

RESOLUCIÓN POR LA QUE SE APRUEBA LA PROPUESTA DE LOS GESTORES DE LA RED DE TRANSPORTE DE LA ZONA CONTINENTAL EUROPEA DE NORMAS COMUNES DE LIQUIDACIÓN APLICABLES A LOS INTERCAMBIOS DE ENERGÍA INTENCIONADOS DERIVADOS DEL PROCESO DE CONTENCIÓN DE FRECUENCIA Y RAMPAS DE VARIACIÓN DE POTENCIA, CONFORME A LO PREVISTO EN EL ARTÍCULO 50.3 DEL REGLAMENTO (UE) 2017/2195, DE LA COMISIÓN, DE 23 DE NOVIEMBRE DE 2017, POR EL QUE SE ESTABLECE UNA DIRECTRIZ SOBRE EL BALANCE ELÉCTRICO.

DCOOR/DE/004/19

SALA DE SUPERVISIÓN REGULATORIA

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En Madrid, a 3 de junio de 2020

El artículo 5(3)(j) del Reglamento (UE) 2017/2195, de la Comisión, de 23 de noviembre de 2017, por el que se establece una directriz sobre el balance eléctrico, establece que las autoridades reguladoras de cada zona síncrona deberán aprobar las normas de liquidación para el intercambio intencionado de energía, conforme a lo dispuesto en el artículo 50, apartado 3. En cumplimiento de la función de aprobación prevista en dicho artículo, la Sala de Supervisión Regulatoria aprueba la siguiente resolución:

ANTECEDENTES DE HECHO

El 13 de junio de 2019 tuvo entrada en el registro de la CNMC escrito de Red Eléctrica de España, S.A.U., presentando una propuesta de normas comunes de liquidación aplicables en la zona síncrona Continental Europea a los intercambios de energía intencionados derivados del proceso de contención de frecuencia y rampas de variación de potencia. En cumplimiento del último párrafo del artículo 5(3) del Reglamento 2017/2195, las propuestas fueron remitida al Ministerio para la Transición Ecológica.

Las Autoridades Reguladoras de la región deben garantizar que la metodología aprobada cumple con los requerimientos previstos por el Reglamento 2017/2195. A tal fin, con fecha 12 de diciembre de 2019, las autoridades reguladoras de la zona síncrona Continental Europea requirieron a los TSOs modificaciones en el texto de la propuesta. La CNMC recibió de REE la versión enmendada el 13 de marzo de 2020. De acuerdo con lo establecido en el artículo 6(1) del Reglamento, las autoridades reguladoras disponen de dos meses tras la fecha de recepción por la última autoridad para decidir sobre la aprobación de la metodología.

Las Autoridades Reguladoras de la zona síncrona Continental Europea acordaron que la metodología era acorde al Reglamento 2017/2195 en el seno del Energy Regulators' Forum (ERF) con fecha 27 de mayo de 2020, debiendo ser aprobada por cada Autoridad Reguladora antes del 15 de junio de 2020.

La decisión nacional adoptada por cada Autoridad Reguladora será remitida al TSO, quien deberá publicar la metodología, de acuerdo al artículo 7 del Reglamento 2017/2195, y cumplir con los plazos de implementación requeridos en el artículo 4 de la misma.

FUNDAMENTOS JURÍDICOS DE DERECHO

Los artículos 4 y 5 del Reglamento (UE) 2017/2195 regulan la elaboración y aprobación de las condiciones y metodologías de los gestores de la red de transporte.

