EXPLANATORY DOCUMENT ON THE PROPOSAL FOR RCC TASK OF FACILITATING THE REGIONAL PROCUREMENT OF BALANCING CAPACITY IN ACCORDANCE WITH ARTICLE 37(5) OF REGULATION (EU) 2019/943 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 5 JUNE 2019 ON THE INTERNAL MARKET FOR ELECTRICITY

17 March 2023

DISCLAIMER

This explanatory document is submitted by ENTSO-E for information and clarification purposes only accompanying the ENTSO-E proposal for the Regional Coordination Centres' task "Facilitating the regional procurement of balancing capacity" in accordance with Article 37(1)(k) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity.



TABLE OF CONTENT

Tab	le of Content	2
1.	Introduction	3
2.	Relevant Legislation and Background	4
3. proc	Facilitation of determination of the amount of balancing capacity that needs to cured – Assessment of non-contracted platform bids	
	Example: determination of volume of non-contracted platform bids	5 6
4. leve	Facilitation of the procurement of the required amount of balancing capacity on region l - RCC involvement in harmonised CZCA process	
5.	Timeline	. 11
6.	Glossary of Terms	. 13



1. Introduction

This explanatory note describes the TSOs' approach to the ENTSO-E proposal for the Regional Coordination Centres' (RCCs) task according to Article 37(1)(k) of the Regulation (EU) 2019/943 (hereinafter, "Electricity Regulation"). Therefore, it gives background to the ENTSO-E proposal for the RCC task 'facilitating the regional procurement of balancing capacity'.

For the tasks set out in Article 37(1) of Regulation (EU) 2019/943 and not already covered by the relevant Network Codes or Guidelines, ENTSO-E shall develop a proposal according to Article 37(5) of Regulation (EU) 2019/943 based on the procedure set out in Article 27 of Regulation (EU) 2019/943. RCCs shall carry out those tasks on the basis of the proposal following its approval by ACER.

ENTSO-E identified that the RCC task according to Article 37(1)(k) of Regulation (EU) 2019/943 – facilitating the regional procurement of balancing capacity - is not yet fully covered by the relevant network codes or guidelines. Therefore, ENTSO-E decided to draft an ENTSO-E proposal defining this task to establish a coordinated understanding of the general aspects of the task. For the avoidance of doubt, regional in this context means the cross-border interaction of TSOs related to reserve capacity.

The facilitation by the RCC has to be in line with the existing and applicable European and National legal frameworks. Therefore, the RCC tasks defined in the ENTSO-E proposal must not go beyond facilitating the TSOs' task 'procurement of balancing' on the regional level according to Article 6(8) of Regulation (EU) 2019/943. The allocation of such a facilitating task to the RCC shall focus on providing added value to the relevant TSOs' task. TSOs have the final decision as they are obliged by regulation and liable accordingly to perform the relevant tasks. Additionally, TSOs' legal obligations and local approaches concerning the procurement of balancing capacity, the optimal provision of reserve capacity, and the final determination of balancing capacity procurement amounts are to be respected.

With regards to the TSOs' task of procurement of balancing capacity, the facilitation by the RCC is only considered mandatory for TSOs accounting for volumes of non-contracted balancing energy bids, which are expected to be available within the European platforms (non-contracted platform bids) and/or allocating cross zonal capacity for the exchange of balancing capacity or sharing of reserves with neighbouring TSOs following Article 38(3) of EB Regulation.

This explanatory note gives more detailed information on the processes described in the proposal to define the RCCs' task of facilitating the regional procurement of balancing capacity. Therefore, it depicts how the RCC supports the TSOs' determination of the amount of balancing capacity that needs to be procured and the TSOs' procurement of the required amount of balancing capacity to meet the requirements of Point 8 of Annex I of the Regulation (EU) 2019/943.



