Core CCR for the go-live of the Core FB MC.

3. Legal requirements

This chapter provides some further explanation on the contribution of the Core CCR TSOs' Fallback Procedures as already provided in the 'Whereas' section of the legal document, where Core TSOs deemed necessary. Furthermore, more information about how Core CCR TSOs' Fallback Procedures ensure robustness and efficiency of the fallback procedures for the single day-ahead market coupling is given.

² The Shadow Allocation Rules for AT-DE/LU bidding zone border enter into force together with the Go-Live of Market-Coupling for Day-Ahead allocation on that border, planned 01 October 2018.

³ The Shadow Allocation Rules for HR-SI bidding zone border enter into force together with the Go-Live of Market-Coupling for day-ahead allocation on that border, planned for July 2018.

3.1 Additions to the compliance assessment with CACM targets

Further remarks to article 3b of the CACM Regulation: The Fallback Procedures make sure that even in case of failure of the day-ahead coupling process, the cross-border capacity can still be allocated to the market participants in the day-ahead timeframe which is highly important for example for the following aspects: TSO operational planning (optimal use of transmission infrastructure operational security) and the market participants' portfolio optimisation.

Further remarks to article 3c of the CACM Regulation: The allocation on day-ahead timeframe is an important step between the long-term and intraday operational planning that is one of the main pillars of the operational security. Without allocation possibility on this timeframe the market participants would face difficulties during the adjustment of their positions that can cause further balancing energy needs. All these factors would have negative impact on operational security.

3.2 Efficiency

Firstly, the respective Shadow Auctions are performed by the dedicated Allocation Platforms: the IT tools and operational teams used for Shadow Auctions are the same as the ones used for other explicit allocations. This reduces the specific costs for this process and thus increases its economic efficiency.

Secondly, the Shadow Auction process can be launched as a parallel process in the background of the particular day-ahead coupling processes as soon as the information of the risk that the particular day-ahead coupling process may be unable to produce results is known by the TSOs. Shadow Auctions might be triggered during the session of single day-ahead market coupling or can be activated in advance, if it is known beforehand, that the single day-ahead coupling process will be unable to produce results. In the latter case, Shadow Auctions are not performed in background mode in parallel to the particular day-ahead coupling process but in replacement of it. This ensures that results of the Shadow Auctions are provided to the market participants as soon as possible after the unavailability of the particular day-ahead coupling results is effectively confirmed by the NEMOs.

In case fallback procedure cannot be initiated properly, further fallback procedures for data exchange can be activated. In this case, Shadow Auctions will be postponed. In any case, in order not to collide with subsequent processes, the respective Allocation Platform will use its best effort to send the results to the Market Participants before 13:58 CET day-ahead.

Finally, the Shadow Auction process has already been in place for several years as a fallback of the MRC day-ahead coupling process and 4M day-ahead coupling processes. This implies that the Core CCR TSOs' Fallback Procedures rely on well-proven and known processes by TSOs, NEMOs and market participants.

3.3 Robustness and reliability

The IT tools and operational teams used for Shadow Auctions are in principle the same as the ones used for the explicit allocations in other time frames, and furthermore apply on most of the today coupled by borders, which means that:

- The systems used for Shadow Auctions come with the same service level as the other regular allocation processes (up to a daily frequency);
- The operational teams running the Shadow Auctions are used to handle the relevant systems and procedures, including communication and data exchanges with the market participants;
- This increases the potential functionality of such processes and therefore their reliability.

Moreover, the Shadow Allocation Rules define fallback procedures for data exchanges between market participants and the Allocation Platform to cope with situations where these data exchanges cannot be performed through the standard processes by the applicable deadlines. Fallback procedures for data exchanges between market participants and the Allocation Platform consist in exchanging data by e-mail, which is an efficient communication mode that can be easily used by all market participants and allows an efficient processing of data received by the Allocation Platform in tense situations, especially compared to fax or phone.

Then, Article 3 and 4 of the Core CCR TSOs' Fallback Procedures provides provisions to manage possible delays in the execution of Shadow Auctions: in case the execution of Shadow Auction faces difficulties to be conducted in time (due to technical difficulties or additional delays to process data exchanges with fallback procedures as described above), the Allocation Platform Operators will attempt to postpone it.

Finally, if none of the of the above measures is assessed by the respective Allocation Platform Operators as possible (especially due to lack of time with regards to other processes on TSOs' side following Shadow Auction results), this Shadow Auction will be cancelled and all bids already submitted will automatically be deemed null and void, in compliance with the provisions of Shadow Allocation Rules.

4. Shadow Auctions

4.1 Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of MRC

The Core CCR TSOs' Fallback Procedures prescribe the execution of Shadow Auctions, in the form of explicit shadow allocation of physical transmission rights (PTR), on bidding zone borders where a risk occurs that the single day-ahead coupling process may be unable to produce results.

