Annex 3: Policy on Accounting and Settlement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Version History Table**

|  |  |
| --- | --- |
| **Date** | **Description** |
| 14/04/2019 | SAFA entry into force |
| 23/05/2019 | SAFA Amendment 1 is applied to Articles A-1 and A-2, after SAFA Parties’ and MC approval. Pending NRA approval. |
| 07/04/2020 | SAFA Amendment 4 is applied to Articles A-1 and A-2, after SAFA Parties’ and MC approval. Pending NRA approval. |
| 16/02/2021 | Editorial modifications are applied to Introduction and Part A, after RG CE acknowledgment |
| 16/04/2021 | SAFA Amendment 11 is applied to Part C, after SAFA Parties’ approval |
| 26/07/2021 | Erratum : Incorrect references in Part C |
| 30/11/2021 | SAFA Amendment 17 is applied to Part C, after SAFA Parties’ approval |
| 15/02/2022 | Version history table added |
| 11/03/2022 | SAFA Amendment 21 is applied to Articles C-6-2-1 and C-12-4, after SAFA Parties’ approval |
| 13/02/2024 | SAFA Amendment 34 is applied to new Articles C-14-1 and C-14-2, after SAFA Parties’ approval |
| 23/04/2024 | SAFA Amendment 35 is applied to Part C, after SAFA Parties’ approval |

Table of Contents

[Introduction 6](#_Toc95482569)

[A Methodologies, conditions and values subject to all regulatory authorities approval 7](#_Toc95482570)

[A-1 Common settlement rules applicable to intended exchanges of energy according to Article 50(3) EBGL (mandatory & NRA approval) 7](#_Toc95482571)

[A-2 Common settlement rules applicable to all unintended exchanges of energy according to Article 51(1) EBGL (mandatory & NRA approval) 7](#_Toc95482572)

[B Methodologies, conditions and values subject to approval by all TSOs 8](#_Toc95482573)

[C Methodologies, conditions and values agreed among the members of RGCE 9](#_Toc95482574)

[C-1 Definitions 9](#_Toc95482575)

[C-1-1 Accounting process 9](#_Toc95482576)

[C-1-2 Settlement process 9](#_Toc95482577)

[C-1-3 Cross-border Energy Exchanges 9](#_Toc95482578)

[C-1-4 Meter Measurement Data 9](#_Toc95482579)

[C-1-5 Accounting Point 10](#_Toc95482580)

[C-1-6 Accounting Data 11](#_Toc95482581)

[C-1-7 Working day 11](#_Toc95482582)

[C-1-8 Financial settlement 11](#_Toc95482583)

[C-1-9 TSO-TSO Settlement Period 11](#_Toc95482584)

[C-1-10 Settlement Price 12](#_Toc95482585)

[C-1-11 Settlement Results 12](#_Toc95482586)

[C-1-12 Settlement Reports 12](#_Toc95482587)

[C-1-13 Coordination Centre 12](#_Toc95482588)

[C-1-14 Invoicing Entity 13](#_Toc95482589)

[C-2 Standards – general process overview 13](#_Toc95482590)

[C-2-1 Overview 13](#_Toc95482591)

[C-2-2 Workflow for the accounting and settlement process 14](#_Toc95482592)

[C-2-3 Consideration of time shift CET - CEST 15](#_Toc95482593)

[C-2-4 Area Consideration 15](#_Toc95482594)

[C-3 Standards - General rules 16](#_Toc95482595)

[C-3-1 Accounting and Settlement Period 16](#_Toc95482596)

[C-3-2 Availability 16](#_Toc95482597)

[C-3-3 Local exceptions 16](#_Toc95482598)

[C-3-4 Consideration of DC-links 16](#_Toc95482599)

[C-3-5 Modification of the accounting process and related data 16](#_Toc95482600)

[C-3-6 Rounding rules 16](#_Toc95482601)

[C-3-7 Electronic Data Exchange 17](#_Toc95482602)

[C-3-8 Troubleshooting 17](#_Toc95482603)

[C-4 Standards - Bilateral agreement for the accounting/settlement process 18](#_Toc95482604)

[C-4-1 List of tie-lines, meter measurement and accounting data 18](#_Toc95482605)

[C-4-2 Data format 18](#_Toc95482606)

[C-4-3 Trouble shooting 18](#_Toc95482607)

[C-4-4 Resolution 19](#_Toc95482608)

[C-4-5 Consideration of line losses 18](#_Toc95482609)

[C-5 Standards - Accounting process 20](#_Toc95482610)

[C-5-1 Overview 20](#_Toc95482611)

[C-5-2 Accounting data exchange between TSOs in the SA CE 20](#_Toc95482612)

[C-5-3 Workflow of accounting process 22](#_Toc95482613)

[C-6 Standards - Settlement process 24](#_Toc95482614)

[C-6-1 Overview 24](#_Toc95482615)

[C-6-2 Workflow of settlement process 24](#_Toc95482616)

[C-6-3 Extraordinary measures 26](#_Toc95482617)

[C-7 Guidelines 27](#_Toc95482618)

[C-7-1 Troubleshooting for the accounting process. 27](#_Toc95482619)

[C-7-2 Timeframe for changing the accounting data 28](#_Toc95482620)

[C-7-3 Timeframe for changing the verified ANES 28](#_Toc95482621)

[C-7-4 Timeframe for changing other inputs 28](#_Toc95482622)

[C-8 Entities 29](#_Toc95482623)

[C-9 Remuneration 29](#_Toc95482624)

[C-10 Transitory provision 34](#_Toc95482625)

[C-11 Termination by Coordination Centres 34](#_Toc95482626)

[C-12 Supplements 35](#_Toc95482627)

[C-12-1 Equation terms 35](#_Toc95482628)

[C-12-2 Timetables for daily accounting and settlement process 35](#_Toc95482629)

[C-12-3 Registration form for Accounting Process including Tie-Lines 37](#_Toc95482630)

[C-12-4 List of LFC Blocks performing Accounting and Settlement Process on LFC Block level……………… 37](#_Toc95482631)

[C-13 The specific regulations with regard to a withholding tax due in Poland 38](#_Toc95482632)

[C-14 Settlement of energy provision for the Extraordinary procedure According to Annex01 Policy on LFC&R, B-9-1-3, B-9-1-4 and B-9-1-5 38](#_Toc95482627)

[C-14-1 Cost Compensation 38](#_Toc95482628)

[C-14-2 Final Reporting of Stage 2 39](#_Toc95482628)

# Introduction

This document is part of the Synchronous Area Framework Agreement for the Synchronous Area CE (SA CE).

All times mentioned in this document are related to CET respectively CEST. Additional details of the Accounting and Settlement Process are described in the following documents:

ENTSO-E ACCOUNTING AND FINANCIAL SETTLEMENT OF KF, ACE AND RAMPING PERIOD (FSKAR) IMPLEMENTATION GUIDE

currently published on https://www.entsoe.eu/publications/electronic-data-interchange-edi-library/.

# Methodologies, conditions and values subject to all regulatory authorities approval

The following section includes all methodologies, conditions and values jointly developed by all TSOs from the Synchronous Area CE and which are subject to approval by all regulatory authorities.

## Common settlement rules applicable to intended exchanges of energy according to Article 50(3) EBGL (mandatory & NRA approval)

The SAFA Parties acknowledge that the proposal “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” that has been approved according to Article 4 EBGL on 09 March 2020 and approved by the competent regulatory authorities in accordance with Article 5(3) EBGL as of 16 June 2020 is accepted by all Parties. The Parties agree to apply this methodology as it is agreed by the TSOs and approved by the NRAs.

Amendment Proposals that will be developed on the basis of a Request for Amendments by the relevant regulatory authorities according to Article 6 of the EB GL will be processed by applying the regular amendment rules according to Article 14 of the SAFA.

## Common settlement rules applicable to all unintended exchanges of energy according to Article 51(1) EBGL (mandatory & NRA approval)

The SAFA-Parties acknowledge that the document “All continental European TSOs’ proposal for common settlement rules for all unintended exchanges of energy in accordance with Article 51(1) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing” that has been approved according to Article 4 EBGL on 09 March 2020 and approved by the competent regulatory authorities in accordance with Article 5(3) EBGL as of 16 June 2020 is accepted by all Parties. The Parties agree to apply this methodology as it is agreed by the TSOs and approved by the NRAs.