2. Relevant Legislation and Background

According to Article 6(8) of Regulation (EU) 2019/943, the procurement of balancing capacity shall be performed by the TSO and may be facilitated at a regional level. In addition, Article 32(1) of EB Regulation states that each TSO shall perform an analysis on the optimal provision of reserve capacity aiming at minimisation of costs associated with the provision of reserve capacity. This analysis takes into account the following options for the provision of reserve capacity:

- procurement of balancing capacity within the control area and exchange of balancing capacity with neighbouring TSOs, when applicable;
- sharing of reserves, when applicable; and
- the volume of non-contracted balancing energy bids, which are expected to be available both within their control area and within the European platforms taking into account the available cross-zonal capacity.

Furthermore, Article 167 and Annex VII of SO Regulation require TSOs to procure at least 50% of their FRR capacity within their LFC Block (known as core shares within CE) and Art. 169 and Annex VIII of SO Regulation require TSOs to procure at least 50% of their RR capacity within their LFC Block.

Basic obligations, roles and responsibilities first, can be summarised as follows:

- Each TSO shall operate its control area with sufficient upward and downward active power
 reserves, which may include shared or exchanged reserves, to face imbalances between demand and
 supply within its control area, according to Article 152 (1) of SO Regulation. This for example
 means that each TSO remains responsible for ensuring that a sufficient amount of balancing
 capacity is available for the respective control area.
- Article 34(2) of Regulation (EU) 2019/943 charges TSOs to promote the integration of balancing mechanisms which is fulfilled by the implementation of EB Regulation requirements. But neither the EB Regulation nor the Electricity Regulation obliges TSOs to share reserves or exchange balancing capacity cross-border. Thus, the sharing of reserves (and the exchange of balancing capacity) remains non-mandatory and thus voluntary for TSOs.
- Each TSO shall also take into account the volume of non-contracted balancing energy bids which are expected to be available both within their control area and within the European platforms when analysing the optimal provision of reserve capacity (Article 32(1) of EB Regulation). Therefore, the available cross-zonal capacity at the balancing energy timeframe has also to be taken into account. Thus, each TSO might consider a reduction of the procurement amount of balancing capacity dependent on probabilistic methodologies pre-estimating volumes of non-contracted balancing energy bids which may be available both within their control area and within the European platforms.

Given the above, the potential for regional coordination is an RCC's role to facilitate the secure and efficient regional procurement of balancing capacity by supporting TSOs:

• in determining the amount of balancing capacity that needs to be procured by the assessment of available volumes of non-contracted balancing energy bids which may be available within the European platforms (non-contracted platform bids), and



• in the procurement of the required amount of balancing capacity by an RCC involvement in the application of methodology for a harmonised allocation process of cross-zonal capacity (CZCA) for the exchange of balancing capacity or sharing of reserves per timeframe (hereafter referred to as "HCZCAM") in accordance with Article 38(3) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing ("EB Regulation").

3. Facilitation of determination of the amount of balancing capacity that needs to be procured – Assessment of non-contracted platform bids

According to Article 32(1) of EB Regulation TSOs determine their procurement amount of balancing capacity based on dimensioned reserve capacity amounts, exchange and sharing agreements, when applicable, and volumes of non-contracted balancing energy bids.

Following the provisions of Regulation (EU) 2019/943, an RCC shall facilitate TSOs of the relevant SOR in determining the amount of balancing capacity that needs to be procured per LFC block. Therefore, the RCC shall assess the availability of non-contracted platform bids to TSOs for their locally optimal provision of reserve capacity according to Article 32(1)(c) of EB Regulation at least on a day-ahead basis.

The expected volume of non-contracted platform bids is equal to the volume of balancing energy bids exceeding the local reserve capacity needs per participating TSO of each European balancing platform per type of reserves and direction and per validity period of the relevant balancing capacity market. This results from summing up the quantities of all bids in the respective merit order list and subtracting the final determined reserve capacity for each type of reserve and direction per relevant TSO. The expected volume of non-contracted platform bids shall additionally be monitored by the RCC.

