
Common provisions for the Greece-Italy CCR for regional operational security coordination in accordance with Article 76 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation

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Whereas

- (1) Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as the “SO Regulation”) entered into force on 14 September 2017.
- (2) Greece-Italy Capacity Calculation Region (hereafter referred to as “GRIT Region”) is defined in accordance with Article 15(1) of Regulation (EU) 2015/1222 on Capacity Allocation and Congestion Management (hereafter referred to as the “CACM Regulation”).
- (3) This document, including its annexes, sets out the Greece-Italy methodology for regional operational security coordination (hereafter referred to as “GRIT ROSC methodology”) developed for the GRIT Region, in accordance to Article 76(1) of the SO Regulation.
- (4) The GRIT ROSC methodology takes into account the principles and goals set out in the SO Regulation, as well as those of the CACM Regulation, Regulation (EU) 2019/943 of the European Parliament and of the Council of 5th July 2019 on the internal market for electricity (recast) (hereafter referred to as “Regulation (EU) 2019/943”). Moreover, the GRIT ROSC methodology in accordance with Article 76(1) of the SO Regulation follows the principles set out in the methodology for coordinating operational security analysis (hereafter referred to as “CSAm”) approved by ACER pursuant to Article 75(1) of the SO Regulation.
- (5) In accordance with Article 76(1) of the SO Regulation, the GRIT ROSC methodology “*shall determine:*
 - (a) *conditions and frequency of intraday coordination of operational security analysis and updates to the common grid model by the regional security coordinator;*
 - (b) *the methodology for the preparation of remedial actions managed in a coordinated way, considering their cross-border relevance as determined in accordance with Article 35 of Regulation (EU) 2015/1222, taking into account the requirements in Articles 20 to 23 and determining at least:*
 - (i) *the procedure for exchanging the information of the available remedial actions, between relevant TSOs and the regional security coordinator;*
 - (ii) *the classification of constraints and the remedial actions in accordance with Article 22;*
 - (iii) *the identification of the most effective and economically efficient remedial actions in case of operational security violations referred to in Article 22;*
 - (iv) *the preparation and activation of remedial actions in accordance with Article 23(2);*
 - (v) *the sharing of the costs of remedial actions referred to in Article 22, complementing where necessary the common methodology developed in accordance with Article 74 of Regulation (EU) 2015/1222. As a general principle, costs of non-cross-border relevant congestions shall be borne by the TSO responsible for the given control area and costs of relieving cross-border-relevant congestions shall be covered by TSOs responsible for the control areas in proportion to the aggravating impact of energy exchange between given control areas on the congested grid element.”*



- (6) In accordance with Article 77(1) of the SO Regulation, the GRIT ROSC methodology “shall also include common provisions concerning the organisation of regional operational security coordination, including at least:
- (a) *the appointment of the regional security coordinator(s) that will perform the tasks in paragraph 3 for that capacity calculation region;*
 - (b) *rules concerning the governance and operation of regional security coordinator(s), ensuring equitable treatment of all member TSOs;*
 - (c) *where the TSOs propose to appoint more than one regional security coordinator in accordance with subparagraph (a):*
 - (i) *a proposal for a coherent allocation of the tasks between the regional security coordinators who will be active in that capacity calculation region. The proposal shall take full account of the need to coordinate the different tasks allocated to the regional security coordinators;*
 - (ii) *an assessment demonstrating that the proposed setup of regional security coordinators and allocation of tasks is efficient, effective and consistent with the regional coordinated capacity calculation established pursuant to Articles 20 and 21 of Regulation (EU) 2015/1222;*
 - (iii) *an effective coordination and decision making process to resolve conflicting positions between regional security coordinators within the capacity calculation region.”*
- (7) In accordance with Article 77(3) of the SO Regulation, the TSOs of each capacity calculation region shall propose the delegation of the following tasks in accordance with paragraph 1:
- (a) *regional operational security coordination in accordance with Article 78 of SO Regulation in order to support TSOs fulfil their obligations for the year-ahead, day-ahead and intraday time-frames in Article 34(3) and Articles 72 and 74 of SO Regulation;*
 - (b) *building of common grid model in accordance with Article 79 of SO Regulation;*
 - (c) *regional outage coordination in accordance with Article 80 of SO Regulation, in order to support TSOs fulfil their obligations in Articles 98 and 100 of SO Regulation;*
 - (d) *regional adequacy assessment in accordance with Article 81 of SO Regulation in order to support TSOs fulfil their obligations under Article 107.*
- (8) The GRIT ROSC methodology in accordance with Article 76(1) of the SO Regulation, considers and, where necessary, complements the common Greece-Italy methodologies for coordinated redispatching and countertrading and for the relative cost-sharing (hereafter referred to as “GRIT RD and CT methodology” and “GRIT RD and CT CS methodology”) developed for the GRIT Region in accordance with Article 35 and Article 74 of the CACM Regulation.
- (9) In accordance with Article 20(1) of the CSAm, TSOs of each CCR shall, in accordance with Article 21(1) of the SO Regulation, “jointly define the rules on the process for determining the cross-border network elements on which the operational security violations shall be managed in a coordinated way (i.e. cross border relevant network elements)”.
- (10) GRIT Region consists of the borders between internal Italian bidding zones and the border between Italy and Greece, which are directly connected only via a HVDC interconnector.



