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**Explanatory document to the proposal for the  
establishment of fallback procedures for Capacity  
Calculation Region Hansa  
in accordance with Article 44 of the Commission  
Regulation (EU) 2015/1222 of 24 July 2015 establishing a  
Guideline on Capacity Allocation and Congestion  
Management**

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14<sup>th</sup> of June 2017

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## 1. Introduction

The Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management (hereafter referred to as “CACM Regulation”) sets out rules to ensure optimal use of the transmission infrastructure, operational security and optimizing 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, by each Transmission System Operator (hereinafter “TSO”), in coordination with the other TSOs in the Capacity Calculation Regions (hereinafter “CCRs”).

Pursuant to Article 44 of the CACM Regulation, all TSOs in the CCR Hansa have established a proposal for fallback procedure. This document provides additional information to the proposal.

The proposal for establishment of fallback procedures in CCR Hansa has to be submitted for approval to all regulatory authorities (hereinafter “NRAs”) within the CCR Hansa no later than 16 months after the CACM Regulation entered into force. Due to a delayed regulatory approval of the proposal for CCRs, TSOs requested to extend this deadline by 6 months.

This document is meant to ease the approval process of the proposal by all NRAs in CCR Hansa. The terms used in this document follow the definitions of Article 2 of the proposal for establishment of fallback procedures.

In regards to Norway, the CACM Regulation is not yet implemented as Norwegian law due to delay in implementing the Regulation (EC) No 714/2009. No decision has been made from the Norwegian government in time of writing, but there are no indications that there are obstacles to implementing the CACM Regulation. This document is written under the assumption of Statnett that Norway will implement the CACM Regulation prior to the implementation deadline for this methodology.

## 2. Geographical application of this proposal

The proposal applies to the bidding zone borders within the CCR Hansa.

## 3. Legal requirements and interpretation

This chapter contains a description of the relevant legal references in the CACM Regulation including their interpretation in order to formulate a proposal for fallback methodology.

### 3.1 Legal references and requirements

A number of relevant preamble of the CACM Regulation are cited, that should be taken into account to properly interpret the articles stated further below.

Article 7(1)(h) in the CACM Regulation states that with regard to single day-ahead and intraday price coupling, NEMOs shall in particular be responsible for the following tasks:

*“establishing jointly with relevant NEMOs and 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 account of fallback procedures provided for in Article 44”*

According to Article 8(2), TSOs shall:

*“establish and operate fallback procedures as appropriate for capacity allocation in accordance with Article 44”.*

Article 44, TSOs shall in coordination:

*“By 16 months after the entry into force of this Regulation, each TSO, in coordination with all the other TSOs in the capacity calculation region, shall develop a proposal for 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. The proposal for the establishment of fallback procedures shall be subject to consultation in accordance with Article 12.”*

Article 50(1) states that:

*“In the event that all NEMOs performing MCO functions are unable to deliver part or all of the results of the price coupling algorithm by the time specified in Article 37(1)(a), the fallback procedures established in accordance with Article 44 shall apply”*

Furthermore, according to Article 50(2):

*“In cases where there is a risk that all NEMOs performing MCO functions are unable to deliver part or all of the results within the deadline, all NEMOs shall notify all TSOs as soon as the risk is identified. All NEMOs performing MCO functions shall immediately publish a notice to market participants that fallback procedures may be applied.”*

As a general point, all methodologies and proposals developed under the CACM Regulation should align with the objectives of the CACM Regulation. More specifically, Article 9(9) of the CACM Regulation requires that:

*“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.”*

### **3.2 Interpretation and scope of proposal**

The legal framework stated above needs to be given an interpretation in order to formulate a legally sound proposal of fallback methodology, to define the scope of this proposal and to make the proposal implementable.

Fallback procedures apply in the event that the single day-ahead coupling process is unable to produce results. The results meant are specified in Article 39 (2) of the CACM Regulation and relate to the output of the day-ahead price coupling algorithm i.e. prices, net positions and status of orders.

A Partial Coupling is a situation where it is not possible, for a specific day, to allocate the Cross Zonal Capacities (CZCs) via the implicit allocation for one or several areas and/or interconnectors before the relevant Partial Coupling Deadline. A Full Decoupling is a situation where it is not possible to allocate the CZCs, for a specific day, via the implicit allocation process, where a time limit has been reached and the Market Coupling Results cannot be published before the Full Decoupling Deadline. Full definitions are described in chapter 4.