If a TSO considers non-contracted platform bids for its local provision of balancing capacity, it shall notify the RCC about that. The RCC shall coordinate this on a regional level in case there is an insufficient volume of non-contracted platform bids available for all TSOs considering them, or no sufficient CZC is available to guarantee access to the expected volumes.

Example: determination of volume of non-contracted platform bids

The following figure shows an illustrative numerical example of how TSOs may consider the contribution of non-contracted balancing energy bids in the calculation of their balancing capacity requirements.

TSO A faces a reserve capacity need of 1000 MW, following the reserve dimensioning principles specified in the SO GL. It submits 1200 MW of balancing energy bids to the balancing energy platform it is participating in, of which 200 MW are non-contracted balancing energy bids.

TSO B faces a reserve capacity need of 2000 MW, following the reserve dimensioning principles specified in the SOGL. It submits 2200 MW of balancing energy bids to the balancing energy platform it is participating in, of which 300 MW are non-contracted balancing energy bids. This TSO already covers part, 100 MW, of its reserve capacity needs with local non-contracted balancing energy bids, in line with Article 32(1)(c) of the EBGL and thus only procures 1900 MW balancing capacity.

From the perspective of both TSOs, a total reserve capacity of 3000 MW is required at a regional level. Overall, 3400 MW of balancing energy bids are available. Consequently, an excess volume of excess balancing energy bids (non-contracted platform bids) of 400 MW is available. Thus, both TSOs may consider,



on a voluntary basis, taking into account part of these 400 MW in its optimal provision of reserve capacity in line with Article 32 of EB Regulation.

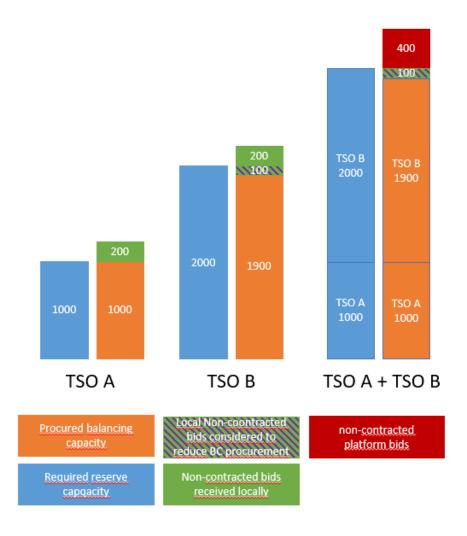


Figure 1 illustrative example of contribution of non-contracted balancing energy bids

It is important to mention that one balancing energy bid shall only be taken into account once by a TSO for its optimal provision of reserve capacity in line with Article 32 of EB Regulation. Therefore, RCC shall coordinate the use of the available amount of non-contracted platform bids. Additionally, the amount of available non-contracted platform bids may be reduced by a TSO starting to consider the non-contracted bids, which initially have led to a volume of bids submitted to the platform exceeding its required reserve capacity, locally to reduce its amount of balancing capacity to be procured.

Example for RCC involvement in consideration of non-contracted platform bids

The following table shows a numerical example for TSOs considering non-contracted platform bids. Different balancing capacity market validity periods are possible for each TSO. The RCC's analysis of the available non-contracted platform bids takes these different validity periods into account, while at the same time



considering the total amount of available non-contracted platform bids as well as the CZC that is available between the respective control blocks.