- (11) The network elements which are influenced by a change in the set-point of the HVDC Interconnector between Italy and Greece shall be managed in a coordinated way between the relevant TSOs whereas elements not or lowly influenced by the flow in the HVDC interconnector can be monitored separately by each TSO, which remains responsible for its own control area. In this light and in accordance with Article 21(1) of CSAm, the same distinction is made in the GRIT ROSC methodology as in GRIT RD and CT and relative cost-sharing methodologies between the elements of the Area of Common Interest (hereafter referred to as “ACI”) and the elements of the Area of TSO Interest (hereafter referred to as “ATI”). Article 11 of the SO Regulation requires that the GRIT ROSC methodology shall be subject to consultation for a duration of not less than one month. The GRIT ROSC methodology was consulted from 22/10/2019 until 24/11/2019, without any response from stakeholders received.
- (12) In compliance with Article 27(2) of CACM Regulation TSOs of GRIT CCR jointly appoint a Coordinated capacity calculator which shall perform capacity calculation according to the process described in the document “*Greece-Italy TSOs proposal of common capacity calculation methodology for day-ahead and intraday market timeframe in accordance with Article 21 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management*” (hereafter referred to as “GRIT CCm”). Article 77(1)(ii) of SO Regulation foresees that the allocation of tasks to the RSCs shall ensure effectiveness and consistency with regard to the execution of CCm processes, while Article 37 of Regulation (EU) 2019/943 assigns the execution of CCm processes to Regional Coordination Centres, which will replace RSCs by 1st July 2022. In the light of this provisions, the RSC may be appointed by GRIT TSOs to perform coordinated capacity calculation alongside the tasks described in Article 77(3) SOGL through a Service Level Agreement.
- (13) Article 6(6) of the SO Regulation requires that the proposed timescale for the implementation and the expected impact of the GRIT ROSC methodology I on the objectives of the SO Regulation shall be described. The timescale for implementation is detailed in Article 23 of the GRIT ROSC methodology. The impact is presented below (point (14) of this Whereas Section).
- (14) The goal of the SO Regulation is to safeguard operational security, frequency quality and the efficient use of the interconnected system and resources. The GRIT ROSC methodology contributes and does not in any way hinder the achievement of the objectives of Article 4 of SO Regulation:
- a) Article 4(1)(a) of SO Regulation aims at determining common operational security requirements and principles. The GRIT ROSC methodology serves this objective by introducing common set of principles to be followed by TSOs in the Region for a coordinated operational security coordination.
 - b) Article 4(1)(d) of SO Regulation aims at ensuring the conditions for maintaining operational security throughout the Union. The GRIT ROSC methodology serves this objective by setting out the rules for coordination within the Region.
 - c) Article 4(1)(e) of SO Regulation aims at ensuring the conditions for maintaining a frequency quality level of all synchronous areas throughout the Union. The GRIT ROSC methodology serves this objective since maintaining the operational security is essential (together with the balancing mechanisms) for safeguarding the frequency quality in the interconnected system.
 - d) Article 4(1)(f) of SO Regulation aims at promoting the coordination of system operation and operational planning. The GRIT ROSC methodology serves this objective by setting



out rules for the preparation of Remedial Actions to be coordinated, thus extending the scope of coordination also to the operational planning timeframe.