Amendment Proposals that will be developed on the basis of a Request for Amendments by the relevant regulatory authorities according to Article 6 of the EB GL will be processed by applying the regular amendment rules according to Article 14 of the SAFA.

# Methodologies, conditions and values subject to approval by all TSOs

The Parties acknowledge that at the moment of entry into force of the Agreement there is no obligation arising from the applicable legislation according to Article 2.1 of the SAFA to include Part B within the subject scope of the Policy on Accounting and Settlement.

1. **Methodologies, conditions and values agreed among the members of RGCE**

The following section includes all methodologies, conditions and values which are jointly developed and agreed among the SAFA parties.

* 1. **Definitions**
1. * 1. **Accounting process**

The Accounting Process is the validation of the metered data (usually located at an interconnecting Tie-Line of a TSO) and validation of the resulting Accounting Data. The purpose of the daily accounting is to provide a validated set of Accounting Data to the Coordination Centres (CCs) in order to enable the calculation of the volumes of intended exchanges of energy as a result of the frequency containment process (FCP Energy), the Ramping Period energy (RP Energy) and Unintended Exchanges (UE Energy), for each TSO-TSO Settlement Period.

* + 1. **Settlement process**

The purpose of the Settlement Process is the determination of Settlement Prices for the intended exchanges of energy as a result of the Frequency Containment Process (FCP Energy), the Ramping Period Energy (RP Energy) and Unintended Exchange Energy (UE Energy), for each TSO-TSO Settlement Period and the final monetary values for each LFC area/block and Settlement Period. The Settlement Process concludes with the distribution of results through the Settlement Reports.

* + 1. **Cross-border Energy Exchanges**

The Cross-Border Energy Exchange consists of the following:

**Cross-Border Flows**

The sum of the cross-border Tie-Line flows on a border between two TSOs / LFC Areas / LFC Blocks, as taken from the Accounting Data.

**Aggregated Netted External Schedules (ANES) Energy**

This means the Cross-Border Energy Exchange through Aggregated Netted External Schedules (ANES) according to the SOGL. This includes the Cross-Border Energy exchanged as Replacement Reserves and Emergency Assistance as well.

**Virtual Tie-Line Exchanges**

The term Virtual Tie-Line is defined in the SOGL. The energy exchanged through Virtual Tie-Lines can be manual Frequency Restoration Reserves (mFRR), automatic Frequency Restoration Reserves (aFRR) and Imbalance Netting. Moreover, there might be other processes that use Virtual Tie-Lines for the exchange of energy. Virtual Tie-Line exchanges are established within the Accounting Data.

**Frequency Containment Process Energy or FCP Energy**

refers tothe intended exchanges of energy as a result of the frequency containment process. It is equal to the product of the notified K-factor with the average frequency deviation for each TSO-TSO Settlement Period and each LFC area.

**K-factor**

K-factor represents the assumed reaction of an LFC area/block to a frequency deviation. Defined in the SOGL as a value expressed in Megawatts per Hertz (‘MW/Hz’), which is as close as practical to, or greater than the sum of the auto-control of generation, self-regulation of load and of the contribution of frequency containment reserve relative to the maximum steady-state frequency deviation. The K-factors are provided by each TSO for its own LFC area/block.

**Δ*f*** (frequency deviation)

Δ*f* represents the average value of the frequency deviation per second, relative to the nominal system frequency in the Synchronous Area per TSO-TSO Settlement Period. The value of Δ*f* is expressed in mHz.

Where is the average measured value of the frequency per TSO-TSO Settlement Period in the Laufenburg node of the Synchronous Area.

**Ramping Period Energy or RP Energy**

Energy exchanged as a result of ramping between different ANES values (ANES n-1 and ANES n, where n and n-1 refer to neighbouring TSO-TSO Settlement Periods). The RP Energy is the difference between a step change and a ramped change, where the ramp is linear starting 5 minutes before the change and ending 5 minutes after the change.

**Unintended Exchange Energy or UE Energy**

This means the unintended cross-border exchange of energy according to EBGL. is equal to the remaining energy exchanges, which are not included in the verified ANES, the Virtual Tie-Line (VTL) exchanges, the delivery of FCR (FCP Energy) or the realization of ramps in the control programs (RP Energy).

* + 1. **Meter Measurement Data**

The physical energy exchange is registered per Tie-Line, by metering devices installed at substations, which are located at each end of the Tie-Line. There must be at least one main meter and up to “n” back up metering devices per Tie-Line on each end of the Tie-Line.

* + 1. **Accounting Point**

The Accounting Point is the agreed energy delivery point between two TSOs. The Accounting Point can be placed anywhere on the Tie-Line in accordance with the agreement between two TSOs. Based on the position of the Accounting Point, Accounting Data for this Accounting Point is calculated. There must be only one single Accounting Point per Tie-Line.

In case of a Virtual Tie-Line, the location of the Accounting Point is agreed upon bilaterally between Neighbouring TSOs. The power flows of the TSOs can also be based on values which are agreed upon between the involved TSOs and are considered in the Accounting Process.

* + 1. **Accounting Data**

Accounting Data for each Tie-Line is the result of an agreement between two TSOs. One TSO proposes the values using the rules described in C-5-2, and the second TSO confirms the proposed values.

Accounting data is derived from validated metering data in one of the following ways (as agreed upon between TSOs sharing a Tie-Line):

* one to one copy of the metering data (located at the Accounting Point),
* a calculation using a given formula, and either one or more metering data series (e.g. in order to consider line losses).

Accounting data is considered as one value per Tie-Line.

Virtual Tie-Lines are included in the Accounting Data and must be considered as shown in Figure 1. The physical energy exchange between LFC Area 1 and LFC Area 2 is measured by M1+M2 and includes the physical flow measured by M3. The measurement M3 is used as an offset to the set-point of the LFC Controller. Additionally, it must be subtracted from the Accounting Data for accounting.



**Figure 1: The consideration of a Virtual Tie-Line**

* + 1. **Working Day**

A Working Day is a calendar day, excluding Saturdays, Sundays and 4 holidays: Christmas day (25th of December), New Year’s day (1st of January), Easter Monday and Ascension Day. Local holidays including bridge days are considered non-Working Days for the respective TSOs.

* + 1. **Financial Settlement**

The Financial Settlement is the process established among RG CE TSOs in order to financially compensate the intended exchanges of energy resulting from the frequency containment process and ramping periods, as well as unintended exchanges of energy. The process is the scope of this Policy on Accounting and Settlement.

* + 1. **TSO-TSO Settlement Period**

The TSO-TSO Settlement Period is the time period for which the Settlement Process is performed. The TSO-TSO Settlement Period corresponds to 15 min. Within this document, the TSO-TSO Settlement Period may also be referred to as “Period”.

* + 1. **Settlement Price**

The Settlement Price is the price for RP Energy, FCP Energy and UE Energy used for the Financial Settlement of volumes of RP Energy, FCP Energy and UE for each TSO-TSO Settlement Period. This is a uniform price for FCP Energy and UE for the Synchronous Area with the only exception of the FCP Energy and UE between two LFC Areas connected only by HVDC cable for which the price may be different.

The Settlement Price of RP Energyis 0 €/MWh.

* + 1. **Settlement Results**

The Settlement Results consist of volumes, prices, and monetary values (equivalent to the multiplication of volumes and corresponding prices) for each of and .

* + 1. **Settlement Reports**

The results of the accounting and settlement processes are summarized in three different reports, which are sent by the Coordination Centres (CCs) to the TSOs. These reports are the Daily Settlement Report (DSR), the Daily Settlement Prices Report (DSPR) and the Monthly Settlement Report (MSR). The following table gives an overview of the contents of the individual reports.