[MW]	Reserve capacity requirement	Sharing of Reserves	volume contracted	considered e of non- d balancing gy bids	Available non- contracted platform bids incl. available	Balancing capacity amount to	
TSO	4		Locally	Platform level	CZC determined by RCC	be procured	
A	100	0	50	50	25	25	
В	150	25	50	50	75	25	
С	300	25	0	100	100	175	
D	200	0	0	0	0	200	

Explanation:

- TSO A notifies the RCC that 50 MW of non-contracted platform bids are to be considered for the specified validity period. TSO A additionally considers 50 MW of locally available non-contracted balancing energy bids to cover its reserve capacity requirement. The RCC's analysis shows that only 25 MW are available with regard to the availability of non-contracted platform bids and the availability of CZC. RCC notifies TSO A that the requested amount is not available and provides the actual available amount of bids (25 MW). Thus, TSO A has to increase the amount of balancing capacity to be procured (to 25 MW) based on the recommendation of the RCC.
- TSO B notifies the RCC that 50 MW of non-contracted platform bids are to be considered for the specified validity period. TSO B additionally considers 25 MW of shared reserves and 50 MW of locally available non-contracted balancing energy bids to cover its reserve capacity requirement. This means, that TSO B considers 50% of its reserve capacity requirement would be covered by reserves outside its LFC block. The RCC's analysis shows that 75 MW of non-contracted platform bids would be available with regards to the availability of bids and the availability of CZC. RCC notifies TSO B that the requested amount is available (50MW) and that overall 75 MW of non-contracted platform bids would be available. TSO B cannot consider more than 50 MW to comply with SO Regulation requirements. If the TSO's initial reserve capacity requirement would allow compliance with SO Regulation requirements when considering 75 MW of available non-contracted platform bids, it would be up to the TSO to decide whether more non-contracted-platform bids than the initial amount requested may be considered for system security reasons.
- TSO C notifies the RCC that 100MW of non-contracted platform bids are to be considered for the specified validity period. TSO C additionally considers 25 MW of shared reserves. The RCC's



analysis shows that 100 MW are available with regards to the availability of bids and the availability of CZC. RCC notifies TSO C that the requested amount is available (100 MW).

• TSO D does neither consider non-contracted balancing energy bids nor shared reserves and procures the determined reserve capacity requirement locally (200 MW).

4. Facilitation of the procurement of the required amount of balancing capacity on regional level - RCC involvement in harmonised CZCA process

If there is a regional (i.e., cross-border) procurement between member states of balancing capacity (i.e., a balancing capacity cooperation) under an application of the HCZCAM following Article 38(3) of EB Regulation in place, RCC shall facilitate the involved TSOs in the regional procurement of balancing capacity. Therefore, the RCC shall perform the tasks allocated to them by the HCZCAM¹ and further described in the related explanatory document².

Providing the relevant CZC data to the CZCAOF from existing RCC processes

The RCC shall also facilitate two or more TSOs performing an allocation of cross-zonal capacity for the exchange of balancing capacity or the sharing of reserves by an application of the HCZCAM according to Article 38(3) of EB Regulation by taking over data provision and reporting tasks related to the cross-zonal capacities considered.

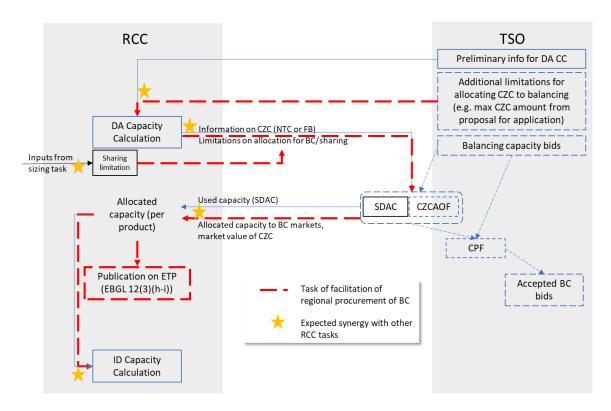
Based on the available version of "CACM 2.0" at the time of drafting this document, synergies were identified between the RCC task of sending capacity information to the market coupling operator (MCO) and the RCC facilitation of procurement of balancing capacity.