- e) Article 4(1)(g) of SO Regulation aims at ensuring and enhancing the transparency and reliability of information on transmission system operation. The GRIT ROSC methodology serves this objective by introducing specific provisions for the exchange of necessary information among the TSOs in the Region and among TSOs and RSCs for achieving the necessary coordination.
 - f) Article 4(1)(h) of SO Regulation aims at contributing to the efficient operation and development of the electricity transmission system and electricity sector in the Union. The GRIT ROSC methodology serves this objective since this specific Region is an integral part of the European interconnected system. Therefore, by safeguarding secure operation in the Region, the overall security is guaranteed, and the markets can function in a way that provides the right incentives for the development of the system and the electricity sector in the Union.
- (15) In conclusion, the GRIT ROSC methodology contributes to the general objectives of the SO Regulation.

TITLE 1

General Provisions

Article 1

Subject matter and scope

1. The GRIT ROSC methodology shall be considered as the proposal of the TSOs of the GRIT Region in accordance with Article 76 of the SO Regulation.
2. The GRIT ROSC methodology rules the execution of the day-ahead and intraday regional operational security coordination within GRIT Region. The coordination includes day-ahead and intraday coordinated regional operational security assessment and coordinated operational security analysis.
3. The GRIT ROSC methodology shall apply to all TSOs and RSCs within GRIT Region.

Article 2

Definitions and interpretation

2. For the purposes of the GRIT ROSC methodology, the terms used shall have the meaning of the definitions included in Article 3 of the SO Regulation, Article 2 of CACM Regulation, Article 2 of the CSAm and the other items of legislation referenced therein. In addition, the following definitions shall apply:
 - a) 'ADMIE' is the Greek Transmission System Operator;
 - b) 'area of common interest' or 'ACI' means the list of critical network elements pursuant to the coordinated Redispatching and Countertrading methodology developed in accordance with Article 35 of the CACM Regulation;
 - c) 'Remedial Action' or 'RA' means any measure applied by a TSO or several TSOs, manually or automatically, in order to maintain operational security;



- d) 'Security-Constrained Optimal Power Flow (SCOPF) function' means a function which determines the best operating levels for electric power plants in order to meet demands given throughout a transmission network while respecting the technical limits of the elements of the network and with the objective of minimizing operating cost;
 - e) 'Terna' is the Italian Transmission System Operator.
3. Potential categories of Remedial Actions shall be classified in accordance with Article 22 of the SO Regulation.
 4. Where this Methodology refers to grid elements, it includes HVDC systems.
 5. 'IGM' and 'CGM' and 'regional CSA' respectively stand for 'individual grid model', 'common grid model' and 'coordinated regional operational security assessment' defined in Article 2 of the CSAm.
 6. In the GRIT ROSC methodology, unless the context requires otherwise:
 - a) the singular indicates the plural and vice versa;
 - b) the headings are inserted for convenience only and do not affect the interpretation of this methodology;
 - c) References to an "Article" are, unless otherwise stated, references to an article of this methodology;
 - d) References to a "paragraph" are, unless otherwise stated, references to a paragraph included in the same article of this methodology where it is mentioned; and
 - e) any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force.

TITLE 2

Provisions for regional operational security coordination

Chapter 1

General provisions for regional operational security coordination

Article 3

Area of Common Interest (ACI) and Area of TSO Interest (ATI)

1. The regional operational security coordination shall regard actions of cross-border relevance.
2. While executing the regional operational security coordination the RSC and all TSOs of the GRIT Region shall effectively relieve physical congestion on the elements of cross border relevance of the Region, irrespective of whether the reasons for the physical congestion fall mainly outside their control area or not.
3. The Italian and Greek systems are directly connected only via a HVDC interconnector, while the AC interconnection to the synchronous Continental Europe takes place via borders electrically far each other. Therefore, changes in one system have no relevant effect on the other and the system security of Italian and Greek grids can be monitored separately, being each TSO responsible for its own control area.