**Table 1: Content of the Settlement Reports**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Unit | DSR | DSPR | MSR |
| Timeframe: |  | 1 day | 1 day | 1 month |
| Scheduled energy exchanges (ANES)  | MWh | x |   |   |
| Intended Exchanges (Virtual Tie-Lines) | MWh | x |   |   |
| Accounting Tie-Line flows | MWh | x |   |   |
| K-factors | MW/Hz | x |   |   |
| Frequency Deviation | mHz | x |   |   |
| Volumes of FCP Energy | MWh | x | x | x |
| Volumes of RP Energy | MWh | x | x | x |
| Volumes of UE Energy | MWh | x | x | x |
| Day-Ahead Market Price (DAMP) | €/MWh |  | x |  |
| Price for FCP Energy | €/MWh |   | x | x |
| Price for RP Energy | €/MWh |   | x | x |
| Price for UEEnergy | €/MWh |   | x | x |
| Monetary values for FCP Energy | € |  | x | x |
| Monetary values for RP EnergyE | € |  | x | x |
| Monetary values for UEEnergy | € |  | x | x |

* + 1. **Coordination Centre**

The Coordination Centres are responsible for and shall perform the following tasks within the Financial Settlement:

* Receiving Accounting Data from TSOs through SOVA files to perform the Accounting Process
* Performing the Accounting Process and Settlement Process as described in this Policy
* Calculating the Settlement Results as reflected in the DSR, DSPR and MSR, and submitting them to the TSOs
* Submitting the monthly Settlement Results to the Invoicing Entity
* Submitting the actual cost sharing key to the Invoicing Entity
	+ 1. **Invoicing Entity**

The Invoicing Entity is an external party to invoice TSOs according to the results of the Financial Settlement.

* + 1. **Neighbouring TSO**

A Neighbouring TSO is a TSO that is directly connected to another TSO via at least one AC or DC interconnector. For the purposes of this document, TSOs connected via Virtual Tie-Line are also considered Neighbouring TSOs.

* 1. **Standards – general process overview**
		1. **Overview**

In the SA CE the energy volumes corresponding to Frequency Containment Process (FCP) Energy, Ramping Period (RP) Energy, and Unintended Exchange (UE) are compensated financially between TSOs.

* + 1. **Workflow for the accounting and settlement process**

**Accounting Process**

The Accounting Process begins with the validation of the metered data by TSOs and of the resulting Accounting Data. The purpose of the daily accounting is to provide a validated set of Accounting Data to the Coordination Centres in order to perform the settlement process every day.

Accounting process by the TSOs: TSOs have to finish the daily Accounting Process in line with deadlines specified in C-11-2, except in cases of unavailability of accounting offices (see C-3-3) or data mismatch (see C-3-8 and C-5-2-4). It starts with the initial exchange of metered data for each Tie-Line between Neighbouring TSOs, continues with the establishment of the Accounting Data for each Tie-Line, and the transmission of the resulting Accounting Data to the Coordination Centres.

Accounting process by the Coordination Centres: Upon reception of the Accounting Data (including VTL), the frequency deviations from Swissgrid and the K-factors from the TSOs, the Coordination Centres perform the determination of energy volumes corresponding to Frequency Containment Process (FCP) Energy, Ramping Period (RP) Energy, and Unintended Exchange (UE) by comparison with the sum of the LFC areas schedules (ANES) and application of the corresponding formulas. Afterwards, a Daily Settlement Report (DSR) is sent to each TSO. The TSOs have the opportunity, to review the reported Settlement Results in line with the deadlines specified in section C-11-2. The expiration of the monthly deadline (see C-11-2) concludes the Accounting Process and the volumes are considered final.

**Settlement Process**

The Daily Settlement Process starts after the Daily Accounting Process for all TSOs has been concluded and the Coordination Centres (CCs) have received all Day-Ahead Market Prices (DAMPs). The Coordination Centres perform the calculation of the Settlement Price for FCP Energy, RP Energy and UE. Following this, the Daily Settlement Prices Report (DSPR) is consolidated and distributed among the TSOs. The TSOs have the opportunity to review the reported Settlement Results within the deadline specified in C-11-2.

The Monthly Settlement Process is performed after the Daily Settlement Process is concluded for each day of the calendar month. It covers the correction of daily settlements (if any) and consolidation of the results of all the DSPR. Coordination Centres send the consolidated results to each TSO through the Monthly Settlement Report (MSR). The TSOs shall confirm the MSR according to the ACCOUNTING AND FINANCIAL SETTLEMENT OF KF, ACE AND RAMPING PERIOD (FSKAR) IMPLEMENTATION GUIDE. After receiving all confirmations from the TSOs in line with deadlines specified in chapter C-11-2, the Settlement Process is concluded and the monthly results are considered final.



**Figure 2. Workflow of the accounting and settlement process**

* + 1. **Consideration of time shift CET - CEST**

For the day with a duration of 23 hours, the Periods from 02:00 to 03:00 shall not be considered.

For the day with a duration of 25 hours (Periods from 02:00 to 03:00) each Period shall be considered individually and as any other Period. For example, both Periods 02:00A-02:15A and 02:00B-02:15B shall be considered individually.

* + 1. **Area Consideration**

Per default, the Accounting and Settlement Process shall be performed on LFC Area level. This requires that each LFC Area Operator shall send the relevant data for performing the process to the responsible Coordination Centre.

Alternatively, LFC Blocks may agree on performing the Accounting and Settlement Process on LFC Block level, for which the LFC Block Operator shall send the relevant data, aggregated for the LFC Block, to the Coordination Centres, provided all LFC areas of the LFC Block jointly agree on this. The list of LFC Blocks performing the Accounting and Settlement Process on LFC Block level is included in C-11-4.

The Day-Ahead Market Prices (DAMPs) are determined per LFC Block as detailed in Chapter C-6-2-1

* 1. **Standards - General rules**
		1. **Accounting and Settlement Period**

The daily accounting and settlement is done for the calendar day “D” in line with deadlines specified in C-11-2.

The monthly settlement is done for the calendar month.

* + 1. **Availability**

Accounting offices have to be available on Working Days from 08:00 to 11:30 and 13:30 to 16:00 CET, or CEST, respectively.

* + 1. **Local exceptions**

In case of unavailability of an accounting office, e.g. system maintenance, local holidays including local bridge days, the office in question must inform the Coordination Centre and other affected TSOs at least 4 days in advance. In case of unexpected unavailability, as soon as possible. The TSO’s individual unavailability may have impact on the daily deadlines. However, monthly deadlines shall not be affected and are to be followed in accordance with the deadlines specified in C-11-2.

* + 1. **Consideration of DC-links**

DC links between CE LFC areas will be considered in the SA CE Accounting and Settlement process, only if they are considered by both connecting TSOs in the exchange programs and in the Load Frequency Controller (LFC).

DC links between synchronous areas cannot be considered in the SA CE accounting and settlement process.

* + 1. **Modification of the Accounting Process and related data**

The SAFA parties must provide complete and correct information about all issues affecting the Accounting Process e.g. new Tie-Lines or changes to tie-lines (including DC-links and Virtual Tie-Lines), etc.

In case of changes, the requesting TSO must inform the affected TSO and Coordination Centre at least 30 calendar days in advance by means of the registration form in C-11-3.

* + 1. **Rounding rules**

Generally, the data exchanged is provided in MWh with 3 decimal places (kWh precision).

The following rounding rules will be applied in the calculations by the Coordination Centres:

* For input data:
	+ Energy volumes (MWh) with 3 decimal places
	+ K-factors (MW/Hz) with 3 decimal places.
	+ DAMP (€/MWh) with 2 decimal places (cent precision)
	+ Frequency deviation (mHz) with 3 decimal places
* Calculation steps:
	+ Calculation of RP Energy: MWh with 3 decimal places (kWh precision), rounded commercially. Rounding differences are taken into account by the Coordination Centres respectively, to ensure the sum of RP Energy is zero.
	+ Calculation of FCP Energy: MWh with 3 decimal places (kWh precision), rounded commercially.
	+ Calculation of UE Energy: MWh with 3 decimal places (kWh precision), rounded commercially. Rounding differences are taken into account by the Coordination Centres respectively, to ensure the sum of UE and FCP Energy is zero.
	+ Calculation of price for FCP Energy and UE Energy: Euro with 2 decimal places, rounded commercially.
	+ Monetary values (settlement volumes multiplied by prices): Euro with 2 decimal places, rounded commercially. Rounding differences are taken into account by the Coordination Centres respectively, to ensure the sum is zero.
* For the sake of clarity:
	+ 24,0005 rounds to 24,001;
	+ -24,0005 rounds to -24,001
	+ and 24,00049 rounds to 24,000
		1. **Electronic Data Exchange**

For the electronic data exchange for accounting and settlement it is required to use e-mail via Electronic Highway (EH). If this communication channel is disturbed, an electronic back-up must be agreed upon, such as e-mail via internet. If electronic communication is generally disturbed, fax or phone must be used as a last resort.