In detail, the provision of the relevant cross-zonal capacity data to the CZCAOF to facilitate the regional procurement of balancing capacity where a **co-optimised allocation of cross-zonal capacity** is applied will be organised as described in the following graph:

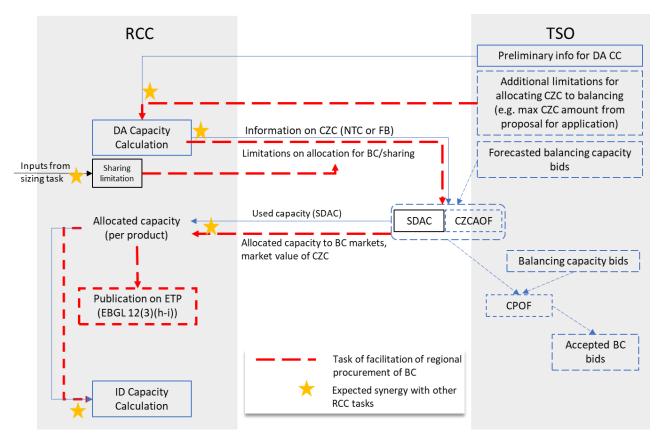
¹ All TSOs proposal to harmonise the methodology for the allocation processes of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves per timeframe in accordance with Article 38(3) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

² Explanatory document to all TSOs' proposal for a harmonised methodology for the allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves per timeframe in accordance with Article 38(3) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.



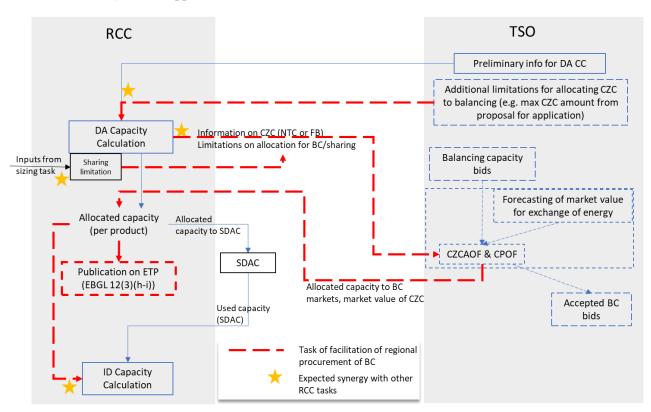


Similarly, the following graph accordingly represents the provision of the relevant cross-zonal capacity data to the CZCAOF to facilitate the regional procurement of balancing capacity where an **inverted market-based allocation of cross-zonal capacity** is applied:





The last graph below accordingly represents the RCC's provision of the relevant cross-zonal capacity data to the CZCAOF to facilitate the regional procurement of balancing capacity in case a **market-based allocation of cross-zonal capacity** is applied:



The presented graphs are to be considered a valid representation of what pertains to the facilitation of regional procurement of balancing capacity (**red** lines). All other processes represented are out of the scope of this document and are only depicted to clarify the overall day-ahead processes and synergies.



5. Timeline

In order to take into account, the fact that the RCCs have not been active in the field of balancing until today and thus completely new tasks arise for them (including, the regional sizing of reserve capacity), an implementation period of at least 36 months seems appropriate.

The time taken for further specifying this RCC task together with ACER and NRAs is used for further preparation of the establishment of the RCC task and therefore, ENTSO-E and RCCs were able to reduce the implementation time starting from the date of approval to the time given in the proposal.