4. In the scope of the GRIT ROSC methodology the ACI is defined by evaluating the possible effect of a change in the set-point of the HVDC Interconnector between Italy and Greece. Elements no or lowly affected by this change do not require to be managed in a coordinated way and, therefore, are not part of the ACI.
5. The ACI refers to the parts of the grids of each TSO that are influenced by the flow in the HVDC interconnector and it is identified according to the same process described in the GRIT RD and CT methodology.
6. The ATI refers to the elements of the Italian system which are sensitive to the exchanges between internal Italian bidding zones. In consideration of the fact that Terna uses a SCOPF function in order to realize a more optimized and efficient redispatching on all the Italian system, the ATI coincides with the entire Italian transmission network.
7. Some network elements may belong to both ACI and ATI.

Article 4

Detection of the constraints for regional operational security analysis and assessment

1. When performing day-ahead and intraday coordinated regional operational security assessment or coordinated operational security analysis, each TSO or the RSC of GRIT Region shall detect if power flows exceed operational security limits.
2. To detect other constraints (such as voltage violations, violations of short-circuit thresholds or violations of stability limits) each TSO of GRIT Region performs local assessment and long-term operational security analyses according to Article 31, 38 and 73 of the SO Regulation.

Article 5

Definition of cross border network elements

1. In the light of ACI and ATI described under Article 3, network element belonging only to the ATI are not deemed of cross border relevance for the purpose of this ROSC methodology, as they are impacted only by actions taken within the control area of Terna, with no impact on the neighbouring TSOs belonging to GRIT Region. They are thus excluded from the list of XNEs, according to the provisions of Article 15(1) of CSAm, and therefore they do not require to be managed in a coordinated way according to Article 20(1) of CSAm.
2. The list of XNEs consist, thus, only in all the elements belonging to the ACI.

Article 6

Procedure for exchanging the information between relevant TSOs and the RSC

1. TSOs of GRIT Region shall build the list of internal and external contingencies (hereinafter referred to as “contingency list”) as required by Article 33 of the SO Regulation and according to the criteria defined in Article 11 of CSAm and they shall share with each TSO of GRIT Region and the RSC the established list of contingencies on XNEs as defined according to Article 5.
2. When there is a significant change on its grid, each TSO of GRIT Region shall update its contingency list. In any case, TSOs of GRIT Region may review the list of internal



contingencies on a yearly basis and shall re-assess the external contingency list at least once every 5 years.

3. In day-ahead timeframe, at latest at hour T0 defined in accordance with Article 45 of CSAm, or in intraday timeframe before the starting time of each coordinated regional operational security assessment defined in Article 8, each TSO shall provide the RSC with the last updated information on the transmission systems in a timely manner, including the following information:
 - a) the updated list of cross-border relevant Remedial Actions, among the categories listed in Article 22 of the SO Regulation, and their anticipated costs provided in accordance with GRIT RD and CT methodology and Article 18(3) of CSAm if a Remedial Action includes redispatching or countertrading, aimed at contributing to relieve any constraint identified in the ACI;
 - b) the operational security limits to perform the processes described in Article 14(5) and Article 15(6).

Article 7

Creation of Individual Grid Models

1. For the day-ahead timeframe, each TSO shall build and deliver its IGM for at least each hour of the day of delivery, in accordance with the provisions of Article 21 of CSAm and with the reference times referred to in Article 33 of CSAm.
2. For intraday timeframe, prior to each reference time referred to in Article 8, each TSO shall build and deliver an intraday IGM for at least each hour of the day of delivery between the reference time and the end of the business day, in accordance with the provisions of Article 21 of CSAm.