The TSOs are to develop a proposal for a robust and timely fallback procedure to ensure efficient, transparent and non-discriminatory capacity allocation. A robust fallback procedure is understood as procedure, which is independent, and not subject to the errors in Market Coupling (MC) function. A timely procedure can be operated in time and parallel with the MC function, so the fallback procedure can be applied immediately after the announcement of partial coupling or full decoupling. A non-discriminatory and transparent methodology is understood as a methodology, which should be open for all market participants and providing sufficient guidance and insight into the procedure.

According to Article 44 of the CACM Regulation, the TSOs in CCR Hansa are to coordinate the fallback proposal, and it is assumed to imply that the TSOs are not obliged to choose the same fallback

procedure, but to coordinate the delivery of the proposal according to Article 44 in the CACM regulation and in the implementation period.

Article 7(1)(h) is understood as the Nominated Electricity Market Operators (NEMOs) and TSOs shall jointly establish back-up procedures, and the fallback procedure is one of these elements. According to Article 44 in the CACM Regulation, the TSO shall propose the fallback procedures, whereas the procedures are to be jointly implemented by the TSOs and NEMOs.

#### **4. Present fallback procedures**

In this section, the present fallback solutions in place within the CCR Hansa area are described, starting with an introduction to the European market coupling.

##### **4.1 The Multi Regional Coupling (MRC)**

In the MRC, prices are calculated in the PCR Matcher-Broker system (PMB) using the Euphemia algorithm, which all involved NEMOs have developed in close cooperation. The PMB system is designed so that the calculation will start automatically when all the needed data is received, being all Network Data (Cross-Zonal Capacities and Allocation constraints) and Order Data (Order books).

The NEMOs take turns being the Coordinator – or responsible party – for the calculation. The NEMOs each spend two weeks as the Coordinator, two weeks as a hot backup (being able to take over the role as Coordinator on short notice) and two weeks off.

##### **4.2 MRC Fallback procedures**

MRC fallback procedures identify two overall fallback situations: partial coupling or full decoupling.

In case of partial coupling, one region might experience problems and therefore has to be decoupled from the rest of MRC, which continues to be coupled. The following deadlines apply to the submission of Network Data and Order data, respectively:

1. If one power exchange has not submitted the Network Data by 11:45 CET, this will lead to a Partial Decoupling of the area(s) missing in the MRC-system
  - For example: if Power Exchanges has not submitted the Network Data by 11:45 CET this will lead to a Partial Decoupling of the Nordic/Baltic region,
2. If one power exchange has not submitted the Order Data by 12:40 CET, this will lead to a Partial Decoupling of the region/area(s) missing in the MRC-system
  - For example: if Power Exchanges has not submitted the Order Data by 12:40 CET this will lead to a Partial Decoupling of the Nordic/Baltic region.

Under normal circumstances, all NEMOs will receive the prices and flow results of the common price calculation in the MRC-system. Each NEMO checks the results for max/min prices, thresholds etc. and either confirms or rejects the results. If this confirmation is not received before 13:50 CET this will lead to a full decoupling.

In case of full decoupling all MRC regions and bidding zones are decoupled from each other. Following partial coupling or full decoupling, local procedures are activated in order for the individual regions or bidding zones to allocate capacities and calculate a price.

##### **4.3 Current situations on borders in CCR Hansa**

In case of activation of the MRC fallback procedures, the current procedure on the bidding zone borders DE/LU-DK1 and DE/LU-DK2 is Shadow Auctions.

The Shadow Auction is handled by an allocation office, currently -Joint Allocation Office (JAO), and is an

explicit allocation of physical transmission rights (PTRs) in the day-ahead market time-frame. The local NEMO, currently NP, receives capacities from the TSOs and provides the required pre-coupling data to the MRC day-ahead platform. In addition, JAO receives the pre-coupling data, either by the TSOs or the NEMOs.

On the SE4-PL border (“SwePol Link”) the results of day-ahead market coupling are known usually at approx. 13:00 CET the day the day-ahead implicit auction is held. If the market coupling results are not available by 15:45 CET, i.e. commercial flow is not nominated by NEMOs to TSOs, then the day ahead commercial flow equals to zero. Available transmission capacity (ATC) on SwePol Link not used for the purpose of the day-ahead market coupling or in case of unavailability of the market coupling results by 15:45 CET, goes back to the relevant TSOs for operational security purposes until intraday capacity allocation is implemented.

## **5. Proposed fallback procedures**

Common practice in the rest of Europe in a fallback situation is to cancel the day-ahead implicit auction at the deadline 13:50 CET, and to either apply Shadow Auction or let market participants use the intraday market to trade their power production and consumption.