* + 1. **Troubleshooting**

If the Accounting and Settlement Process cannot be performed as described, the TSO that has issues must inform, without undue delay, the Neighbouring TSOs and the respective Coordination Centre. The Coordination Centres then inform all affected TSOs within the SA CE without undue delay. Both Coordination Centres will agree on a solution and inform the affected TSOs without undue delay.

* 1. **Standards – Bilateral agreement for the accounting/settlement process**

To perform the Accounting and Settlement Process in a correct manner, the partners of a common border have to agree bilaterally on accounting metering data with respect to the following document: “ENTSO-E Guide for Agreement on Data Exchange Process for Accounting of Unintentional Deviation”, including the following items:

* + 1. **List of Tie-Lines, meter measurement and Accounting Data**

TSOs have to agree bilaterally upon the list of Tie-Lines and Virtual Tie-Lines to be included in the SA CE Accounting Process according to the “ENTSO-E Guide for Agreement on Data Exchange Process for Accounting of Unintentional Deviation”. This list must provide information about meter measurement and Accounting Data. It must provide:

* Names of both involved TSOs
* Name of Tie-Lines
* Name of the substations a Tie-Line is connecting as well as the related TSO
* List of measurement data to be used to derive the accounting value
* List of measurement data to be exchanged
* EIC for each metering data to be exchanged
* EIC of Accounting Point
* If line losses are to be considered, agreement on formula to calculate Accounting Data
	+ 1. **Data format**

The SAFA parties must use the data exchange format for metering, accounting and settlement:

* SOMA: System Operator Meter Alignment
* SOAM: System Operator Accounting Data Matching
* SOVA: System Operator Validated Accounting data
* DSR: Daily Settlement Report
* DSPR: Daily Settlement Prices Report
* MSR: Monthly Settlement Report
* K-factors
* DAMP
* Frequency Deviation

according to the bilateral agreement and the ACCOUNTING AND FINANCIAL SETTLEMENT OF KF, ACE AND RAMPING PERIOD (FSKAR) IMPLEMENTATION GUIDE.

* + 1. **Troubleshooting**

To be prepared in case of problems, TSOs have to agree bilaterally on rules for troubleshooting (in case of missing metering data, inconsistent data, unavailable data, etc.). In this case, TSOs have to agree bilaterally on a substitute value for every time unit in question and inform their responsible Coordination Centres or/and LFC Block immediately (see C-7-1). Substitute values are to be submitted within the deadlines defined for submission of Accounting Data (see C-11-2).

* + 1. **Resolution**

TSOs must agree on the resolution for the validation of the energy exchange on their common border. The resolution for the exchange of meter measurement and Accounting Data is by default MWh with 3 decimal digits.

* + 1. **Consideration of line losses**

TSOs have to agree on a way to consider line losses. This can be done by agreement defining the Accounting Point e.g. on the basis of the Accounting Data.

* 1. **Standards - Accounting process**
		1. **Overview**

In the framework of the Accounting Process, Coordination Centres (CCs) calculate:

* The volumes of FCP Energy and RP Energy for each TSO-TSO Settlement Period. The inputs needed for these calculations shall be:
	+ The K-factor per LFC Area or LFC Block;
	+ The average of the frequency deviation over each TSO-TSO Settlement Period;
	+ The aggregated external schedules (ANES)
* The volumes of UE Energy for each TSO-TSO Settlement Period. The inputs needed for these calculations shall be:
	+ The Accounting Data per TSO-TSO Settlement Period and per LFC Area or LFC Block of SA CE, including exchanges of energy accounted for through a Virtual Tie-Line;
	+ All aggregated netted external schedules (ANES);
	+ The volumes of FCP Energy and RP Energy
		1. **Accounting data exchange between TSOs in the SA CE**



**Figure 3: Overview of the Data Exchange Process between TSOs**

**Principles of metering data exchange**

Each TSO assembles and sends his metering data document “System Operator Meter Alignment” (SOMA) to its Neighbouring TSO (see C-4-1, C-1-7 and Figure 3). Every TSO validates the contents of the SOMA document. The TSOs inform each other about the result of validation.

**Principles of Accounting Data exchange between TSOs**

The calculated Accounting Data is assembled into a document “System Operator Accounting Data Matching” (SOAM) and must be exchanged between the involved TSOs. One TSO sends the values that have been calculated and that will serve as the Accounting Point data. If the receiving TSO agrees to the values, then a positive acknowledgement is sent. If, however, the receiving TSO does not agree, then a negative acknowledgement is sent. After successful matching, both TSOs send the SOVA (based on the SOAM) to the respective Coordination Centres. If Accounting Data is based on substitute metering data, the two involved TSOs have time to adjust the data during the Accounting Process. If data is not adjusted by either of the TSOs and the data received in the SOVA matches, this data is considered final on the dedicated SA CE border. If data does not match, the accounting mismatch rules (see C-7-1) will be applied by the dedicated SA CE level.

#### Metering requirements

The following metering requirements must be fulfilled by the metering devices on both ends of the Tie-Line by both connecting TSOs.

**Voltage and current transformer**

Voltage and current transformers have to be operated at each metering point. Data from the metering point is used as a source for the determination of an Accounting Point. Voltage and current transformers at the Accounting Points must have an accuracy class rating of 0.2. Current transformers must have 2 cores for measurement purposes.

**Electricity metering**

On the basis of the current and voltage values measured by the transformers, the electricity meters determine the active energy flow in both directions related to a given time frame. The electricity meters at the Accounting Points must have an accuracy class rating of 0.2.

**Redundancy**

Metering points must be equipped with main and secondary meters at each Tie-Line. Main and secondary meter must each be connected to a separate core of the current transformer. Equivalent solution to this is allowed.

**Transformer cables**

Due to the accuracy of the whole metering, voltage transformer cables must be designed in such a way that a voltage drop is reduced to 0.1% or less of the nominal voltage.

**Telecounter**

The task of a telecounter is the acquisition of metered values from the electricity meters at the metering point and the teletransmission of this data to the central accounting office of every partner concerned (remote meter readout). The meters at a metering point must be doubled.

#### Availability and timing for metering data exchange process

The SAFA parties must follow the deadlines outlined in C-11-2.

#### Availability and timing of Accounting Data exchange process

The SAFA parties must follow the deadlines outlined in C-11-2.

#### Troubleshooting procedure

The SAFA parties must follow the deadlines outlined in C-11-2. In case these deadlines cannot be met, the following rules shall be applied both in the bilateral TSO-TSO process and the Accounting Process by the Coordination Centre (see C-11-2).

For the bilateral TSO-TSO process, the following rules shall be applied:

* The TSOs have to bilaterally apply the rules for troubleshooting agreed upon in section C-7-1.
* Upon request of a TSO A, the Coordination Centre can send the SOVA values of the Neighbouring TSO B to TSO A for validation purposes.

For a proper and smooth process, the following rules are applied by the Coordination Centre:

* A received “Negative ACK” is considered as notification of problems by the TSOs. TSOs and the responsible Coordination Centre shall take action to resolve the problem.
* A missing “ACK” or an “ACK” received (on DSR, DSPR, MSR, etc.) after the deadlines defined in chapter C-11-2 are disregarded by the Coordination Centre from a business perspective. No further actions are expected from the Coordination Centre or the TSOs.