Article 8

Timing of intraday coordinated regional operational security assessment

1. In accordance with Article 24 of CSAm, each TSO of GRIT Region shall perform at least three assessment runs in intraday timeframe where it performs a coordinated operational security analysis taking into account the reference times for the intraday coordinated operational security assessment defined in paragraph 2.
2. The reference times for the intraday coordinated operational security assessment are defined in Annex 1.
3. The number of operational security assessments and the reference times referred to in paragraph 2 may be revised on a yearly basis subject to the agreement of the involved TSOs and communicated to NRAs of GRIT Region.
4. On demand intraday coordinated operational security assessment process can be triggered by each TSO of the GRIT Region in case of unforeseen events that may endanger the secure operation of the grid and the resolution of which cannot wait for the coordinated regional operational security assessment performed at regular reference times defined in the paragraph 2.



Chapter 2

Remedial Actions cross-border relevance assessment

Article 9

General principles

1. In accordance with the provisions of Article 15 of CSAm, TSOs of GRIT Region shall aim at agreeing on a qualitative approach in accordance with Article 10 to determine the potential Remedial Actions or sets of Remedial Actions that are deemed cross-border relevant and the corresponding TSOs affected by those Remedial Actions.
2. If the TSOs of GRIT Region cannot agree on a qualitative approach, a quantitative approach shall be used, in accordance with Article 11.

Article 10

Process for cross-border relevance assessment (qualitative approach)

1. TSOs of GRIT Region shall jointly establish a list of potential cross-border relevant Remedial Actions, both preventive and curative, which are generally able to address operational security violations in the ACI.
2. For each Remedial Action:
 - a) Each TSO shall individually assess the cross-border relevance of the Remedial Action on its grid;
 - b) The TSO owner of the Remedial Action shall also assess the cross-border relevance of the Remedial Action on each other TSOs grid;
 - c) For Remedial Actions that are quantifiable (e.g. PSTs, HVDC links or activation of redispatch and countertrading), the quantity above which this Remedial Action is deemed cross-border relevant has to be specified.
3. Each TSO shall propose Remedial Actions deemed necessary for coordination, if any.
4. If an agreement is reached then the Remedial Action is defined as cross-border relevant; If a RA is not proposed as cross-border relevant by any TSO, it is considered as non-cross-border relevant.
5. If an agreement on a Remedial Action cannot be reached, then the quantitative approach is used to assess the cross-border relevance of this Remedial Action.

Article 11

Process for cross-border relevance assessment (quantitative approach)

1. Quantitative approach shall be used to assess cross-border relevance of Remedial Actions only if no agreement can be reached on the cross-border relevance assessment of these Remedial Actions using qualitative approach.
2. To assess the cross-border relevance of one Remedial Action quantitatively, the following process is defined:
 - a) Year-ahead CGMs developed in accordance with Article 67 of the SO Regulation shall be used for assessment;



- b) TSOs shall provide a list of elements on which the influence of the RA shall be assessed;
- c) The RSC calculates the influence of each Remedial Action on each element according to the Remedial Action influence factor defined in Article 15 of CSAm;
- d) For Remedial Actions that are quantifiable (e.g. PSTs, HVDC links or activation of redispatch and countertrading), the quantity above which this Remedial Action is deemed cross-border relevant has to be specified;
- e) TSOs shall consider as cross-border relevant all the Remedial Actions or sets of Remedial Actions for which the Remedial Action influence factor is higher than 5%.

Article 12

Frequency of update of the list of cross border relevant Remedial Actions

When there is a significant change on the grid or at least every 12 months, TSOs of GRIT Region will update the list of cross-border relevant Remedial Actions.

Chapter 3

Conditions of coordination of operational security assessment and analysis

Article 13

General principles

1. In accordance with Article 17 of the CSAm, RSC shall support TSOs of GRIT Region to manage in a coordinated way operational security violations on the network elements belonging to the ACI, considering all cross-border relevant remedial actions and taking into account the potential technical restrictions limiting the use of certain remedial actions.

