SDAC_BUP_01: Cross-Zonal Capacities and Allocation Constraints Submission

Version	Public version			
First Trading Day	08/06/2022			
Status	Draft Final			

Version	Date	Name	Function	Signature

Version	Date	Name	Function	Signature

Remarks

As a general principle, if this backup procedure cannot solve the issue by 11:30 (Partial Coupling Deadline for CZC-related issues), the operators refer to **SDAC_FAL_01** – Incident Management.

Та	ble of	Contents				
1.	Intr	oduction4				
	1.1.	Purpose4				
	Table	1 – The SDAC interconnectors and the different entities involved in the CZC process 5				
	1.2.	Governed / Regulated by6				
	1.3.	Tools and Communication protocols6				
	1.4.	Associated procedures7				
2.	Pro	cedure				
	2.1.	General overview				
	Table	2 – Risk Cases associated to the CZC process				
	2.2.	Risk Cases - Process clarification9				
	Cas calo	e 1: CZCs and Allocation Constraints are not available at Target Time due to technical/ culation issues				
	Cas Tim	e 2: TSO Pre-Coupling System cannot send the CZCs and Allocation Constraints at Target e to the NEMO Pre-Coupling Module9				
	Case3: NEMO Pre-Coupling Module cannot receive the CZCs and Allocation Constraints 9					
	Case 4: NEMO Pre-Coupling Module rejects the CZCs and Allocation Constraints					
	Case5: CZCs and Allocation Constraints need to be updated after Target Time					
	Case 6: Issues regarding the CZCs for the double-sided submission interconnectors11					
	Table interc	3 – Regional procedures dealing with the CZC issues for the double-sided submission onnectors				
	Cas	e 7: Network Data file rejected by the PMB12				
3.	Fina	al state to start the next normal procedure13				
4.	Inci	dent investigation and reporting13				

1. Introduction

The Cross-Zonal Capacities (CZCs) and optionally the Allocation Constraints are determined by the TSOs or any party entitled by TSOs to do so (hereafter referred to as the TSOs), and submitted to the NEMOs Pre-Coupling Module. NEMOs then forward this data to the PMB according to the ANDOA procedures.

This backup procedure describes all the risk cases related to the procedure SDAC_NOR_01.

1.1. Purpose

As a general remark, the SDAC backup procedures aim at offering a common framework to which all the local backup procedures must be aligned accordingly.

The purpose of this procedure is to provide the PMB operators with an overview of the applicable backup solutions in case of problems in the Pre-Coupling phase, which might jeopardize the timely reception of the CZCs and optional Allocation Constraints by the local NEMO Pre-Coupling Module.

The below mentioned backup solutions may be applied only before 11:30, which is the Partial Coupling Deadline for CZC-related issues, even though NEMOs will perform the decoupling of the relevant interconnector

In case the issue still persists at 11:00, i.e. at the Latest Time to Start an Incident Committee (IC) for CZC-related issues, an IC will be started according to procedures SDAC_FAL_01.

If the backup solutions do not solve the issue before 11:30 and CZCs are still not available for a certain Area, the Incident Committee will declare the decoupling of the relevant interconnector(s) from SDAC. This means the Area(s) and/or interconnector(s) with the issue is decoupled, while the rest of SDAC is coupled as described in SDAC_FAL_03.

The local procedures are mentioned only for reference purpose, while the common backup solutions are explained in more detail.

The table below shows the interconnectors concerned by this procedure, the type of submission based on the source of the CZCs (single or double or multi-submission), the presence of the Allocation Constraints (for example: ramping, losses, tariff parameters etc.) and the different entities involved in the CZC-related processes.







1.2. Governed / Regulated by

- Day-Ahead Operations Agreement (DAOA)

1.3. Tools and Communication protocols

- NEMOs Pre-Coupling Module / Local NEMO IT systems
- TSO Back-End Systems
- TSO Pre-Coupling Systems

1.4. Associated procedures

Normal procedures:

_

SDAC_NOR_01: Cross-Zonal Capacities and Allocation Constraints Submission

Following Normal procedures:

- ANDOA_NOR_02: Network Data Sending and Receiving
- SDAC_NOR_02: Final Confirmation of the Results

Other associated procedures:

- ANDOA_BUP_02: Network Data Sending and Receiving
- ANDOA_FAL_01: Incident Committee
- SDAC_FAL_01: Incident Management
- SDAC_FAL_03: Partial Decoupling
- SDAC_OTH_02: Internal and External Communications

The below flowchart shows the CZC process.