		Goal	Start	End	Time interval
1.	Regional alignment	Inclusion of RCC task in working arrangements ³	1.1.2023	28.2.2024	4234
1.1.	Clarification of tasks to be requested by TSOs	Determining the tasks on the facilitation of regional procurement of balancing capacity to be performed by the RCCs by the SOR TSOs	1.1.2023	1.9.2023	243
1.2.	Drafting of detailed regional process	Detailed definition of the regional process of facilitation of regional procurement of balancing capacity in cooperation with the SOR TSOs	1.9.2023	28.2.2024	180
1.3	Clarification of IT needs	Definition of the needs for an IT tool in order to fulfil the RCC tasks in cooperation with the SOR TSOs	1.9.2023	28.2.2024	180
2.	RCC process establishment	Implementation of RCC task	1.9.2023	15.12.2025	836
2.1.	Internal definition of process	Determining the internal RCC process on the facilitation of regional procurement of balancing capacity	1.9.2023	1.1.2024	122
2.2.	IT specification	Specifying the IT tool needed for the internal RCC process of facilitation of regional procurement of	1.1.2024	15.6.2024	166

³ Art 39 ER: working arrangements shall address planning and operational aspects related to the tasks to be carried out, taking into account, in particular, the specificities and requirements of those tasks.

⁴ Highest uncertainty resulting from regional alignment. Regions are very different.



		Goal	Start	End	Time interval
		balancing capacity (if needed)			
2.3.	IT development	Realisation of the IT tool needed for the internal RCC process of facilitation of regional procurement of balancing capacity (if needed)	15.6.2024	15.6.2025	365
2.4.	IT testing	Testing of the IT tool needed for the internal RCC process of facilitation of regional procurement of balancing capacity (if needed)	15.6.2025	15.12.2025	183
3.	Go-live Phase		1.9.2024	15.6.2026	652
3.1.	Operational SLA finalisation	To finalise the Operational SLA of the service including indicators measuring the performance of the underlying RCC task	1.9.2024	28.2.2025	180
3.2.	Go-live. Check list completion	Fill and sign the go-live checklist before starting the Parallel run	15.12.2025	15.3.2026	90
3.3.	Training Operators	Train Operators to provide the service	15.12.2025	15.3.2026	90
3.4.	Trial Run	Monitor the facilitation of regional procurement process of TSOs according to the set process to identify possible risks	15.3.2026	15.6.2026	92
3.5.	Go-live		15.6.2026	15.6.2026	0



6. Glossary of Terms

The glossary shall provide a short description of the term and a reference where further details can be found (e.g., regulations, guidelines, descriptions, etc.).

Term	Definition
BSPs (Balancing Service Providers)	EB GL Art 2(6): 'balancing service provider' means a market participant with reserve-providing units or reserve-providing groups able to provide balancing services to TSOs;
CZCA (Cross Zonal Capacity Allocation)	methodologies for allocating cross-zonal capacity to the balancing timeframe pursuant to Chapter 2 of Title IV of EB GL.
CZCAOF (Cross Zonal Capacity Allocation Optimisation Function)	Harm. CZCA Method Art. 2(2)(b) 'Cross-zonal capacity allocation optimisation function' means the functionality that determines for each application and for each SPBC in each direction the allocation of cross-zonal capacity for the exchange of energy and for the exchange of balancing capacity or sharing of reserves. For the market timeframes of the co-optimised allocation process and the market-based allocation, the cross-zonal capacity allocation optimisation function shall determine the clearing prices and volumes of balancing capacity of each SPBC per bidding zone;
DAM (Day-Ahead Market)	CACM Art. 2(34) 'day-ahead market time-frame' means the time-frame of the electricity market until the day-ahead market gate closure time, where, for each market time unit, products are traded the day prior to delivery;
FCR (Frequency Containment Reserves)	SO GL Art. 3(6) 'frequency containment reserves' or 'FCR' means the active power reserves available to contain system frequency after the occurrence of an imbalance;
FRCE (Frequency Restoration Control Error)	SO GL Art. 3(43) 'frequency restoration control error' or 'FRCE' means the control error for the frequency restoration process (FRP) which is equal to the area control error (ACE) of a load frequency control (LFC) area or equal to the frequency deviation where the LFC area geographically corresponds to the synchronous area;
LFCB (Load Frequency Control Block)	SO GL Art. 3(18) 'load-frequency control block' or 'LFC block' means a part of a synchronous area or an entire synchronous area, physically demarcated by points of measurement at interconnectors to other LFC blocks, consisting of one or more LFC areas, operated by one or more TSOs fulfilling the obligations of load-frequency control;
FRR (Frequency Restoration Reserves), aFRR, mFRR	SO GL Art. 3(7) 'frequency restoration reserves' or 'FRR' means the active power reserves available to restore system frequency to the nominal frequency and, for a synchronous area consisting of more than one LFC area, to restore power balance to the scheduled value;