Article 14

Day-ahead coordinated operational security assessment and preparation of RAs

1. In accordance with Article 78 of the SO Regulation and in line with the reference times and processes defined in Article 33(1) of the CSAm, each day the RSC shall run the day-ahead coordinated operational security assessment to check the security of the ACI with respect to the constraints defined under Article 4(1).
2. The RSC shall perform the day-ahead coordinated operational security assessment on ACI elements using the latest contingency list, the data listed in Article 6(3)(a) and Article 6(3)(b) and the CGM built in accordance with the CGM methodology developed in accordance with Article 67(1) and 70(1) of the SO Regulation (hereinafter referred to as "CGM methodology").
3. The day-ahead coordinated operational security assessment is performed by the RSC with the aim of:
 - a) Ensuring that, in accordance with Article 4, the operational security limits of all the network elements belonging to the ACI are respected according to the available CGM;
 - b) Selecting, in accordance with the GRIT RD and CT methodology, the set of cross-border relevant RAs which allow the achievement of point a) with the minimum cost.
4. Each day-ahead coordinated operational security assessment shall cover all the 24 hours of the day of delivery.



5. While the RSC performs the process referred to in Articles 33(1)(b) and 33(1)(e) of the CSAm, the following optimization process shall be followed for GRIT Region:
 - a) Costly and non-costly remedial actions are managed by a single optimization process with the aim to minimize the overall activation costs;
 - b) The process first selects the available non-costly RAs, in order to attempt to solve the constraints on all the network elements belonging to the ACI;
 - c) If these non-costly RAs alone are not sufficient to secure the grid, the process selects costly RAs in accordance with the GRIT RD and CT methodology.
6. TSOs of GRIT Region shall evaluate and decide whether to implement the recommended cross-border relevant RAs in accordance with Article 78(4) of SO Regulation.
7. Taking into account the provisions of Article 33(1)(c) and (g) of the CSAm, each TSO of GRIT Region shall implement all the agreed preventive RAs in its subsequent IGMs in accordance with the requirements of the methodology developed according to Article 70(1) of SO Regulation. The list of all agreed XRAs, both preventive and curative, shall be logged and made accessible to all TSOs and RSCs, in line with the objectives of Article 41 of the CSAm.

Article 15

Intraday coordinated regional operational security assessment and preparation of RAs

1. In accordance with Article 78 of the SO Regulation, each day the RSC shall run the intraday coordinated regional operational security assessment to check the security of the ACI with respect to the constraints defined under Article 4(1).
2. The RSC shall perform the intraday coordinated regional operational security assessment on ACI elements using the latest contingency list, the data listed in Article 6(3)(a) and Article 6(3)(b) and the CGM built in accordance with the CGM methodology.
3. The intraday coordinated regional operational security assessment is performed by the RSC with the aim of:
 - a) Ensuring that, in accordance with Article 4, the operational security limits of all the network elements belonging to the ACI are respected according to the available CGM;
 - b) Selecting, in accordance with the GRIT RD and CT methodology, the set of cross-border relevant RAs which allow the achievement of point a) with the minimum cost.
4. Each intraday coordinated regional operational security assessment shall start 45 minutes before the reference times referred to in Article 8(2) and cover at least the next eight hours of the day.
5. According to Article 33(3) of CSAm, when the RSC performs the intraday coordinated regional operational security assessment or TSOs perform coordinated operational security analyses, they shall take the cross-regional day-ahead coordinated operational security assessment's final outcomes and agreed RA as a reference basis, against which needed adaptations shall be assessed.
6. While performing the intraday coordinated regional operational security assessment, the RSC shall follow the following optimization process:
 - a) Costly and non-costly remedial actions are managed by a single optimization process with the aim to minimize the overall activation costs;



- b) The process first selects the available non-costly RAs in order to attempt to solve the constraints on all the network elements belonging to the ACI;
 - c) If these non-costly RAs alone are not sufficient to secure the grid, the process selects costly RAs in accordance with the GRIT RD and CT methodology.
7. TSOs of GRIT Region shall evaluate and decide whether to implement the cross-border relevant RAs recommended by the RSC in accordance with Article 78(4) of SO Regulation.
8. Each TSO shall implement all the agreed RAs in its IGM in accordance with the requirements of the methodology developed according to Article 70(1) of SO Regulation. The list of all agreed XRAs, both preventive and curative, shall be logged and made accessible to all TSOs and RSCs, in line with the objectives of Article 41 of the CSAm.