Once the deadline for the last day of a month has passed (cf. C-11-2), the following rules are applied by the Coordination Centre:

* “Silent acceptance by the TSO” for all days of the month
* In case SOVA files are missing for any day of the month, the Coordination Centre shall copy SOVA values from the Neighbouring TSO for the missing day(s), if they are available.
	+ 1. **Workflow of the Accounting Process**

The workflow of the Accounting Process is described in the ACCOUNTING AND FINANCIAL SETTLEMENT OF KF, ACE AND RAMPING PERIOD (FSKAR) IMPLEMENTATION GUIDE.

* + - 1. **Inputs**

The Verification Platform provides the scheduled exchanges (ANES) to the Coordination Centres.

TSOs with yearly K-factors send them to the Coordination Centres once per year. TSOs participating in the FCR cooperation update these K-factors on a daily basis with 4h-resolution, therefore they are required to additionally send the updated K-factors to the Coordination Centres. System Operator Swissgrid sends the **Δ*f*** to the Coordination Centres.

The submission deadline of these data is detailed in Table 2: Timetable for daily accounting and settlement process (C-11-2).

* + - 1. **Outputs**

The energy exchanges are calculated as follows:

FCP Energy, for each LFC area or LFC block, using the corresponding K-factor, the frequency deviation Δ*f*:

RP Energy for the quarter hour n referring to the scheduled ANES (MW) in quarter-hours n-1 and n+1 (previous and following quarter hours):

UE Energy:

The parameters in the calculations refer to the Cross-Border Energy Exchange that is intended (Eie), done through Virtual Tie-Lines (EVTL), a result of FCP (EFCP) and ramping period processes (ERP) or unintended (Eue).

The outputs of the accounting function are EFCP, ERP and EUE.

* + - 1. **Daily Settlement Report**

As a result of the Accounting Process, the TSOs receive for their corresponding LFC area the following results through the Daily Settlement Report (DSR), for each TSO-TSO Settlement Period of the day:

* Scheduled energy exchanges for each border (ANES) – individual schedules will be reported
* The scheduled energy exchanges will include the compensation program, for the transition phase (from compensation programs to Financial Settlement)
* Intended energy exchange for each Virtual Tie-Line (as reported in SOVA files) – individual Tie-Line exchanges will be reported
* Metered Tie-Line flows for each Tie-Line (as reported in SOVA files) – per individual Tie-Line
* K-factors
* Frequency Deviation
* Volumes of FCP Energy for each TSO
* Volumes of RP Energy for each TSO
* Volumes of UE Energy for each TSO

In case of needed corrections, TSOs shall inform the Coordination Centres immediately and align bilaterally to correct the data. After corrections, Coordination Centres shall send a corrected DSR to the TSOs. This concludes the Accounting Process. In any case, the deadlines in C-11-2 shall be respected.

* 1. **Standards - Settlement process**
		1. **Overview**

The daily Settlement Process starts after the finalisation of the daily Accounting Process for all TSOs as well as the reception of DAMPs from all TSOs.

In the framework of the Settlement Process, the Coordination Centres determine:

* Settlement Prices for FCP Energy, RP Energy and UE for each TSO-TSO Settlement Period
* Monetary values for FCP Energy, RP Energy and UE for each TSO-TSO Settlement Period, equivalent to the multiplication of volumes and prices.

The inputs needed for these calculations shall be:

* Results of the Accounting Process: volumes of FCP Energy, RP Energy and Unintended Exchange for each LFC Area or Block
* Day-Ahead Market Prices (DAMPs) per LFC Block
	+ 1. **Workflow of settlement process**
			1. **Inputs**

All LFC operators send their Day-Ahead Market Prices (**DAMP**s) per LFC area or block to their Coordination Centres which are responsible for the determination of DAMPs for individual LFC blocks according to the following rules:

|  |  |
| --- | --- |
| **LFC block** | **DAMP determination method** |
| AT, BE, BG, CH, CZ, ES, FR, GR, HU, NL, PT, RO, SK, PL | The corresponding bidding zone DAMP is used. |
| DE-LU-DKW |  |
| SMM | Only the DAMP from bidding zone RS (Serbia - EMS) is considered. |
| LFC Block UA+MD |  |
| SHB |  |
| AL | Imbalance Settlement Price of the LFC Block is used instead of a Day-Ahead Market Price (DAMP).  |
| IT | The DAMP of the BZ bordering with the rest of the SA is used. This means IT-North |

* + - 1. **Outputs**

**Settlement prices**

The calculation of Settlement Prices for FCP Energy and UE Energy is carried out by the Coordination Centres.

The price for RP Energy is 0 €/MWh.

The price for FCP Energy and UE Energy are the same and calculated as follows:

* Frequency-independent component is calculated as a weighted average of the DAMP across CE, with weighting performed according to the absolute value of the volumes of FCP Energy and UE Energy, as follows, where m is an index running over all LFC blocks
* Frequency-dependent component calculated as follows:

The uniform price for Unintended Exchange and FCP Energy corresponds to

The frequency dependent component may not be considered on the UE and FCP Energy between two LFC Areas connected only by HVDC cable. In this case the reference price corresponds to .

**Monetary values**

Based on settlement volumes and the Settlement Prices the monetary values are calculated.

* + - 1. **Daily Settlement Prices Report and Monthly Settlement Reports**

For the Settlement Process, the following reports are generated: Daily Settlement Prices Reports (DSPR), Monthly Settlement Reports (MSR). The Daily Settlement Prices Report is generated daily, the Monthly Settlement Report is generated monthly. In both cases, the resolution is per TSO-TSO Settlement Period.

The reports contain the following information:

* Volume of FCPE for each TSO (as calculated in the Accounting Process)
* Volume of RPE for each TSO (as calculated in the Accounting Process)
* Volume of UE for each TSO (as calculated in the Accounting Process)
* Day-Ahead Market Price (DAMP) for each LFC block, as used in the settlement process.
* Day-Ahead Market Price (DAMP) for each LFC area, for each LFC block with multiple LFC areas.
* Price for FCPE for the SA CE (as calculated in the settlement process)
* Price for RPE for the SA CE: 0 €/MWh
* Price for UE for the SA CE (as calculated in the settlement process)
* Monetary values for FCPE for each TSO (as calculated in the settlement process)
* Monetary values for RPE for each TSO (as calculated in the settlement process)
* Monetary values for UE for each TSO (as calculated in the settlement process)

As a result of the daily Settlement Process, Coordination Centres send the DSPR to the TSOs. The TSOs must review the DSPR for each day. In case of needed corrections, the TSOs shall inform the Coordination Centre immediately and align bilaterally within the deadline (see C-11-2) to correct the data. After corrections, the Coordination Centres shall send a corrected DSPR to the TSOs. This concludes the daily Settlement Process.

After the daily Settlement Process for each day of the calendar month has been concluded, Coordination Centres send the MSR to the TSOs. The TSOs must review the MSR and send a Confirmation Document for the MSR within the deadlines specified in C-11-2.

Once the MSR was confirmed by all TSOs, Coordination Centres send the validated monthly Settlement Results (validated settlement volumes, prices end values) to the Invoicing Entity. If no substantiated objection by a TSO within the deadlines given specified in C-11-2 is received, the Settlement Result are deemed to be confirmed/accepted and will be invoiced as such. If. The Invoicing Entity sends invoices to all TSOs. This concludes the Settlement Process

* + 1. **Extraordinary measures**

Extraordinary measures may be proposed and implemented by the Coordination Centres after approval by RGCE Plenary, especially in cases of violations of this Policy. Extraordinary measures should not affect the Accounting Process. Extraordinary measures are also possible in case of large frequency deviations, when some TSOs intentionally enter into deviation to help restore the frequency, to ensure that these TSOs are not penalized for such behaviour.

* 1. **Guidelines**
		1. **Troubleshooting for the Accounting Process**

In case metering data is unavailable or the available data is not agreed upon in time (see C-11-2), the following procedure is recommended in the following sequence:

If available, use the secondary meter values from the Accounting Point substation.

If available, use the main meter values from the adjacent substation.

If available, use the secondary meter values from the adjacent substation.

If available, use the integrated measurement values from the on-line observation.