2. Procedure

2.1. General overview

The table below lists all the risk cases that were identified in procedure SDAC_NOR_01 and indicates which actions should be taken on SDAC-level to solve the identified issues.

Risk Case	Process	Target Time	Latest Time to Start IC for CZC- related issues	Partial Coupling Deadline for CZC- related issues	Tool	Backup solution	FALLBACK
1	CZCs and Allocation Constraints are not available at Target Time due to technical/ calculation issues.		11:00	11:30	TSO Back-End Systems and TSO Pre- Coupling Systems	TSO backup procedures	SDAC_FAL_01
2	TSO Pre-Coupling System cannot send the CZCs and Allocation Constraints before Target Time to the NEMO Pre-Coupling Module.		11:00	11:30	TSO Back-End Systems and TSO Pre- Coupling Systems	Sending of the files in Backup mode	SDAC_FAL_01
3	NEMOs Pre-Coupling Module cannot receive the CZCs and Allocation Constraints.		11:00	11:30	NEMOs Pre- Coupling Module	Manual upload of files by Local NEMO PMB Operators	SDAC_FAL_01
4	NEMO Pre-Coupling Module rejects the CZCs and Allocation Constraints.		11:00	11:30	NEMOs Pre- Coupling Module	Local NEMO to contact the relevant TSO	SDAC_FAL_01
5	CZCs and Allocation Constraints need to be updated after Target Time (allowed until 11:00).		N/A	11:30	TSO Back-End Systems and TSO Pre- Coupling Systems, NEMOS Pre- Coupling Module, PMB	TSO Pre-Coupling System Operator updates and resends the files to the NEMO	SDAC_FAL_01
6	Issues regarding the CZCs for the double submission interconnectors.		11:00	11:30	-	Regional procedures	SDAC_FAL_01
7	Network Data file rejected by the PMB		11:00	11:30	TSO Pre- Coupling Systems, NEMOs Pre- Coupling Module, PMB	Regional procedures	SDAC_FAL_01

Table 2 – Risk Cases associated to the CZC process

2.2. Risk Cases - Process clarification

Case 1: CZCs and Allocation Constraints are not available at Target Time due to technical/ calculation issues

In case CZCs and Allocation Constraints cannot be generated due to technical or calculation issues by Target Time, the related TSO or any party entitled by the TSO has to contact as soon as possible the related NEMO in order to inform about the issue. The NEMO will inform the PMB Coordinator about the delay.

The concerned TSO or party entitled by the TSO applies its own backup procedures in order to solve the issue.

If the issue cannot be solved by 11:00 (the Latest Time to Start an Incident Committee for CZC reasons) an Incident Committee will be launched according to procedure SDAC_FAL_01.

Messaging involved will be sent according to local procedures.

Case 2: TSO Pre-Coupling System cannot send the CZCs and Allocation Constraints at Target Time to the NEMO Pre-Coupling Module

When the TSO Pre-Coupling Systems have determined the CZCs and Allocation Constraints these should automatically be sent as a file from the TSOs Pre-Coupling System to the NEMOs Pre-Coupling Module before the Target Time.

If one or more of the TSO's Pre-Coupling Systems encounter sending issues, the following actions have to be performed:

- a) TSO Pre-Coupling System Operator contacts the relevant NEMO by phone
- b) If the NEMO has no information from the related TSO or any party entitled by the TSO
 Comparison of the NEMO contacts the relevant TSO Pre-Coupling System
 Operator by phone and the NEMO contacts the PMB Coordinator according to the ANDOA procedures;
- c) TSO or any party entitled by the TSO sends the file in backup mode according to local backup procedures and NEMO uploads the file according to local procedures

If the above action does not solve the issue by the Latest Time to Start an Incident Committee (11:00), an Incident Committee will be launched according to procedure SDAC_FAL_01.