Article 16

Day-ahead and intraday security analysis on the ATI

1. The day-ahead and intraday security analyses and the selection and optimization of RAs in accordance with Article 21(1)(a) of SO Regulation aiming at contributing to relieve any constraint identified on the Italian network elements exclusively belonging to the ATI are performed by Terna since, according to Article 5, these elements are not deemed as XNEs and thus do not need to be managed in a coordinated way.
2. Terna will also perform day-ahead and intraday security analysis for the elements belonging to both ATI and ACI to check if potential constraints on these elements can be efficiently relieved without changing the transit on the HVDC between Italy and Greece, and thus without applying any coordinated process.
3. RAs shall be activated on ATI elements on the basis of the procedures currently used to operate the Italian electrical system; in particular the following optimization processes are run:
 - a) Terna monitors the security of the ATI and identifies the congested grid;
 - b) Terna identifies and applies its own available non-costly remedial actions for relieving or reducing congestions on the elements the ATI;
 - c) If RAs under point b) alone are not sufficient to secure the grid, the selection of costly remedial actions shall be performed with the objective to minimize the overall cost for the Italian system. The redispatching actions shall be activated by Terna following the process described in GRIT RD and CT methodology, which may perform a continuous real time redispatching via a SCOPF function which guarantees the security of the ATI at the minimum cost. When such a SCOPF is operating, regular intraday security analysis runs on the ATI in line with Article 8(1) are not necessary and may be performed by Terna only in exceptional cases.

Article 17

Activation of Remedial Actions

1. TSO of GRIT Region shall plan and activate the agreed cross-border relevant RAs in accordance with the provisions of Article 17(5) of the CSAm. In particular, for each hour, all the cross-border relevant Remedial Actions agreed among the relevant TSOs in accordance with Article 14(6) and Article 15(7) are considered the reference for the real time operations.
2. Each TSO of GRIT Region shall activate each of the RAs referred to in paragraph 1, unless:



- a) a RA is not anymore available for proven technical reasons (e.g. outage); or
 - b) a new set of RAs is agreed by the affected TSOs for a given time period according to the real time conditions of the network; or
 - c) it is applied a deviation from the set of RAs referred to in paragraph 1 which is not deemed as cross-border relevant according to the Remedial Actions cross-border relevance assessment described in Chapter 2, not requiring thus a new agreement between the affected parties.
3. In case one TSO detects and communicates that the new set of RAs referred to in paragraph 2(b) is not ensuring anymore the grid security, the set of RAs referred to in paragraph 1 shall be activated.

Article 18

Fast Activation process

1. In case of sudden critical situations (such as, but not limited to, an unplanned outage in real time or a relevant forecast error), that lead to overloads on ACI elements and requires fast actions, which cannot be effectively and promptly treated with the regular process described in Article 14 and Article 15, a Fast Activation process for coordinated cross-border remedial actions is adopted in order to cover the time horizon until the regular process can be applied effectively.
2. The fast activation process shall also be considered as a fallback where coordination through the RSC is no longer possible due to insufficient time and/or the regular processes cannot be properly applied (e.g. missing data, tools failure).
3. The Fast Activation process for coordinated cross-border remedial actions is activated by a TSO who identifies overloads on ACI elements during the real time security monitoring of its own grid in direct coordination with the other affected TSO.
4. Before activating the coordinated cross-border remedial actions with the Fast Activation process, the concerned TSO shall consider the available non-costly remedial actions for relieving or reducing congestions on the elements of the ACI.
5. After the available non-costly remedial actions have been considered, costly resources needed to be activated to relieve the remaining congestions on the elements of the ACI shall be selected.
6. Considering the application of this process should be very infrequent, being linked to extraordinary and unusual events, and that it must be characterized by fast activation and additional flexibility, a lower degree of optimization is accepted and the resources may be activated without considering their costs. The TSO activating the fast activation process shall provide the RSC with all the relevant information on which the decision was based. The RSC shall monitor occurrences of fast activation processes and the information provided by the relevant TSOs on those occurrences in relevant reports.
7. Remedial Actions agreed among affected TSOs during the fast activation process shall be considered as coordinated Remedial Actions and therefore shall be subject to cost sharing in accordance with the principles described in Article 19.