Otherwise, the partners involved agree on the methodology to determine substitutes.

In any case, a more flexible procedure for troubleshooting can be agreed upon bilaterally among the affected TSOs, ensuring normal operation of the Accounting Process. If files are not available at deadlines specified in C-11-2, the Coordination Centre shall apply the following rules:

Upon request of a TSO A, the Coordination Centre can use SOVA files of the Neighbouring TSO B.

In case D is the last day of the month, the Coordination Centre is mandated to copy SOVA values from the Neighbouring TSO to avoid stopping the process, assuming these values are available. This means that values are copied latest by D\_last-month+2 at 16:00. No confirmation is needed and “silent acceptance” is applied.

In case two SA CE bodies are sending mismatching Accounting Data to the Coordination Centre (and LFC Block, where applicable) as part of the daily Accounting Process, the Coordination Centre (and LFC Block, where applicable) should immediately prepare a substitution of values in the following sequence:

* In case of mismatching, Coordination Centre notify the affected TSOs to align on matching values.
	+ 1. **Timeframe for changing the Accounting Data**

All substituted values and/or all already matched values can be changed until the deadline according to C-11-2. After the confirmation of the Monthly Settlement Report, the Accounting Data cannot be changed anymore.

* + 1. **Timeframe for changing the verified ANES**

The verified ANES can be changed by the concerned LFC Areas until the deadline according to C-11-2. In such cases, the concerned LFC Areas shall firstly inform the respective Coordination Centre and then send their updated ANES to the Verification Platform. The respective Coordination Centre will then manually export the updated and verified ANES, recalculate the Unintentional Deviations of the concerned LFC Blocks and resend the updated Daily Settlement Report(s). After confirmation of the Monthly Settlement Report, the verified ANES cannot be changed anymore.

* + 1. **Timeframe for changing other inputs**

K-factors, frequency deviation and Day-Ahead Market Prices (DAMPs) can be changed until deadline according to C-11-2. After the end of the monthly Settlement Process, these data cannot be changed anymore.

In case a TSO verifies a mismatch of its DAMP, the TSO immediately informs the Coordination Centre and submits a new DAMP document within the given deadline (see C-11-2). After the confirmation of the Monthly Settlement Report, the DAMP cannot be changed anymore.

* 1. **Entities**

In accordance with Article 3 (2) of the approved proposal for common settlement rules applicable to all unintended exchanges of energy (“CCU”) according to Article 51.1, as well as the approved proposal for common settlement rules applicable to the intended exchanges of energy as a result of the frequency containment process and ramping periods (“CCFR”) according to Article 50.3 of COMMISSION REGULATION (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing, the entities entrusted with the CCU and CCFR accounting function and the CCU and CCFR settlement function (Coordination Centres) designated by all SA CE TSOs are:

* Amprion GmbH, for the northern block of SA CE and
* Swissgrid AG, for the southern block of SA CE.

For settlement tasks, both entities will share the tasks according to the Implementation Guide.

The entity entrusted with the invoicing task (Invoicing Entity) designated by all SA CE TSOs in accordance with Article 3 (2) of the approved proposal for common settlement rules applicable to all unintended exchanges of energy according to Article 51.1 of COMMISSION REGULATION (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing, as well as the approved proposal for common settlement rules applicable to the intended exchanges of energy as a result of the frequency containment process and ramping periods (“CCFR”) according to Article 50.3 of COMMISSION REGULATION (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing is

* JAO S.A.

The performance of services through the Invoicing Entity with corresponding service levels and service fees shall be regulated in a separate agreement with the appointed Invoicing Entity.

* 1. **Remuneration**

The TSOs shall reimburse the following costs incurred by the Coordination Centres.

Amprion, as the Coordination Centre for the northern block of SA CE shall invoice ESO, APG, Elia, ČEPS, Energinet, TenneT Germany, TransnetBW, 50Hertz, MAVIR, Creos, TenneT NL, PSE, Transelectrica, SEPS, Ukrenergo, Litgrid, AST and Elering. Swissgrid, as the Coordination Centre for the southern block of SA CE shall invoice OST, NOSBiH, HOPS, RTE, IPTO, Terna, MEPSO, CGES, REN, EMS, ELES, REE, KOSTT and TEIAS.

The total reimbursement is shared equally by Amprion and Swissgrid.

The Coordination Centres have the right to adapt the costs every three years based on the inflation rate in the Eurozone. In case of significant deviations from usual tasks, the Coordination Centres may include additional and justified costs. The TSOs must be informed about the increase at least 3 months before its coming into effect. All cost increases have to be approved by the RG CE Plenary. Costs resulting from tasks not covered by usual tasks can be asked to be approved and consequently invoiced on a yearly basis.

The yearly costs are shared according to the cost sharing principles of EBGL Article 23(3).

Currently applicable costs, as approved by RG CE, are to be included as an annex (cost table) in the invoice by the Coordination Centres.

The Coordination Centres will send invoices to the TSOs after services for each year have been performed. The services provided by the Coordination Centres are considered to start 01/06/2021, corresponding to the go-live of the Financial Settlement.

Starting in 2023, the Coordination Centres will send the invoices for the yearly operational costs at the latest on 31/01 of each year, corresponding to the services provided from 01/12 to 31/12 of the previous year (starting 2022).

The Coordination Centres shall each send separate invoices to the respective TSOs. Each invoice shall be sent by email to the TSOs, but at the request of a TSO, a paper version shall also be provided. The invoice shall be issued no later than the 14th calendar day of the next month after the invoiced period. Each invoice shall include at least the following items:

1. Full name, address and e-mail address of the respective Coordination Centre and the invoiced TSO;
2. VAT number of the respective Coordination Centre and the invoiced TSO;
3. Invoiced amount, valued in Euro;
4. A detailed specification of the costs;
5. Bank account and bank address (including IBAN and BIC) into which the relevant payment shall be made;
6. Invoice number;
7. Invoice issue date;
8. Invoicing period from date \_\_\_\_\_\_\_to date\_\_\_\_\_\_\_;
9. Designation of the service on the invoice;
10. Tax rate and tax amount separately, if any;
11. References to specific constraints for invoicing, if applicable (required by article 226 of Directive 2006/112/CE), e.g. the application of the VAT reverse charge procedure;
12. Reference, if required by the invoiced TSO; and
13. Payment term.

Reference or purchase order numbers necessary for identifying payments internally, contact persons and contact details for the sake of sending invoices shall be requested by the Coordination Centre from each TSO.

Invoices shall be paid within thirty (30) calendar days from the end of the month of the receipt of the respective invoice. All payment(s) shall be made by wire transfer to the bank account indicated in the invoice(s).

If a TSO disputes an invoice, it shall; (i) pay all undisputed charges, and (ii) notify the Coordination Centre, as indicated in the invoice, of the dispute in writing, providing the invoice number and an explanation of the issue in dispute.

In the event of failure to pay the invoiced amount within the abovementioned payment period, the Coordination Centre sends a reminder and has the right to automatically charge the defaulting TSO interest for late payment. For the following months, the interest for late payment, on any amount effectively due, will be the positive one month EURIBOR rate or zero, if the one month EURIBOR rate is negative.

All payments shall be made in Euro and, unless otherwise agreed in writing, shall be made without set-off or counterclaim.

When any tax or duty is due by TSOs in their countries at receipt of the invoices issued by the Coordination Centre for its services, it should be paid on top of the amounts due to the latter. It is understood that all amounts billed by the Coordination Centre are exclusive of applicable taxes and duties. The parties confirm that the two previous sentences do not apply to a potential withholding tax applicable in Poland. The specific regulations with regard to a withholding tax due in Poland are determined in the following provisions of section C-9 of this Annex 3 as well as in section C-12 of this Annex 3.

The net remuneration due to the Coordination Centre (i.e. remuneration exclusive of VAT) includes the amount of withholding tax due in Poland on taxable income received by foreign entities. In the event that, in accordance with applicable tax regulations, PSE is obliged to deduct from the Coordination Centre’s payment the amount of withholding tax due in Poland, PSE shall make this deduction, taking into account the applicable rate and the principles set out in the relevant Polish tax law and double taxation agreements.