Term	Definition
(Automatic/Manual FRR)	SO GL Art 3(99) 'automatic FRR' means FRR that can be activated by an automatic control device; Full activation time of standard products of balancing energy aFRR: 5min
	mFRR: 12.5min
MCO (Market Coupling Operator)	CACM GL Art. 2(30) 'market coupling operator (MCO) function' means the task of matching orders from the day-ahead and intraday markets for different bidding zones and simultaneously allocating cross-zonal capacities;
	CACM Whereas (5) The market coupling operator (hereinafter 'MCO') uses a specific algorithm to match bids and offers in an optimal manner. The results of the calculation should be made available to all power exchanges on a non-discriminatory basis. Based on the results of the calculation by the MCO, the power exchanges should inform their clients of the successful bids and offers. The energy should then be transferred across the network according to the results of the MCO's calculation. The process for single day-ahead and intraday coupling is similar, with the exception that the intraday coupling should use a continuous process throughout the day and not one single calculation as in day-ahead coupling.
Regional Sized Reserve Capacity	required reserve capacity for the system operation region
RR (Replacement Reserve)	SO GL Art. 3(8) 'replacement reserves' or 'RR' means the active power reserves available to restore or support the required level of FRR to be prepared for additional system imbalances, including generation reserves; Full activation time of standard products of balancing energy for RR 30 min.
Control Area	SO GL Art. 3(12) 'load-frequency control area' or 'LFC area' means a part of a synchronous area or an entire synchronous area, physically demarcated by points of measurement at interconnectors to other LFC areas, operated by one or more TSOs fulfilling the obligations of load-frequency control;
BSP-TSO gate closure time	EB GL Art. 2(27) 'balancing energy gate closure time' means the point in time when submission or update of a balancing energy bid for a standard product on a common merit order list is no longer permitted;
	EB GL Art. 24



Term	Definition
required local reserve capacity / local reserve capacity needs / NRC	SO GL Art 3(95) 'reserve capacity' means the amount of FCR, FRR or RR that needs to be available to the TSO;
(Needed Reserve Capacity)	In RCC Procurement/Sizing Methodology FCR is out of scope.
available cross-zonal capacity	for CZCA: CZC calculated following CACM GL Art. 14 1(a)
non-contracted balancing energy bids	balancing energy bids, which are submitted without a prior contract for balancing capacity.
	Indirect Definition: EB GL Art 16(5)
balancing energy cooperation platforms, IGCC, PICASSO, MARI, TERRE	EB GL Art. 2(24) 'exchange of balancing energy' means the activation of balancing energy bids for the delivery of balancing energy to a TSO in a different scheduling area than the one in which the activated balancing service provider is connected;
	European platforms pursuant to Articles 19(1), 20(1), 21(1) and 22(1) EB GL
	IGCC: International Grid Control Cooperation <u>Imbalance Netting</u> (entsoe.eu)
	PICASSO: Platform for the International Coordination of Automated Frequency Restoration and Stable System Operation PICASSO (entsoe.eu)
	MARI: Manually Activated Reserves Initiative Manually Activated Reserves Initiative (entsoe.eu)
	TERRE: Trans European Replacement Reserves Exchange <u>TERRE</u> (entsoe.eu)
TSO-TSO model	EB GL Art. 2(21) 'TSO-TSO model' means a model for the exchange of balancing services where the balancing service provider provides balancing services to its connecting TSO, which then provides these balancing services to the requesting TSO;
co-optimised allocation of cross-zonal capacity	EB GL Art. 42
market-based allocation	EB GL Art. 41
inverted market-based allocation	EB GL Art. 41 after DA Market + Harm. CZCA Method Art. 2(2)(d)