En el artículo 4 se regula la fase previa de adopción de estos documentos, en el seno de los gestores de la red de transporte. Tanto el apartado 1 de ese artículo 4 como el artículo 5 prevén que, tras esa fase inicial, las condiciones y metodologías se han de remitir a las Autoridades Reguladoras para su aprobación:

- *“Los GRT¹ elaborarán las condiciones o metodologías exigidas por el presente Reglamento y las presentarán para su aprobación a las autoridades reguladoras competentes de conformidad con el artículo 37 de la Directiva 2009/72/CE dentro del plazo correspondiente previsto en el presente Reglamento.” (art. 4.1).*
- *“Cada autoridad reguladora competente de conformidad con el artículo 37 de la Directiva 2009/72/CE aprobará las condiciones o metodologías, elaboradas por los GRT, en virtud de los apartados 2, 3 y 4.” (art. 5.1).*

Hay tres supuestos diferentes de aprobación (que se distinguen en los apartados 2, 3 y 4 del artículo 5):

¹ Gestores de Redes de Transporte

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Notifíquese esta resolución a la Agencia para la Cooperación de los Reguladores de Energía (ACER), comuníquese a Red Eléctrica de España, S.A.U. y publíquese en la página web de la CNMC.

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El presente documento está firmado electrónicamente por el Secretario del Consejo, D. Joaquim Hortalà i Vallvé, con el Visto Bueno de la Presidenta de la Sala, María Fernández Pérez.

APPROVAL BY
CONCERNED REGULATORY AUTHORITIES

OF

ALL CONTINENTAL EUROPEAN TSOs' PROPOSAL
FOR COMMON SETTLEMENT RULES FOR INTENDED
EXCHANGES OF ENERGY AS A RESULT OF THE
FREQUENCY CONTAINMENT PROCESS AND RAMPING
PERIOD IN ACCORDANCE WITH THE ARTICLE 50(3) OF
COMMISSION REGULATION (EU) 2017/2195 OF 23
NOVEMBER 2017 ESTABLISHING A GUIDELINE ON
ELECTRICITY BALANCING

27 May 2020

I. Introduction and legal context

Article 50 (3) of the Commission Regulation (EU) 2017/2195 (hereafter: EBGL)¹ requires that by 18 months after the entry into force of the EBGL, all TSOs intentionally exchanging energy within a synchronous area shall develop a proposal for common settlement rules applicable to all intended exchanges of energy, as a result of one or both: i) the frequency containment process pursuant to Article 142 of Regulation (EU) 2017/1485; ii) the ramping period pursuant to Article 136 of Regulation (EU) 2017/1485.

The final proposal shall be subject to the approval of all concerned Regulatory Authorities (hereafter: concerned RAs).

The all Continental European TSOs' proposal for a methodology for common settlement rules applicable to energy exchanges resulting from frequency containment process and/or ramping period, in accordance with Article 50(3) of the EBGL (hereafter: the CCFR Proposal), was received by the last concerned RA on 5 July 2019.

All concerned RAs reached an agreement on 4 December 2019, to request an amendment to the CCFR Proposal. The amended CCFR Proposal was received by the last RA on 15 April 2020.

Article 6(1) of the EBGL requires relevant Regulatory Authorities to make a decision within two months following receipt of submissions of the last relevant Regulatory Authority concerned. A decision is therefore required by all concerned RAs by 15 June 2020.

This agreement of all concerned RAs shall provide evidence that a decision on the CCFR Proposal does not need to be adopted by ACER pursuant to Article 6(2) of the EBGL.

The all concerned RAs' joint approval was coordinated through the Electricity Balancing TF (hereafter: EB TF) of ACER and agreed on 27 May 2020.

The legal provisions that lie at the basis of the CCFR Proposal can be found in Articles 3 and 50 of the EBGL:

Article 3 Objectives and regulatory aspects

1. This Regulation aims at:

(a) fostering effective competition, non-discrimination and transparency in balancing markets;

¹ Commission regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing, referred to as the "EBGL"

- (b) enhancing efficiency of balancing as well as efficiency of European and national balancing markets;
- (c) integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security;
- (d) contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union while facilitating the efficient and consistent functioning of day-ahead, intraday and balancing markets;
- (e) ensuring that the procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of balancing markets while preventing undue distortions within the internal market in electricity;
- (f) facilitating the participation of demand response including aggregation facilities and energy storage while ensuring they compete with other balancing services at a level playing field and, where necessary, act independently when serving a single demand facility;
- (g) facilitating the participation of renewable energy sources and support the achievement of the European Union target for the penetration of renewable generation.