In order for PSE to apply the exemption or the appropriate reduced tax rate of withholding tax in Poland on income obtained by foreign entities, the Coordination Centre shall deliver, in accordance with the following provision, a valid and original tax residence certificate issued by tax authorities competent for the Coordination Centre’s registered office and documents mentioned in section C-12 of this Annex 3.

Upon request of a TSO, Coordination Centres shall deliver a valid and original tax residence certificate issued by tax authorities competent for the Coordination Centre’s registered headquarters to the requesting TSO, after concluding this Annex, but not later than by the 10th calendar day prior to the date of the first payment and at least 30 calendar days prior to the expiry of each running calendar year, while the Annex is in force. In the event of a change of tax residence, the Coordination Centre is required to provide the requesting TSO with a valid and original tax residence certificate of the new state of tax residence issued by the relevant tax authorities, not later than by the 10th calendar day prior to the expiry of the payment period of the part of the payment due after the change of tax residence. The costs associated with obtaining the original certificate of tax residence (in particular, any administrative fees) shall be borne by the Coordination Centre.

In the event of failure to comply with the obligation to deliver a correct tax residency certificate or with the obligations set out in section C-12 of this Annex 3, each Coordination Centre confirms that it is aware of the obligation of PSE to reduce the payment due to the Coordination Centre by the amount corresponding to the value of the withholding tax due in Poland (if PSE is obliged to collect such tax pursuant to Polish tax provisions, tax rulings or decisions received by PSE individually or in accordance with generally available practice and/or standpoint of the Polish tax authorities) and the Coordination Centre agrees to such a deduction. The Coordination Centre agrees also to a deduction of the tax amount from the remuneration due to the Coordination Centre, if PSE is obliged to withhold such tax (pursuant to Polish tax provisions, tax rulings or decisions received by PSE individually or in accordance with generally available practice and/or standpoint of the Polish tax authorities) despite the documentation being delivered in accordance with this Annex 3, in particular with its section C-12.

* 1. **Termination by Coordination Centres**

Each entity appointed to perform the role of Coordination Centre may cease to perform the functions set out in this Annex 3, subject to a period of notice of twelve (12) months for any reasons of its own.

Upon notice of termination, the entity commits itself to assist the newly appointed entity in taking over all needed information for the performance of the role of Coordination Centre.

The entity shall provide technical assistance to the newly appointed entity free of charge.

* 1. **Supplements**
		1. **Equation terms**

 Sum of cross-border Tie-Line flows between two TSOs/LFC Areas/LFC Blocks/Coordination Centres

 Intended cross-border exchanges through Virtual Tie-Lines (VTL)

 Cross-border energy exchange through ANES

 FCP Energy

 RP Energy

 Unintended exchange

 Power control error. Defined in SOGL.

 K-factor of the LFC area

* + 1. **Timetables for daily and Monthly accounting and settlement process**

|  |
| --- |
| REGULAR PROCESS |
| Data | Deadline (gate closure) for Working Days |
| ANES (from VP to CC) | 12:00 D+1 |
| DAMP | 10:00 D+2 |
| k-factor | 10:00 D+2 |
| Delta f | 16:00 D+1 |
| SOVA from TSOs | 10:00 D+2 |
| SOVA from CCs | 15:15 D+2 |
| DSR | 16:00 D+2 |
| DSPR | 16:00 D+4 |
| MSR | 16:00 DLAST +8 |
| CNF on MSR | 16:00 DLAST +12 |
| Invoicing | 16:00 DLAST +15 |

**Table 2: Timetable for daily accounting and settlement process**

Notes:

1. Bilateral exchange between Neighbouring TSOs is not included in the table above since it is considered part of the bilateral agreement between the respective TSOs.
2. All deadlines are referenced to delivery days with consideration of Working Days (for delivery day Monday, D+1 is on Tuesday; for delivery day Friday, D+1 is on Monday) and holidays (if Tuesday is a holiday, for delivery day on Monday, D+1 is on Wednesday).
3. DLAST is the last delivery day of the respective month.
4. In case of a missing CNF on an MSR at deadline, silent acceptance is considered.
5. Missing or late ACKs are disregarded from a business perspective.
6. A negative ACK is interpreted as notification of a problem by sender to receiver.
7. In case of a missing SOVA of one Neighbouring TSO (and no additional notification), values from the second Neighbouring TSO are applied (the first TSO needs to confirm this action) as described in C-7-1.
8. In case of individual deadlines by TSOs as described in C-3-3, respective TSOs must inform the Coordination Centre.
9. Whereas the daily deadlines are recommended for a smooth daily process, it is pointed out that D\_LAST+8 is considered a “firm” deadline after which the described actions will be taken.
10. For the sake of clarity, the submission of a positive Confirmation (CNF) for the Monthly Settlement Report concludes all possibilities for corrections from this TSO.
11. For the sake of clarity, the conclusion of the deadline D\_LAST+8 also excludes all possibilities for corrections from all TSOs.



**Figure 4. Timing of daily Accounting Data exchange**

* + 1. **Registration form for Accounting Process including Tie-Lines**



* + 1. **List of LFC Blocks performing Accounting and Settlement Process on LFC Block level**

The Accounting and Settlement Process is performed on LFC Block level for the LFC Block UAMD (Ukrenergo and Moldelectrica).

* 1. **The specific regulations with regard to a withholding tax due in Poland**

1. Immediately after entering into force of this Annex 3, but not later than by the 10th calendar day prior to the date of the first remuneration payment and, after that, at least 30 calendar days prior to the end of each year the services have been performed by the Coordination Centre, the Coordination Centre is obliged to provide PSE with a written statement that it is subject to a taxation on its total income and that it is the beneficial owner of payments received from PSE together with information that it conducts actual business activity in the country of its tax residence. The template of such a statement constitutes Appendix 1 to this Annex 3.

2. Immediately after entering into force of this Annex 3, but not later than by the 10th calendar day prior to the date of the first remuneration payment and, after that, at least 30 calendar days prior to the end of each year the services have been performed by the Coordination Centre, the Service Provider shall provide PSE with a completed verification questionnaire. The template of which constitutes Appendix 2 to this Annex 3. The most recent templates of statements referred to above are available to download on the PSE’s official web site: <https://www.pse.pl/podatki>. The site provides an explanatory note in Polish and English.

3. Based on the information and data provided by CCs, PSE may require the CC to produce additional documents or deliver information necessary to not withhold the tax, and the CC undertakes to provide such documents or information upon request, not later than by the 5th calendar day prior to the date of the upcoming payment, and on the condition that (i) CC would be factually able to obtain/prepare such additional data and (ii) this additional data will not constitute confidential information or a trade secret of the CC.

* 1. **The specific payment requirements of Ukrenergo towards the Coordination Centre**
		1. **Invoice Requirements**
1. In order to be able to pay the invoice to the Coordination Centre, a certificate of residence (for avoidance of application of the double taxation) for each year must be provided by the Coordination Centre. The certificate is required to be provided in both – as a hardcopy (when it’s signed by hand) and as a scan sent via e-mail. Certificate of fiscal residence is issued by the appropriate tax authority for the country where the counterparty is registered and pays taxes. Certificate is valid for one year, unless an expiry date is indicated.
2. According to National Legislation of Ukraine, invoice is issued based on the act of provision of service, thus in order to be able to pay the invoice Ukrenergo will require Act of provision of service according to a template 1 cf. C-13-2
3. Invoices and acts of provision of service sent on the e-mail addresses specified in cf. C-13-2 shall be legally binding at the time of their receipt and shall be valid until the Parties exchange original Documents. Ukrenergo requires originals of acts of provision of service and invoices duly signed by authorized persons, sealed (if applicable) and sent by registered post no later than three (3) working days from the day of sending them by e-mail.
4. In order to fulfil requirements of National Legislation, acts of acceptance and invoices shall be issued not later than 12th calendar day of the month following the settlement period.
5. In case of delay of payment for services provided due to the need of obtaining all the approvals for payment required for performance of payment during war state in Ukraine, late payment fees are not applied with respect to Ukrenergo.
6. Moreover, upon request of Ukrenergo, the Coordination Centre has to provide signed beneficial owner statement.
7. Payment shall be made to the following bank accounts of CC

Beneficiary: Amprion GmbH

VAT Nr: DE 8137 61 356

Beneficiary's bank:

IBAN: DE27 4404 0037 0352 0087 00

BIC/SWIFT COBADEFFXXX

Bank details of National Power Company “Ukrenergo”

a/n UA413204780000026008924870406 JSB “UKRGASBANK”

Bank code: 320478

SWIFT: UGASUAUK

CC may unilaterally modify bank accounts provided that the changes are communicated by e-mail to Ukrenergo in the form of a scan copy of a letter in PDF format. Scan copy of a letter shall be legally binding at the time of its receipt and shall be valid until Ukrenergo receives original latter.

