

**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**

For public consultation (3 November – 9 December 2022)

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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 an 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 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 a cross zonal capacity allocation (CZCA) methodology following Article 38(3) of the 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 not sufficient CZC is available to guarantee the access to the expected volumes.

Example: determination of volume of non-contracted platform bids

The following figure shows an illustrative numerical example 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 on 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, to take into account part of these 400 MW in its optimal provision of reserve capacity in line with Article 32 of EB Regulation.

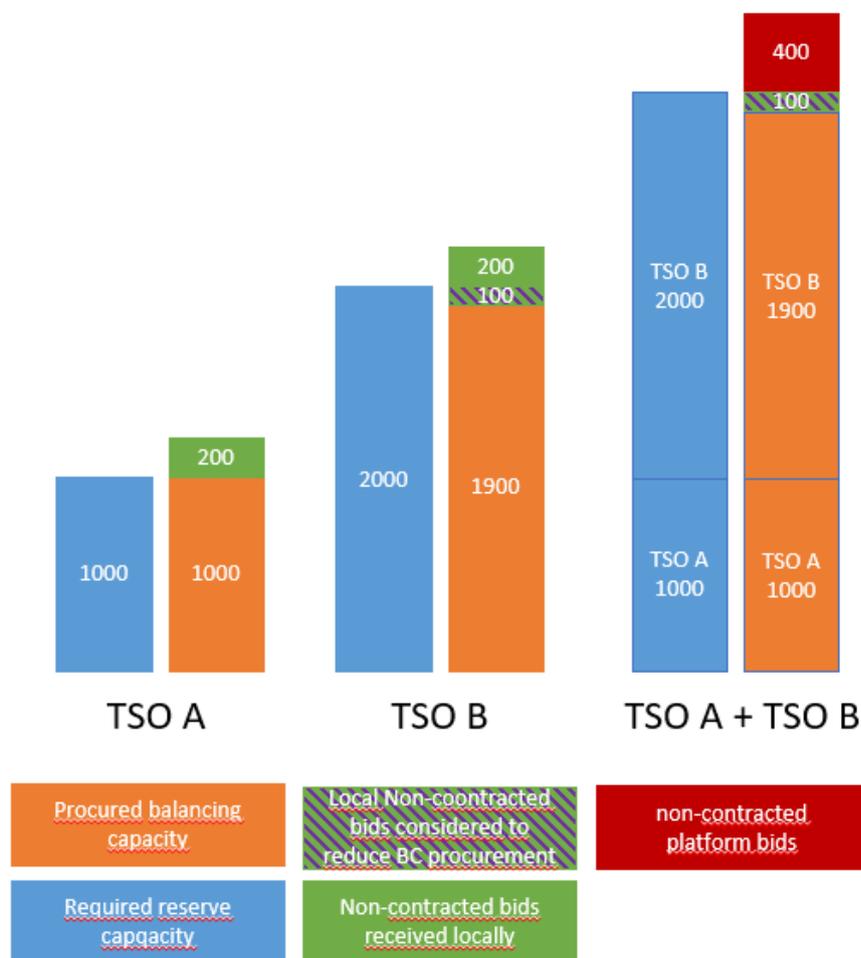


Figure 1 illustrative example of contribution of non-contracted balancing energy bids

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] TSO	Reserve capacity requirement	Sharing of Reserves	Initially considered volume of non- contracted balancing energy bids		Available non- contracted platform bids incl. available CZC determined by RCC	Balancing capacity amount to be procured
			Locally	Platform level		
A	100	0	50	50	25	25
B	150	25	50	50	75	25
C	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 regards 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 actually 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 harmonised CZCA Methodology 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 harmonised CZCA Methodology (latest draft version available [here](#)) and further described in the related explanatory note (latest draft version available [here](#)).

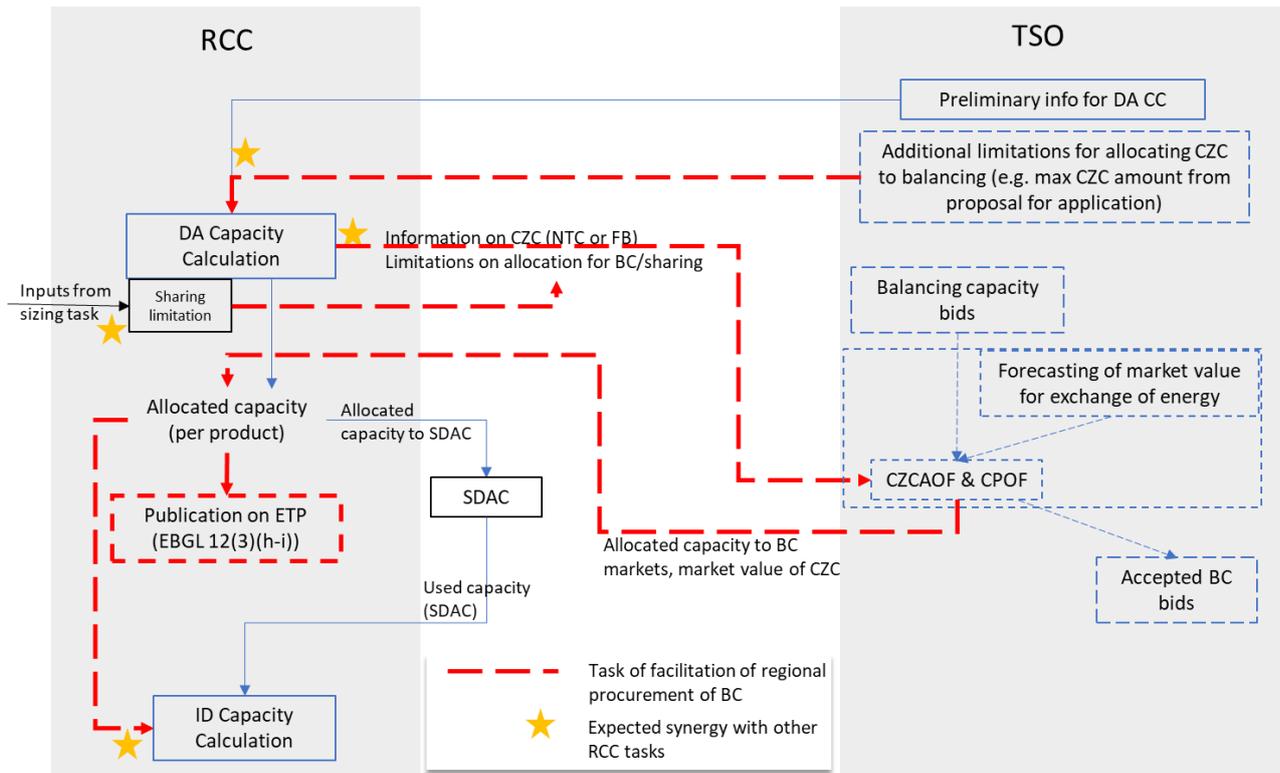
Providing the relevant cross-zonal capacity data to the CZCAOF from existing RCC processes

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 Methodology 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:

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 for what pertains to the facilitation of regional procurement of balancing capacity (red lines). All other processes represented are out of 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 36 months.

		Goal	Start	End	Time interval
1.	Regional alignment	Inclusion of RCC task in working arrangements¹	1.1.2023	28.2.2024	423²
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

¹ 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.

² 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