Term	Definition
probabilistic methodology	EB GL Art. 33(6)
forecast of market value	EB GL Art. 39 Calculation of market value of cross-zonal capacity
order books / adjusted order books	collection of all DA orders submitted to the SDAC operator submitted by relevant NEMOs adjusted: shifted SDAC order book by CZCA forecast entity
CZC (cross-zonal capacity)	Transmission capacity on bidding zone border Regulation (EU) 2019/943 Art. 2 (70) 'Cross-zonal capacity' means as defined in Article 2(70) of Commission Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast).
SDAC	CACM Art. 2(26) 'single day-ahead coupling' means the auctioning process where collected orders are matched and cross-zonal capacity is allocated simultaneously for different bidding zones in the day-ahead market;
CPOF	EB GL Art. 2(42) 'capacity procurement optimisation function' means the function of operating the algorithm applied for the optimisation of the procurement of balancing capacity for TSOs exchanging balancing capacity.
ETP (European Transparency Platform)	Art. 3 of Regulation (EU) No 543/2013
exchange of reserves	SO GL Art. 3(96) 'exchange of reserves' means the possibility of a TSO to access reserve capacity connected to another LFC area, LFC block, or synchronous area to fulfil its reserve requirements resulting from its own reserve dimensioning process of either FCR, FRR or RR and where that reserve capacity is exclusively for that TSO, and is not taken into account by any other TSO to fulfil its reserve requirements resulting from their respective reserve dimensioning processes; EB GL Art. 2(23) 'exchange of balancing services' means either or both exchange of balancing energy and exchange of balancing capacity;
	EB GL Art. 2(24) 'exchange of balancing energy' means the activation of balancing energy bids for the delivery of balancing energy to a TSO in a different scheduling area than the one in which the activated balancing service provider is connected;



Definition
EB GL Art. 2(25) 'exchange of balancing capacity' means the provision of balancing capacity to a TSO in a different scheduling area than the one in which the procured balancing service provider is connected;
SO GL Art. 3(97) 'sharing of reserves' means a mechanism in which more than one TSO takes the same reserve capacity, being FCR, FRR or RR, into account to fulfil their respective reserve requirements resulting from their reserve dimensioning processes;
EB GL Art. 25(2) standard products for balancing capacity for frequency restoration reserves and replacement reserves.
SO GL Art. 3(103) 'control capability providing TSO' means the TSO that shall trigger the activation of its reserve capacity for a control capability receiving TSO under the conditions of an agreement for sharing reserves;
SO GL Art. 3(104) 'control capability receiving TSO' means the TSO calculating reserve capacity by taking into account reserve capacity which is accessible through a control capability providing TSO under the conditions of an agreement for sharing reserves;
SO GL Art. 3(94): 'affected TSO' means a TSO for which information on the exchange of reserves and/or sharing of reserves and/or imbalance netting process and/or cross-border activation process is needed for the analysis and maintenance of operational security;
SO GL Art 3(19) 'area control error' or 'ACE' means the sum of the power control error (' Δ P'), that is the real-time difference between the measured actual real time power interchange value ('P') and the control program ('P0') of a specific LFC area or LFC block and the frequency control error ('K* Δ f'), that is the product of the K-factor and the frequency deviation of that specific LFC area or LFC block, where the area control error equals Δ P+K* Δ f;
SAFA B-6-2-2-1-5 ACE open loop (ACEol) means the remaining ACE open loop without contribution of mFRR and RR activations.
SO GL Art. 3(58) 'reference incident' means the maximum positive or negative power deviation occurring instantaneously between generation and demand in a synchronous area, considered in the FCR dimensioning;