Messaging involved will be sent according to local procedures.

Case3: NEMO Pre-Coupling Module cannot receive the CZCs and Allocation Constraints

After the TSO Pre-Coupling systems have determined the CZCs and Allocation Constraints, these should be automatically sent from the TSOs Pre-Coupling system to the NEMOs Pre-Coupling Module by Target Time.

If one of the NEMOs Pre-Coupling Modules does not receive the files by Target Time, the following actions have to be performed:

- a) The NEMO contacts the relevant TSO Pre-Coupling System Operator by phone and the NEMO informs the PMB Coordinator according to the ANDOA procedure(s)
- b) If the relevant TSO Pre-Coupling System Operator has no information from its NEMO and the TSO Pre-Coupling System Operator has not received an acknowledgement from the NEMOs Pre-Coupling Module
- c) The relevant NEMO receives the files in backup mode from TSOs Pre-Coupling system

and uploads them according to local backup procedures;

If the above action does not solve the issue by 11:00 (the Latest Time to Start an Incident Committee for CZC reasons) an Incident Committee will be launched according to procedure SDAC_FAL_01.

Messaging involved will be sent according to local procedures.

Case 4: NEMO Pre-Coupling Module rejects the CZCs and Allocation Constraints

When the TSO Pre-Coupling Systems have determined the CZCs and Allocation Constraints, these should automatically be sent from the TSOs Pre-Coupling System to the NEMOs Pre-Coupling Module by the target time.

If one of the NEMOs Pre-Coupling Modules rejects the CZCs and/or the Allocation Constraints due to incomplete file or not passing the syntax check, the following actions are to be performed:

- a) The rejecting NEMO has to contact the relevant TSO Pre-Coupling System Operator by phone and informs the PMB Coordinator about the reason of rejection;
- b) Explain the reason for rejection and ask for a new version of the file;
- c) The relevant TSO Pre-Coupling System Operator sends the file once again according to local procedure.

If the above action solves the issue and the new file is accepted, normal procedures are followed as usual. If the new file is not accepted, the steps above are retried in order to solve the issue.

If the above action does not solve the issue by 11:00 (the Latest Time to Start an Incident Committee for CZC reasons) an Incident Committee will be launched according to procedure SDAC_FAL_01.

Messaging involved will be sent according to local procedures.

Case 5: CZCs and Allocation Constraints need to be updated after Target Time

CZCs and Allocation Constraints may be updated in normal situations before the Target Time.

In addition, TSOs may require an update of the CZCs and Allocation Constraints between and 11:00. After 11:00 (day-ahead firmness deadline), CZCs and Allocation Constraints cannot be updated anymore.

Regional procedures may have earlier deadlines for updating the CZCs after the SDAC Target Time **manual**, for the single and double submission interconnectors, especially to secure potential updates of cross-checked values near the decoupling deadline.

Due to the fact that the Market Participants would still have 60 minutes to react on the updated CZCs and Allocation Constraints, the NEMOs order book GCT would never be delayed due to CZCs and Allocation Constraints updates.

Local rules determine if it is allowed to update the CZCs and Allocation Constraints after the Target Time. If a TSO needs and is allowed by local rules to update the CZCs and/or Allocation Constraints after the Target Time, but prior to 11:00, the following actions have to be performed:

- a) The TSO or TSO Pre-Coupling System Operator informs the NEMO by phone that a new file version with an updated CZCs and/or Allocation Constraints will arrive after the Target Time, but before 11:00.
- b) The NEMO informs the PMB Coordinator according to the ANDOA procedures.
- c) The TSO or TSO Pre-Coupling System Operator sends the updated values in a new file to the NEMO Pre-Coupling Module before 11:00.

d) The NEMO validates the file and sends it to the PMB Coordinator, according to the ANDOA procedures.

If, by 11:30, the integration of the updated CZCs and Allocation Constraints in the NEMO systems fails, then the CZCs and Allocation Constraints are set in accordance with the applicable local procedures.