### **5.1 Proposed fallback procedure for DE/LU-DK1 and DE/LU-DK2**

This proposal maintains the current fallback procedure on the DE/LU-DK1 and DE/LU-DK2 borders.

The current Shadow Allocation Rules contain the terms and conditions for the allocation of Transmission Rights, on the borders specified in the Shadow Allocation Rules. In particular, the Shadow Allocation Rules set out the rights and obligations of Registered Participants as well as the requirements for participating in Shadow Auctions. The rules describe the process of the Shadow Auction, including the determination of Marginal Price as a result of Shadow Auction and invoicing/payment.

For the purposes of these Shadow Allocation Rules, the Allocation Platform shall be the party signing the Participation Agreement with the Registered Participant. It is being understood that the Registered Participant will accede these rules by the signature of the Participation Agreement.

The Shadow Allocation Rules<sup>1</sup> have been in public consultation in the time period 07-07-2016 to 20-07-2016, and are available at the website of the Allocation Platform.

The TSOs organise the attribution of cross-zonal capacity through an Allocation Platform Operator, who will act on behalf of the TSOs for this purpose. The TSOs will strive to select the Single Allocation Platform following the Commission Regulation EU (2016/1719) establishing a guideline on forward capacity allocation Article 48.

The following chapters describe the overall processes behind Shadow Auctions and the current timelines.

The timings, formats and procedures are to be specified in the implementation between relevant NEMOs and TSOs, which is to be done in close cooperation with adjacent CCRs applying Shadow Allocation Rules.

#### **5.1.1 Announcement of decoupling from MRC**

Within MRC, several fallback procedures exist, applying either to all borders of a single bidding zone or specific borders in order to manage unforeseen incidents and/or a known unavailability of the MRC for

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<sup>1</sup> Current version of Shadow Allocation Rules: <http://jao.eu/support/resourcecenter/overview>

the next coupling session(s). A Full Decoupling known during the Daily Market Coupling Session will be declared from the PCR Incident Committee (IC) of MRC in case the Market Coupling Results cannot be published within the fixed time limit (currently 13:50 D-1) due to issues detected only during the current Market Coupling Session.

If the IC triggers Shadow Auctions during a daily session of the MRC, Shadow Auctions will be launched in parallel of the resolution of the problem of the MRC but the Shadow Auction results will only be considered if a MRC decoupling is declared. The parallel process is done in order to have the Shadow Auction results ready for publication as soon as decoupling is decided upon and, in the meantime, leaves time to TSOs and NEMOs to remedy the situation and try to publish Market Coupling results before the critical deadline.

If the activation of the Shadow Auctions is known in advance for one or several daily sessions of the MRC, the Allocation Platform informs as soon as possible individually, by an email, the Registered Participants that the Shadow Auctions are performed with the corresponding new time schedule. The Offered Capacity for the Shadow Auctions and the information related to the time schedule will be published in the Auction Specification on the Allocation Platform's website.

#### **5.1.1.1 Default Bid**

Registered Participants willing to participate in Shadow Auctions shall place default Bids for Shadow Auctions. A default Bid, once identified as such by the Registered Participant, shall apply automatically to each subsequent relevant Shadow Auction.

Each day the Registered Participants may update their Bids on the Allocation Platform. In the event that the Shadow Auctions are triggered during a daily session, the Allocation Platform shall import the shadow Bids and immediately inform the Registered Participants that:

- They can no longer update their shadow Bids,
- Shadow Auctions are running as precautionary measure for the case decoupling is finally decided.
- Shadow Auctions results will only be published in case decoupling is decided.

#### **5.1.1.2 Results**

After the expiration of the Bidding Period for a Shadow Auction, the Allocation Platform shall determine the provisional Shadow Auction results if Shadow Auctions are announced in advance or the final Shadow Auction results if Shadow Auctions are triggered during a daily session of MRC.

#### **5.1.1.3 Nomination**

The holder of PTR may nominate it for its physical use. The non-nominated Transmission Rights at nomination deadline are not financially compensated.

The NEMOs will reopen their order books for a limited time, which is defined by the NEMO local trading rules.

#### **5.1.1.4 Cancellation of Shadow Auction**

In case the Allocation Platform cancels a Shadow Auction all Bids already submitted and any results of the respective Auction shall be deemed null and void. The Allocation Platform shall inform all Registered Participants without undue delay, of the Shadow Auction cancellation by notification published in the Auction Tool, on webpage of Allocation Platform and by e-mail.