In the context of the day-ahead coupling currently operated in the framework of MRC, the execution of Shadow Auctions is embedded as follows:

Table 2: Embedding of Shadow Auctions in the MRC processes in case of ad-hoc issues⁴.

| # | Process | Timing [CET] |
|---|--|----------------------------------|
| 1 | NEMOs inform TSOs that the market coupling is delayed | 12:42 - 13:05 |
| 2 | The Allocation Platform informs the market participants that the market coupling process is delayed and that they can update their Shadow Auction bids to prepare for the possibility that shadow auctions are triggered when the MRC day-ahead coupling process is unable to produce results. | As soon as possible after step 1 |
| 3 | The Allocation Platform reminds the market Participants of the Shadow Auctions bid submission deadline. | 13:20 |
| 4 | The Allocation Platform ends the bid submission for the Shadow Auctions. | 13:40 |
| 5 | The Allocation Platform starts the Shadow Auction calculation. | 13:40 |
| 6 | NEMOs inform the Allocation Platform that the day-ahead coupling process was unable to produce results for one or more bidding | No later than 13:50 |

⁴ The timings in the table represent the most critical path from market perspective.

| # | Process | Timing [CET] |
|----|--|----------------------------------|
| | zone borders currently operated in the framework of MRC within the Core CCR. | |
| 7 | The Allocation Platform informs the market participants that Shadow Auctions have been triggered for one or more bidding zone borders currently operated in the framework of MRC within the Core CCR and that the Shadow Auction results will be available on the website latest by 13:58 CET. | 13:50 |
| 8 | The Allocation Platform starts the sending of the Shadow Auction results and corresponding PTRs. | As of 13:50 |
| 9 | The Allocation Platform confirms to the NEMOs that the results of the Shadow Auction are sent. | No later than 13:58 |
| 10 | NEMOs reopen their order books to allow market participants to update their orders according to the Shadow Auction results. | As soon as possible after step 9 |
| 11 | NEMOs close their order books. | defined by NEMOs |
| 12 | Market participants send to the TSOs the nomination of their PTRs received in result of the respective Shadow Auction. | No later than 15:30 |

Shadow Auctions are executed by the Allocation Platform Operator via the Allocation Platform based on the applicable Shadow Allocation Rules. Pursuant to applicable version the Shadow Allocation Rules a Shadow Auction can be summarized in the following steps:

1. Market participants have to be registered at the Allocation Platform in order to participate in Shadow Auctions, pursuant to conditions stated in the Shadow Allocation Rules. This registration is non-discriminatory and free of charge;
2. Once registered, market participants can submit and/or update their default bids to the Allocation Platform without any time limit and prior to the effective execution of a Shadow Auction. These default bids will be used by the Allocation Platform Operator during the execution of the Shadow Auction;
3. When the Core CCR TSOs' Fallback Procedures are launched, the latest version of default bids submitted by the market participants are used by the Allocation Platform Operator in order to run a Shadow Auction: during the execution of Shadow Auctions, market participants do not have the possibility to modify their default bids;
4. The offered capacity used in the Shadow Auctions are shadow auction ATCs which will be calculated as described in the next chapter;
5. The results of a Shadow Auction are determined according to the algorithm described in the Shadow Allocation Rules, which calculates a marginal price for the offered capacity according to the default bid prices;
6. The results of the Shadow Auctions are provided to the market participants only in the case where the unavailability of single day-ahead coupling results is effectively confirmed by the NEMOs, and no later than 13:58 market time day-ahead.

Further information on the processing of Shadow Auctions can be taken from the respective Shadow Allocation Rules.

4.2 ATCs for Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of MRC

Whereas at a subset of bidding zone borders within Core CCR currently operated in the framework of MRC a flow-based capacity calculation for the day-ahead time frame is applied (ie. CWE DA FB MC), that delivers remaining available margins (RAM) for critical network elements (CNE⁵) and power transfer distribution factors (PTDFs) as cross-zonal capacity input to the MCO function, Shadow Auctions require the determination of bilateral available transfer capacities (ATCs) for each market time unit (MTU). The flow-based domains determined by respective Core TSOs in the day-ahead flow-based capacity calculation process for each MTU will serve as the basis for the determination of ATC values that are input to the Shadow Auction.

A detailed description of the determination of ATCs for Shadow Auctions will be provided in the Core TSOs' proposal for the regional design of the day-ahead common capacity calculation methodology in accordance with Article 20 of the CACM Regulation as well.

On bidding zone borders where market coupling is run based on ATCs, these ATCs are used for Shadow Auctions.

4.3 Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of 4M MC

The 4M MC TSOs' Fallback Procedures prescribe in the execution of Shadow Auctions, in the form of explicit shadow allocation of physical transmission rights (PTR) on a daily basis, on bidding zone borders where a risk, that the 4M MC day-ahead coupling process may be unable to produce results, occurs.