If the update of CZCs into the NEMO trading system fails between 11:00 and 11:30 then there are 3 options:

- 1. The earlier CZCs are used;
- 2. The CZCs are put to zero (the concerned interconnector is de facto decoupled);
- 3. No capacity allocation on the line.

The NEMO and TSO will follow the option(s) agreed in their local agreement.

The NEMOs may inform the Market Participants through an external communication, according to local procedures in order to inform the Market Participants about the update.

Case 6: Issues regarding the CZCs for the double-sided submission interconnectors

The main risk related to the CZC process for the double-sided submission interconnectors is CZC mismatch detected by the cross-check between the counterpart NEMOs. Given that the source of the CZC values is different (coming from the two counterpart TSOs), the risk of mismatch in the PMB is higher than the risk associated to interconnectors of single submission or multi submission type (for which the CZCs are received by the NEMOs from a single source, meaning only one TSO).

The solutions for the issues related to the CZCs for the double-sided submission interconnectors are described in the relevant regional operational procedures. They are mentioned here only for ensuring the link with the relevant procedures.

Double-sided submission interconnector	Relevant regional procedures
FR-ES	SWE_BUP_01
IT-AT	IBWT_BUP_01
IT-FR	IBWT_BUP_01
IT-SI	IBWT_BUP_01
GR-IT	IBWT_BUP_01
BG-GR	IBWT_BUP_01
RO-BG	BGRO_BUP_01
NO2A-NL	NorNed_Nordlink_DA_BUP_01
NO2A-DE	NorNed_Nordlink_DA_BUP_01

Table 3 – Regional procedures dealing with the CZC issues for the double-sided submission interconnectors

Double-sided submission interconnector	Relevant regional procedures		
SE4-PL	PL_DA_BUP_01 Nordic_DA_BUP_01		
LT-PL	PL_DA_BUP_01		

Case 7: Network Data file rejected by the PMB

The NEMOs are generating a Network Data file based on the CZC values received from the TSO Pre-Coupling Systems.

As soon as the Network Data file is sent to the PMB by the PMB Operators, the PMB will check if the file passes the following validations:

- Data Completeness
- Data Responsibility
- No redundancy
- Two-directional information
- Document Type
- Single Last Previous Quantity
- Positive Minimum Stable Flow
- Non-negative values
- Hourly ramping presence
- Daily ramping presence
- Valid loss value
- Valid minimum stable flow
- Available capacities consistent in both directions
- Available capacities consistent with ramping limits between consecutive periods
- Available capacities consistent with ramping limits in the first interval
- Not empty Time Series Identification
- Business type value constraint
- Measure Unit value constraint
- Measure Unit Quantity value constraint

If the abovementioned validations are not successful, the PMB will reject the Network Data file and the PMB Operator will receive a negative ACK.

If the Network Data file is rejected by the PMB for all the regional NEMOs, the TSO Pre-Coupling Systems will need to correct the CZC file and will provide a new version to all the relevant NEMOs, using the regular method of communication.

If a valid Network Data file could still not be provided to the PMB by 11:00 (the Latest Time to Start an IC for CZC reasons), an IC will be launched according to the SDAC_FAL_01 procedure.

If a valid Network Data file could still not be provided to the PMB by any of the regional **Operational NEMOs by 11:15**, the NEMOs shall inform the regional parties and the Market Participants about the risk of decoupling of the concerned interconnectors from SDAC.

This information shall be given by sending the external message described in the regional OTH_02 procedure.

If a valid Network Data file could still not be provided to the PMB by 11:30, refer to SDAC_FAL_03 procedure.

3. Final state to start the next normal procedure

The final state in order to be able to start the next process is when the NEMO Pre-Coupling Module has successfully received the CZCs and Allocation Constraints.

4. Incident investigation and reporting

When the price coupling process is complete, in case an Incident Committee was organized, the relevant NEMO involved in the problem is responsible for filling in the Incident Committee Report created and distributed by the PMB Coordinator to all the Incident Committee parties, as described in procedure SDAC_FAL_01.