2. When applying this Regulation, Member States, relevant regulatory authorities, and system operators shall:

- (a) apply the principles of proportionality and non-discrimination;
- (b) ensure transparency;
- (c) apply the principle of optimisation between the highest overall efficiency and lowest total costs for all parties involved;
- (d) ensure that TSOs make use of market-based mechanisms, as far as possible, in order to ensure network security and stability;
- (e) ensure that the development of the forward, day-ahead and intraday markets is not compromised;
- (f) respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation;
- (g) consult with relevant DSOs and take account of potential impacts on their system;
- (h) take into consideration agreed European standards and technical specifications.

Article 50 Intended exchanges of energy

[...]

3. By eighteen months after the entry into force of this Regulation, all TSOs intentionally exchanging energy within a synchronous area shall develop a proposal for common settlement rules applicable to intended exchanges of energy, as a result of one or both:

- (a) the frequency containment process pursuant to Article 142 of Regulation (EU) 2017/1485;

(b) the ramping period pursuant to Article 136 of Regulation (EU) 2017/1485.

8. All TSOs shall establish a coordinated mechanism for adjustments to settlements between all TSOs.

[...]

II. All Continental European TSOs' CCFR Proposal

The CCFR Proposal was not consulted by all Continental Europe TSOs, since it is not explicitly provided by Article 10 of the EBGL.

All concerned RAs closely observed, analysed and continuously provided feedback and guidance to all TSOs during various meetings.

The amended CCFR Proposal, dated 15 March 2020, was received by the last Regulatory Authority on 15 April 2020.

The amended CCFR Proposal covers the rules for the common settlement for all intended exchanges of energy within Synchronous Area Continental Europe, resulting from the frequency containment process and the ramping period. It includes the methodology for calculating volumes of intended exchanges and relevant prices, as well as the high-level process for the common settlement between TSOs.

III. Concerned RAs Assessment

The concerned RAs have assessed the amended CCFR Proposal against the requirements of EBGL and the provisions of the previous request for amendment. They believe that TSOs have fulfilled all the requests for changes and in particular the indication of a stronger commitment to evolve the methodology towards the usage of balancing energy prices. This will be done after the first reviewal mechanism. Moreover, the TSOs have fulfilled all the other changes to improve the clarity of the text. However, in Article 4(2)(b) of the amended CCFR Proposal, the concerned RAs identified one minor typo, related to a reference to “the CCU settlement function”, which is one function of the Continental European TSOs' proposal for unintended exchanges of energy, instead of the “CCFR settlement function”. It was agreed that this typo does not affect the consistency of the amended CCFR Proposal, nor the process of the proposed common settlement between all Continental European TSOs, as Continental European TSOs clarify in their explanatory note that the settlement function for both intended (CCFR) and unintended (CCU) exchanges of energy will be handled by the same entity. Nonetheless, the concerned RAs invite all Continental European TSOs to correct this error as soon as an amendment to the methodology will be submitted in the future.

IV. Conclusion

All concerned RAs have assessed, consulted and closely cooperated and coordinated to reach the agreement that the amended CCFR Proposal according to Article 50(3) of the EBGL can be approved.

All concerned RAs must make their decision on the basis of this agreement by 15 June 2020.

**All continental European TSOs' proposal for
Common settlement rules for intended exchanges
of energy as a result of the frequency
containment process and ramping period in
accordance with the Article 50(3) of Commission
Regulation (EU) 2017/2195 of 23 November 2017
establishing a guideline on electricity balancing**

15 March 2020

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ALL CONTINENTAL EUROPEAN TSOS', TAKING INTO ACCOUNT THE FOLLOWING:

Whereas

- (1) This document is a common proposal developed by all Transmission System Operators in the Synchronous Area Continental Europe (hereafter referred to as "**SA CE TSOs**") regarding the development of common settlement rules for intended exchanges of energy as a result of the frequency containment process and ramping period (hereafter referred to as "**frequency containment process energy and ramping period energy**") in accordance with Article 50(3) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (hereafter referred to as "**EB Regulation**"). This proposal is hereafter referred to as the "**CCFR**", which stands for 'common settlement rules for continental Europe for intended exchanges of energy as a result of the frequency containment process and ramping period'.
- (2) The CCFR takes into account the general principles and goals set in the EB Regulation as well as the Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity (hereafter referred to as the "**Electricity Regulation**") as well as Regulation (EC) No 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as the "**SO Regulation**"). The goal of the EB Regulation is the integration of balancing energy markets. The integration of balancing energy markets should be facilitated with the establishment of common European platforms for operating the imbalance netting process and enabling the exchange of balancing energy from frequency restoration reserves and replacement reserves. Cooperation between TSOs should be strictly limited to what is necessary for the efficient and secure design, implementation and operation of those European platforms.
- (3) Articles 50(3) and 50(8) of the EB Regulation define the deadline for the submission of the CCFR to relevant regulatory authorities and several specific requirements to its content:
 3. *By eighteen months after the entry into force of this Regulation, all TSOs intentionally exchanging energy within a synchronous area shall develop a proposal for common settlement rules applicable to intended exchanges of energy, as a result of one or both:*
 - (a) *the frequency containment process pursuant to Article 142 of Regulation (EU) 2017/1485;*
 - (b) *the ramping period pursuant to Article 136 of Regulation (EU) 2017/1485.*
 8. *All TSOs shall establish a coordinated mechanism for adjustments to settlements between all TSOs.*
- (4) The CCFR contributes to the objective of non-discrimination and transparency in balancing markets pursuant to Articles 3(1)(a), 3(2)(a) and 3(2)(b) of the EB Regulation, since the same settlement rules will apply to the whole Synchronous Area Continental Europe and they will be publicly available.
- (5) The CCFR contributes to the objective of enhancing the efficiency of European and national balancing markets, pursuant to Article 3(1)(b) of the EB Regulation, since the compensation programme is replaced by the common settlement rules applicable to the whole Synchronous Area Continental Europe.

- (6) The CCFR serves the requirement of Article 3(2)(h) of the EB Regulation since the technical framework proposed is based on agreed European standards already in operation.
- (7) The CCFR was developed taking into account consistency with settlement rules of unintended exchange within the Synchronous Area Continental Europe in accordance with Article 51(1) of the EB Regulation. Due to the strong interdependency of the common settlement rules of intended exchanges as a result of the frequency containment process and the ramping periods (in this CCFR) and the unintended exchanges (in the CCU or the methodologies according to Article 51(1) of the EB Regulation), specifically regarding the price calculation, where both the exchanges as a result of the frequency containment process and the unintended exchanges are used, cross-references between the methodologies are unavoidable.
- (8) The CCFR was developed taking into account consistency with settlement rules of intended exchanges of energy between synchronous areas in accordance with Article 50(4) of the EB Regulation and of unintended exchanges in accordance with Article 51(2) of the EB Regulation.
- (9) In conclusion, the CCFR contributes to the general objectives of the EB Regulation.

Abbreviations

The list of abbreviations used in this CCU is the following:

ACE: area control error

ACER: Agency for the Cooperation of Energy Regulators

ANES: aggregated netted external schedules

CCFR: common settlement rules for continental Europe for intended exchanges of energy as a result of the frequency containment process and ramping period

CCU: common settlement rules for continental Europe for all unintended exchanges of energy

EB Regulation: Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

Electricity Regulation: Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity

LFC area: load-frequency control area

LFC block: load-frequency control block

SA CE: Synchronous Area Continental Europe

SO Regulation: Regulation (EC) No 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation

SAFA: Synchronous Area Framework Agreement between all SA CE TSOs

TSO: Transmission System Operator

SUBMIT THE FOLLOWING CCFR TO ALL RELEVANT REGULATORY AUTHORITIES:

Article 1

Subject matter and scope

- (1) The common settlement rules for all intended exchange of energy as result of the frequency containment process and ramping period as determined in this CCFR are the common proposal of all SA CE TSOs in accordance with Article 50(3) of the EB Regulation.
- (2) The following settlement rules are out of scope of the CCFR:
 - (a) the common settlement rules for intended exchanges of energy in accordance with Article 50(1) of the EB Regulation;
 - (b) the common settlement rules for intended exchanges of energy in accordance with Article 50(4) of the EB Regulation;
 - (c) the common settlement rules for unintended exchanges of energy in accordance with Article 51(1) of EB Regulation;
 - (d) the common settlement rules for unintended exchanges of energy in accordance with Article 51(2) of the EB Regulation.
- (3) Governance, cost sharing and decision-making will be organised according to the requirements of the EB Regulation but are not within the scope of this CCFR.

Article 2

Definitions and interpretation

- (1) For the purposes of this CCFR, the terms used shall have the definitions given to them in Article 2 of the EB Regulation and Article 3 of the SO Regulation.
- (2) In addition, in this CCFR the following terms shall apply:
 - (a) 'CCU' refers to the 'All continental European TSOs' proposal for common settlement rules for all unintended exchanges of energy in accordance with the Article 51(1) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing';
 - (b) 'frequency containment process energy' means the energy that has been imported or exported by each LFC area per TSO-TSO settlement period according to the frequency containment process according to Article 142 of the SO Regulation. The frequency containment process energy equals the integral of the frequency control error according to Article 3 of the SO Regulation over a TSO-TSO settlement period and corresponds to the intended exchanges of energy according to Article 50(3)(a) of the EB Regulation;
 - (c) 'ramping period energy' stands for the intended exchanges of energy according to Article 50(3)(b) of the EB Regulation and Article 136 of the SO Regulation;
 - (d) 'TSO-TSO settlement period' means, in the context of this CCFR, the time unit for which unintended exchanges of energy and intended exchanges of energy as a result of the frequency containment process and ramping period is calculated;
 - (e) 'unintended exchanges of energy' equals the integral of the area control error (ACE) according to Article 3 of the SO Regulation over a TSO-TSO settlement period.
- (3) In this CCFR, unless the context requires otherwise:
 - (a) prices for intended exchanges of energy are indicated in EUR/MWh;

(4) In addition, unless the context requires otherwise:

- (a) the singular indicates the plural and vice versa;
- (b) the table of contents and headings are inserted for convenience only and do not affect the interpretation of this CCFR;
- (c) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

(5) Settlement according to Articles 3(8) and 3(9) of this CCFR shall follow the sign convention in Table 1:

Table 1 Payment direction for TSO settlement pursuant to CCFR

	TSO-TSO settlement price: positive	TSO-TSO settlement price: negative
TSO settlement volume: positive (TSO exports)	Payment to TSO	Payment from TSO
TSO settlement volume : negative (TSO imports)	Payment from TSO	Payment to TSO

Article 3

High-level design of the common settlement

- (1) The common settlement performed by SA CE TSOs in accordance with this CCFR shall consist of the CCFR accounting function, the CCFR settlement function and the invoicing task.
- (2) The entity or entities entrusted with the CCFR accounting function, the CCFR settlement function and the invoicing tasks are designated by all SA CE TSOs in the framework of the SAFA.
- (3) The entity or entities entrusted with the CCFR accounting function shall collect all the data required to calculate the values of frequency containment process energy and ramping period energy over each TSO-TSO settlement period.
- (4) The input to the CCFR accounting function shall be:
 - (a) the value of the notified k-factor per LFC area of SA CE;
 - (b) the average frequency deviation over each TSO-TSO settlement period of SA CE, which shall be determined by a designated TSO;
 - (c) all aggregated netted external schedules (ANES) within SA CE.
- (5) The outputs of the CCFR accounting function shall be:
 - (a) the intended exchanges of energy as a result of ramping period for each TSO-TSO settlement period within SA CE, determined per LFC area or LFC block with respect to the rest of the SA CE;
 - (b) the intended exchanges of energy as a result of frequency containment process for each TSO-TSO settlement period within SA CE, determined per LFC area or LFC block with respect to the rest of the SA CE.
- (6) The entity or entities entrusted with the CCFR settlement function shall collect all the data required to calculate a price of frequency containment process energy and ramping period energy over each TSO-

TSO settlement period and calculate , for each LFC block or LFC area, the financial result and financial flows.