The cancellation may be announced in the following cases:

1. before the Capacity is deemed to be allocated in case the Allocation Platform faces technical obstacles during the Shadow Auction process like a failure of standard processes; and

2. during the contestation period, in the event of erroneous results due to incorrect Marginal Price calculation or incorrect allocation of Transmission Rights to Registered Participants or similar reasons.

Capacity is deemed to have been allocated to a Registered Participant from the moment the Registered Participant has been informed of the Auction results and the Contestation Period is closed if relevant.

#### **5.1.1.5 Back up to Shadow Auctions**

If the Shadow Auctions are unable to produce results, the cross-border capacities allocated in the day-ahead timeframe shall be set to zero, and the capacity shall be released to the intraday market.

#### **5.1.1.6 Capacities for Shadow Auction**

ATCs for Shadow Auctions are received daily from each TSO, and the Allocation Platform shall publish the ATC.

TSO shall communicate to the Allocation Platform maximum ramping values to be applied for the concerned borders. For borders where ramping rules apply, the new ramping value shall be communicated two (2) weeks in advance.

#### **5.1.1.7 TSO Designation**

On the borders between Denmark and Germany the Transmission Rights shall be attributed to one or where applicable two of the respective TSO borders. When signing the Participation Agreement, Registered Participants shall determine to which TSO border Transmission Rights shall be attributed.

### **5.2 Proposed fallback procedures for SE4-PL**

On the SE4-PL border the fallback procedure will be to set capacity to zero in the day-ahead market and subsequently give all capacity to the intraday market in the following day. Leaving capacities to the intraday market might be challenging for some market participants, who do not have the possibility to trade as they do not have 24/7 personnel available or are not a member on an intraday trading platform. However especially Swedish market participants may not be familiar with Shadow Auctions processes nor participate on the Allocation Platform. Thus this proposal includes a different fallback procedure for SE4-PL border.

## **6 Impact on objectives of the CACM Regulation**

This chapter contains a description of how the proposal meets the aims of the CACM Regulation as stated in Article 3. The main purpose is to achieve an efficient market coupling also in the situation when the normal market coupling process fails. This must be organized to ensure market flows as close to the normal situation as possible. In this proposal, achieving operational security is paramount.

The CACM Regulation has the objective to ensure optimal use of the transmission infrastructure, operational security and optimizing the calculation and allocation of cross-zonal capacity. In this respect, the Fallback procedure opens up for a transparent and efficient use of transmission capacity in critical situations. A market-based utilization of transmission capacity is beneficial for connected bidding zones, contributing positively to operational security.

In regard to the aim of the CACM Regulation to promote effective competition in the generation, trading and supply of electricity, this proposal has taken into account the importance of creating a level playing field for market parties active on cross-zonal markets.

By having this proposal, the objective of fair and non-discriminatory treatment of the market parties is ensured. It will also represent a fair and orderly organization of the market, as this guarantees equal access to cross-zonal capacity.

### **6.1 Impact on CCR Hansa of other CCR fallback procedures**

Activation of fallback procedures in adjacent CCRs might affect TSOs and NEMOs in CCR Hansa. In that case, the TSOs in CCR Hansa and the relevant NEMOs shall work together with the adjacent CCRs during implementation of the fallback procedures to find solutions to ensure that their fallback procedures do not affect the fallback procedures for CCR Hansa in a negative way.

The assumption is that the launching of the fallback procedures in the adjacent CCRs does not affect CCR Hansa in a way that would be essentially different from the current situation. The assumption is based on the knowledge of the TSOs in CCR Hansa that the neighboring CCRs design their CACM compliant fallback proposals on the basis of the prevailing practices similar as is done in the proposal of CCR Hansa.

### **7 Timeline for implementation**

According to Article 9 (9) of the CACM Regulation, proposals for terms and conditions shall include a proposed timescale for their implementation.

The fallback procedures as proposed in the legal document do not have critical interdependencies to other methodologies developed under the CACM Regulation.

The Fallback procedures in the form of Shadow Auctions shall be binding for the concerned CCR Hansa bidding zone borders no later than 3 months after the procedures have been approved by the relevant NRAs. The Fallback procedure for SE4-PL border shall be implemented simultaneously with the implementation of the single intraday coupling for this border in accordance with CACM Regulation.

The TSOs applying Shadow Allocation Rules will need some time after the approval of the relevant NRAs to negotiate a new service level agreement with the relevant allocation platform operator, and will strive for fast implementation of this proposal.

### **8 Assessment and summary of stakeholders' comments**

Fallback Procedures were consulted between 14 April and 15 May 2017. The TSOs of CCR Hansa received one reply from a market participant, however after the consultation deadline.