In the context of the single day-ahead coupling, the execution of Shadow Auctions is embedded as follows:

Table 3: Embedding of Shadow Auctions in the 4M MC processes in case of ad-hoc issues⁶.

| # | Process | Timing [CET] |
|---|---|----------------------------------|
| 1 | NEMOs inform TSOs that the market coupling is delayed | 11:40 - 12:05 |
| 2 | The Allocation Platforms inform the market participants that the market coupling process is delayed and that they can update their Shadow Auction bids in the eventuality of a full decoupling of bidding zone borders currently operated in the framework of 4M MC. | As soon as possible after step 1 |
| 3 | The Allocation Platforms ends the bid submission for the Shadow Auctions and starts the Shadow Auction calculation. In parallel the Allocation Platform informs the market participants that the full decoupling of bidding zone borders currently operated in the framework of 4M MC is declared and that the Shadow Auction results will be available on the website latest by 12:45 CET. | 12:35 |
| 4 | NEMOs inform that the full decoupling on bidding zone borders | 12:35 |

⁵ Critical Branches (CBs).

⁶ The timings in the table represent the most critical path from market perspective.

| # | Process | Timing [CET] |
|---|---|----------------------------------|
| | currently operated in the framework of 4M MC is declared. | |
| 5 | The Allocation Platforms start the sending of the Shadow Auction results and corresponding PTRs. | As of 12:45 |
| 6 | The Allocation Platforms confirms to the NEMOs that the results of the Shadow Auction are sent. | As soon as possible after step 5 |
| 7 | NEMOs reopen their order books to allow market participants to update their orders according to the Shadow Auction results. | As soon as possible after step 6 |
| 8 | NEMOs close their order books. | defined by NEMOs |
| 9 | Market participants send to the TSOs the nomination of their PTRs received in result of the respective Shadow Auction. | No later than 14:30 |

Shadow Auctions are executed by the Allocation Platform Operators via the Allocation Platforms based on the applicable Shadow Allocation Rules. Pursuant to applicable version the Shadow Allocation Rules a Shadow Auction can be summarized in the following steps:

1. Market participants have to be registered at the Allocation Platform in order to participate in Shadow Auctions, pursuant to conditions stated in the Shadow Allocation Rules. This registration is non-discriminatory and free of charge;
2. Once registered, market participants can submit and/or update their default and/or daily bids to the Allocation Platform without any time limit and prior to the effective execution of a Shadow Auction. These bids will be used by the Allocation Platform Operators during the execution of the Shadow Auction;
3. When the Core CCR TSOs' Fallback Procedures are launched, the latest version of default bids submitted by the market participants are used by the Allocation Platform Operators in order to run a Shadow Auction: during the execution of Shadow Auctions, market participants do not have the possibility to modify their default bids;
4. The offered capacity used in the Shadow Auctions are shadow auction ATCs which shall be exactly the same as provided to 4M day-ahead market coupling;
5. The results of the Shadow Auctions are provided to the market participants only in the case where the unavailability of 4M day-ahead coupling results is effectively confirmed by the NEMOs, and no later than 12:45 market time day-ahead.

Further information on the processing of Shadow Auctions can be taken from the respective Shadow Allocation Rules.

4.4 ATCs for Shadow Auctions within Core CCR as fallback for bidding zone borders currently operated in the framework of 4M MC

The 4M MC solution is an ATC based market coupling. In case of the 4M MC is not able to produce the results until predefined critical deadlines the 4M MC Fallback Procedures have to be applied. During these processes the same ATCs shall be the input to the 4M MC Shadow Auctions that would have been allocated during this implicit allocation processes, thus there is no need to recalculate the ATCs for the MTUs.

5. Evaluation of regional market coupling as possible fallback solution

Core NRAs requested Core TSOs, in cooperation with NEMOs, to study the possibility and opportunity to establish in the future regional back-up coupling within the Core CCR for situations where fallback procedures are triggered based on article 50 CACM Regulation. If it concludes that a Core internal regional back-up coupling as a fallback would be feasible, the analysis shall be included in this explanatory note and the fallback solution in the document shall be modified accordingly.

Core TSOs share the Core NRAs' view, that an additional step between pan-European coupling and total decoupling as fallback procedure leading to explicit shadow auctions as fallback solution on all Core bidding zone borders could be beneficial for the European Union and also for the Core CCR.

However, if Core FB MC is in operation, a partial coupling based on flow-based capacity inputs as fallback solution within the Core CCR is not possible, as it would violate the security principle of the flow-based allocation when capacities are allocated implicitly only on a subset of all Core CCR bidding zone borders. This also applies today for the operational CWE FB MC. If the reason for a fallback initiation lies within the CWE region, a partial decoupling is not possible there today as well. A partial coupling in form of the today's CWE FB MC as a fallback solution will also not be applicable, as all processes of this MC are expected to expire by the Go-live of the eventual Core FB MC. The latter also applies for the 4M MC.

A further possibility could be a regional back-up market coupling within the Core CCR as a fallback based e.g. on the ATCs provided for Shadow Auctions. This would require synchronous to normal operations capacity submission to NEMOs, respective contracts and procedures. Furthermore an efficiency analysis needs to be conducted. The impact of other CCRs' fallback procedures and also how to deal with if a bidding zone is assigned to several CCRs, needs to be assessed as well. This cannot be done solely in scope of the Core TSOs and NEMOs cooperation but needs to be assessed rather on European level. Core TSOs will take care of this idea in course of discussions with NEMOs on the NEMOs back-up methodology proposed pursuant to Art. 36.3 of the CACM Regulation.