- (7) The input to the CCFR settlement function shall be:
 - (a) the volumes of intended exchange as a result of the frequency containment process and ramping period in accordance with Article 7 of this CCFR;
 - (b) the day-ahead market price of each LFC Block in SA CE in accordance with Article 8(2)(a) of this CCFR;
 - (c) the average frequency deviation over each TSO-TSO settlement period of SA CE which shall be determined by a designated TSO;
 - (d) other inputs of the CCFR settlement function, i.e. the volumes of unintended exchange in accordance with Article 7 of the CCU.
- (8) The CCFR settlement function shall calculate or provide the following outputs:
 - (a) the price for the intended exchanges of energy as a result of the frequency containment process for each TSO-TSO settlement period;
 - (b) the financial flows between all LFC blocks or LFC areas in SA CE as a result of intended exchanges of frequency containment process energy for each TSO-TSO settlement period;
 - (c) the price for the intended exchanges of energy as a result of ramping periods for each TSO-TSO settlement period;
 - (d) the financial flows between all LFC blocks or LFC areas in SA CE as a result of intended exchanges of ramping period energy for each TSO-TSO settlement period.
- (9) All volumes of ramping period energy calculated for each LFC block or LFC area for each TSO-TSO settlement period , in accordance with Article 7 of this CCFR, shall be settled at the same price , calculated for that TSO-TSO settlement period in accordance with Article 8(1) of this CCFR.
- (10) All volumes of frequency containment process energy calculated for each LFC block or LFC area for each TSO-TSO settlement period in accordance with Article 7 of this CCFR shall be settled at the same price , calculated for that TSO-TSO settlement period in accordance with Article 8(2) of this CCFR.
- (11) The settlement shall be done on LFC area level unless:
 - (a) all TSOs of a single LFC block agree on settlement on LFC block level; or
 - (b) some TSOs of a single LFC block agree on a common settlement of their LFC areas.
- (12) The entity or entities entrusted with the invoicing task shall invoice the SA CE TSOs according to the results of the CCFR settlement function.
- (13) All SA CE TSOs shall accept the financial flows and are obliged to pay accordingly. Financial flows shall be reviewed by the entity or entities entrusted with the CCFR settlement function in case an error is found in the calculations or in the data input to the calculations. The review can be requested by any TSO until five months after the completion of the settlement results. The exact business day until which such remarks are allowed shall be notified together with the settlement results.

Article 4

Implementation of the common settlement

- (1) The SA CE TSOs shall implement the common settlement rules within 12 months after the approval of this CCFR, in accordance with Article 5(5) of the EB Regulation.

(2) The following steps and timeline shall be used as the roadmap for the implementation of the common settlement rules:

- (a) Adaption of all meters : All SA CE TSOs have changed their metering devices and are able to meter the exchanges of energy in the TSO-TSO settlement period.
- (b) Appointment of the entities: The CCFR accounting function , CCU settlement function and invoicing tasks have been appointed to an entity or entities according to Article 3 of the CCU.
- (c) Implementation of the CCFR accounting function: The entity or entities entrusted with the CCFR accounting function shall implement the CCFR accounting function. All SA CE TSOs shall implement their interfaces to the CCFR accounting function if needed.
- (d) Implementation of the CCFR settlement function: The entity or entities entrusted with the CCFR settlement function shall implement the CCFR settlement function. All SA CE TSOs shall implement their interfaces to the CCFR settlement function if needed.
- (e) Implementation of the CCFR invoicing tasks: The entity or entities entrusted with the CCFR invoicing tasks shall implement the CCFR invoicing tasks. All needed interfaces shall be setup.
- (f) Testing: All SA CE TSOs shall test the interfaces to the CCFR accounting function, the CCFR settlement function and, if applicable, to the CCFR invoicing task.
- (g) Go-live: After all tests in accordance with Article 4(2)(f) of this CCFR have been successful, the common settlement will go live.
- (h) Reviewal mechanism: After implementation of these common settlement rules, a reviewal mechanism shall start no later than the end of 2022, in which all SA CE TSOs shall review the CCFR. A review shall take place at least every three years after the first reviewal. The reviewal mechanism could affect, among others, the parameters of the pricing rules described in Article 8 of this CCFR, the time resolution of the TSO-TSO settlement period described in Article 6 of this CCFR or technical details such as data collection. Whenever changes to the CCFR are agreed by all SA CE TSOs, these shall develop a proposal for amendments to the CCFR and submit it to all relevant regulatory authorities for approval, no later than twelve months after the start of the corresponding period of the reviewal mechanism.
- (i) Usage of balancing prices : All SA CE TSOs shall use the first review of the reviewal mechanism described in paragraph (h) of this Article to develop a proposal for amendments to this CCFR where the methodology shall be reviewed to incorporate balancing energy prices , instead of day-ahead market prices . The usage of balancing energy prices shall be implemented within one year of the approval of the corresponding request for amendments to this CCFR.

Article 5

Functions of the common settlement

- (1) The common settlement in accordance with this CCFR shall consist of the CCFR accounting function and the CCFR settlement function.
- (2) The purpose of the CCFR accounting function shall be the calculation of the intended exchanges of energy as a result of ramping period and of the frequency containment process, for each TSO-TSO settlement period within SA CE, in accordance with Article 3 of this CCFR.
- (3) The purpose of the CCFR settlement function shall be the calculation of the price for the intended exchanges of energy as a result of the frequency containment process for each TSO-TSO settlement

period and of the financial flows between all LFC blocks or LFC areas in SA CE as a result of intended exchanges of frequency containment process energy for each TSO-TSO settlement period, in accordance with Article 3 of this CCFR.

Article 6

Settlement period

- (1) The TSO-TSO settlement period shall be set at 15 minutes.
- (2) The TSO-TSO settlement period of each day shall begin at 00:00 market time. The TSO-TSO settlement periods shall be consecutive and not overlapping.

Article 7

Volume determination per TSO-TSO settlement period

- (1) The volume of intended exchanges of energy as the result of frequency containment process pursuant Article 50(3)(a) of the EB Regulation is calculated by the CCFR accounting function, for each LFC block or LFC area for each TSO-TSO settlement period, as the product of the notified k-factor and the average frequency deviation for that TSO-TSO-settlement period, in accordance with Article 3 of this CCFR.
- (2) The volume of intended exchanges of energy as the result of ramping period pursuant Article 50(3)(b) of the EB Regulation and Article 136 of the SO Regulation is calculated by the CCFR accounting function for each LFC block or LFC area and per TSO-TSO settlement period, in accordance with Article 136 of the SO Regulation.