Ukrenergo may unilaterally modify bank accounts provided that the changes are communicated by e-mail to CC in the form of a scan copy of a letter in PDF format. Scan copy of a letter shall be legally binding at the time of its receipt and shall be valid until CC receives original latter.

* + 1. **Act of provision of Service**

**Template 1**

**Act of provision of service**

|  |  |  |
| --- | --- | --- |
| Акт №\_\_\_\_\_\_\_\_\_\_\_про надання \_\_\_\_\_\_\_\_\_ у відповідності до Угоди від \_\_\_\_\_\_\_\_\_\_\_\_\_ №\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_за \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_ року | Act №\_\_\_\_\_\_\_\_on the provision of \_\_\_\_\_\_\_\_ in accordance with the Agreement of \_\_\_\_\_\_\_\_\_\_\_\_ № \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_ year  |  |
| \_\_\_\_\_\_“  | "”\_\_"\_\_\_\_20\_\_року | \_\_\_\_\_\_\_\_\_“\_ | "”\_\_"\_\_\_\_\_20\_\_ year |  |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, в особі \_\_\_\_\_\_\_\_\_\_\_\_та | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, represented by \_\_\_\_\_\_\_\_\_\_\_\_,and |  |
| Приватне акціонерне товариство «Національна енергетична компанія «Укренерго» (НЕК «Укренерго»), м. Київ, Україна, в особі \_\_\_\_\_\_\_\_\_\_\_, | Private Joint Stock Company “National Power Company “UKRENERGO” (NPC «Ukrenergo»), city of Kyiv, Ukraine, represented by \_\_\_\_\_\_\_\_\_, |  |
| підписали цей акт про наступне: | have signed this Act: |  |
| \_\_\_\_\_\_\_\_\_\_ надала для НЕК «Укренерго» \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ у відповідності до Угоди. Загальна вартість послуг складає \_\_\_\_\_\_\_\_\_\_ (цифри прописом) євро | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provided \_\_\_\_\_\_\_ on\_\_\_\_\_\_\_\_ for NPC “Ukrenergo” in accordance with the Agreement. The total cost of services is \_\_\_\_\_\_\_\_\_\_ (numbers are to be written in full) euros. |  |
|  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Підписано від / Signed on behalf ofНЕК "УКРЕНЕРГО" / NPC «UKRENERGO» |  |  |  |
|  | Підпис/Signature |  | ПІБ та посада підписанта/full name and position |
| Підписано від / Signed on behalf of  |  |  |  |
|  | Підпис/ Signature |  | ПІБ та посада підписанта/full name and position |

* 1. **Settlement of energy provision for the Extraordinary procedure According to Annex01 Policy on LFC&R, B-9-1-3, B-9-1-4 and B-9-1-5**

This article describes the settlement of the energy provision for the Extraordinary Procedure according to Annex01 - Policy on LFC&R - Article B-9-1-3, B-9-1-4 and B-9-1-5. All previous Articles in this Annex03 (C-1 to C-12) are related to the process of Unintentional Deviations/FSkar and do not apply to the Articles under C-13 unless included with explicit reference under C-13.

* + 1. **Cost Compensation**

When Stage 2 of the Extraordinary Procedure has been triggered, costs may arise from Remedial Actions agreed by the Supporting TSO(s). The Providing TSO(s) can recover their direct costs, including but not limited to costs of activated energy bids, resulting from the Remedial Actions and documented in the operational report (cf. Annex01 – Policy on LFC&R – B-9-1-5-3).

Indirect costs are out of Extraordinary Procedure and cannot be compensated.

Claims towards the Receiving TSO(s) are seen as individual claims of Providing TSO(s).

Cost allocation rules:

In the case of a single Receiving TSO, the Providing TSO(s) shall invoice the costs to the Receiving TSO based on the incurred costs from the Remedial Actions.

In the case of several Receiving TSOs, total costs of all Providing TSOs are first summed up and then allocated to the Receiving TSOs proportionally to the activated power, as documented in the operational report from the phone conference (cf. Annex01 – Policy on LFC&R – B-9-1-5-3).

If the Receiving TSO(s) cannot be clearly identified based on the definition of Impacting TSO as defined in Annex01 – Policy on LFC&R – B-9-1-4-1 or in case ex-post analysis shows that, in addition to identified Impacting TSO(s), other TSOs have also contributed to a significant part of the deviation (>100 MW), all SAFA Parties shall decide on how to proceed with the cost compensation according to SAFA governance principles. Any possible dispute in relation to claims brought forward under this section, shall be referred in accordance with Article 10 of SAFA, exclusively.

The Providing TSO(s) shall maintain complete and accurate records and supporting documentation for all billable amounts and payments made, in accordance with generally accepted accounting principles. The Providing TSO(s) shall retain the records for each invoice for at least six (6) years from the end of the year in which that invoice was received by the Receiving TSO(s).

Each amount stated as payable by the Providing TSO is inclusive of all possible taxes, duties or similar charges, but exclusive of the VAT. If possible, the Providing TSO shall endeavour to identify, compatibly with grid conditions, Remedial Actions with lowest or otherwise reasonable cost indication. However, the Providing TSO(s) are not responsible for providing evidence to the Receiving TSO(s) that the cheapest reserves have been activated.

The Providing TSO(s) shall each send separate invoices to the respective Receiving TSO(s). Each invoice issued shall be sent by email to the Receiving TSO, but upon request of a Receiving TSO a paper version shall also be provided instead. Invoice shall be issued no later than 45th Working day (WD) of the month after the Extraordinary Procedure has been triggered. Each invoice shall include at least the following items:

1. Full name, address and e-mail address of the respective Providing TSO and the invoiced TSO;
2. VAT number of the respective Providing TSO and the invoiced TSO;
3. items listed in C-9 point c) to m)

WDs mean Working Days as defined in C-1-7.

Reference or purchase order numbers necessary for identifying payments internally, contact persons and contact details for the sake of sending invoice shall be requested by the Providing TSO(s) from respective Receiving TSO(s).

Invoices shall be paid within thirty (30) Working Days from the end of the month of the receipt of the respective invoice. All payment(s) shall be made by wire transfer to the bank account indicated in the invoice(s).

* + 1. **Final Reporting of Stage 2**

For the final reporting of Stage 2 by the Coordination Centre being required prior to any invoicing, the following parties shall inform as follows:

|  |  |  |
| --- | --- | --- |
| **Responsible**  | **Delivery Time** | **Type of information required** |
| Providing and Receiving TSO(s) | 2 WDs after the procedure | Final adjusted cross border schedules or virtual tie-lines  |
| Providing TSO (s) | 30 WDs after the procedure | Final costs of the Providing TSO(s) |

WDs mean Working Days as defined in C-1-7.

Together with the information provided in the reporting from the phone conference and the table above, the Coordination Centre shall provide a final report to the Supporting and Impacting TSO (s).

Furthermore, the Coordination Centres shall together with the Providing TSO(s) and the Receiving TSO(s) ensure that the energy delivered between Providing TSO(s) and Receiving TSO(s) is identified but excluded from the accounting Process of FSkar in according with provisions under C-6-3. The Remedial Actions from the Extraordinary Procedure will be considered as a cross-border schedule or a virtual tie line whereas the respective energy amount is metered as an input data for the accounting process of FSkar. The respective energy amount is excluded as such from the Fskar process.