Article 8

Pricing rules for TSO-TSO exchanges within SA CE

- (1) The price for intended exchanges of energy as the result of ramping period pursuant to Article 50(3)(b) of the EB Regulation is zero (0) EUR/MWh.
- (2) The price for intended exchanges of energy in accordance with Article 50(3)(a) of the EB Regulation shall be calculated by the entity entrusted with the CCFR settlement function as the sum of the following components in EUR/MWh, per TSO-TSO settlement period:
 - (a) A reference price component calculated for any given TSO-TSO settlement period as the weighted average day-ahead market price of all LFC blocks within SA CE for that TSO-TSO settlement period, weighted by the absolute value of the sum of intended exchanges of energy pursuant to Article 50(3)(a) of the EB Regulation and unintended exchanges of energy pursuant to Article 51(1) of the EB Regulation as calculated by the CCU accounting function, of each LFC block. The following rules shall apply:
 1. In case there is more than one day-ahead market price per LFC block, when the LFC block consists of more than one LFC area, for that TSO-TSO settlement period, a weighted average price is calculated by the entity entrusted with the settlement function and used in 8(2)(a) for the respective LFC block. The weighted average price of an LFC block is calculated by weighting the day-ahead market prices of the LFC areas in that LFC block with the respective notified k-factor of each LFC area. If there is no day-ahead market price in an LFC area within the LFC block, this LFC area is not considered for the calculation of the weighted average price of the LFC block.
 11. In case there are more than one day-ahead market price in an LFC area for that TSO-TSO settlement period, the TSO operating in the LFC area may decide which price or

- prices to utilise for defining the day-ahead market price of the bidding zone, based on the border where the unintended exchange occurs.
111. In case there is no day-ahead market price in an LFC block for that given TSO-TSO settlement period, the imbalance settlement price for that LFC block for that given TSO-TSO settlement period is used in Article 8(2)(a) instead of a day-ahead market price. In the case of dual pricing, an average price is calculated.
 - 1v. In case of full decoupling of the single day-ahead coupling, the day-ahead market price referred to in this paragraph (a) shall be replaced by the weighted average of the prices of the NEMOs' hubs in the relevant bidding zone.
- (b) A frequency-dependent component, applicable only if the absolute value of the average frequency deviation over the TSO-TSO settlement period exceeds the absolute value of the minimum threshold value (20 mHz). The frequency-dependent component is calculated as function of the average frequency deviation for each TSO-TSO settlement period, using a slope of between the minimum threshold and the maximum threshold (two (2) EUR/MWh/mHz). The following rules shall apply:
1. The absolute value of the minimum threshold value is 20 mHz.
 11. The absolute value of the maximum threshold value is 100 mHz.
 111. The slope is two (2) EUR/MWh/mHz.
 - 1v. In case of a positive average frequency deviation exceeding the minimum threshold value in positive direction (+20 mHz), but not exceeding the maximum threshold value in positive direction (+100 mHz), this function is applied to the average frequency deviation decreased with the absolute value of the minimum threshold value (20 mHz).
 - v. In case of a negative average frequency deviation exceeding the minimum threshold value in negative direction (-20 mHz), but not exceeding the maximum threshold value in negative direction (-100 mHz), this function is applied to the frequency deviation increased with the absolute value of the minimum threshold value (20 mHz).
 - v1. In case of a positive average frequency deviation exceeding the maximum threshold in positive direction (+100 mHz), the frequency-dependent component is set as the frequency-dependent component calculated at a frequency deviation of the maximum threshold value in positive direction (+100 mHz).
 - v11. In case of a negative frequency deviation exceeding the maximum threshold in negative direction (-100 mHz), the frequency-dependent component is set as the frequency-dependent component calculated at a frequency deviation of the maximum threshold value in negative direction (-100 mHz).
 - v111. In case of an HVDC system connecting two SA CE TSOs, the frequency-dependant component may be not applicable.
- (3) In the case of a network split with more than one LFC block disconnected, the frequency-dependant component is set for each TSO-TSO-settlement period during that network split at zero (0) EUR/MWh/mHz per TSO-TSO settlement period.

Article 9

Publication and implementation of the CCFR

- (1) All SA CE TSOs shall publish the CCFR without undue delay after all relevant regulatory authorities have approved the proposed CCFR or a decision has been taken by ACER in accordance with Articles 5(7), 6(1) and 6(2) of the EB Regulation.

(2) All SA CE TSOs shall implement the CCFR in accordance to Article 4 of this CCFR.

Article 10

Language

The reference language for this proposal shall be English. For the avoidance of doubt, where TSOs need to translate this proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 7 of the EB Regulation and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant regulatory authorities with an updated translation of the proposal.