Chapter 4

Sharing of the costs

Article 19

Sharing of costs of coordinated Remedial Actions

1. Costs related to the activation of a RA or a set of RAs used to relieve a congested element belonging to the ACI shall be shared among the TSOs of GRIT Region according to the cost-sharing methodology developed under Article 74 of the CACM Regulation.
2. Costs related to the activation of a RA or a set of RAs used to relieve a congested element exclusively belonging to the ATI shall be borne by Terna.

TITLE 3

Appointment, governance and task allocation of the RSC

Chapter 5

Common provisions concerning the organisation of regional operational security coordination

Article 20

Appointment of the regional security coordinator in GRIT Region

1. All TSOs of GRIT Region appoint SEleNe CC S.A. (hereafter referred to as “SELENE”) as the regional security coordinator of GRIT Region that will perform the tasks listed in Article 22.

Article 21

General rules concerning the governance and operation of regional security coordinator

1. SELENE governance and decision-making process is regulated by the Articles of Association.
2. SELENE shall be a service provider for all TSOs of GRIT Region, providing at least the services related to the tasks defined under Article 22.
3. All TSOs of GRIT Region shall enter into an Operational Service Agreement (hereinafter referred to as “OSA”) with SELENE to define specific rules concerning the operation of the RSC.
4. The OSA shall set forth all rights and obligations of TSOs of GRIT Region and SELENE. The OSA shall comply with the rules set out in the GRIT ROSC methodology, without limitation to other arrangements which may be necessary. The OSA shall include at least the provisions related to the fulfilment of SELENE tasks in accordance with SO Regulation and as specified below concerning:
 - a) all matters regarding the Operational Procedures related to the functional requirements;
 - b) all matters regarding financial aspects related to the service delivered by the RSC, including the calculation and the validation of the fees to be paid by all shareholder TSOs for the RSC tasks;



- c) criteria for the setting up of business requirements and KPI on the service delivered by SELENE, which shall be approved by the TSOs;
 - d) regular reporting from SELENE to TSOs served by OSA, including the content and regularity of the reports.
5. Decisions regarding OSA shall be taken unanimously per bidding zone border by the concerned TSO(s). Where the decision of concerned TSOs can lead to significant risks for SELENE, the decision shall be taken by all TSOs belonging to the GRIT Region.
6. For the functions and tools, including those required for the exchange of relevant information identified in accordance with Article 6, all concerned TSOs shall:
 - a) decide on their development;
 - b) provide the needed budgets for their development and maintenance;
 - c) agree on the rules applicable for the management of the development and maintenance, including evolutions;
 - d) agree on the applicable process to select the hosting entities for their operation, notably in terms of competence and resources necessary to achieve the needed levels of reliability, confidentiality and security;
 - e) and agree on the characteristics of the service delivered by these functions and tools.
7. SELENE may incorporate subsidiary companies, acting as regional desks, in order to ensure the efficient and reliable operation of RSC tasks of sub-regional relevance related to shareholder TSOs' control areas. Subsidiaries shall take advantage of the local expertise needed to convey sub-regional specificities. Services performed for SELENE by the subsidiaries shall be regulated through an intercompany service agreement.
8. The security of supply remains the responsibility of each individual TSO according to national laws and regulations. The responsibility for secure system operation and any decision taken based on services from the RSC shall remain with the TSOs.
9. For the avoidance of doubt, OSA provisions do not replace any provision of national or European law that may apply to any of the TSOs. These provisions shall be complementary and interpreted in accordance with the applicable regulations. In case of contradictions between these provisions and the applicable laws and regulations, the former shall be amended accordingly.

Chapter 6

Tasks of regional security coordinator

Article 22

Delegation of tasks to regional security coordinator

1. In accordance with Article 77(3) of the SO Regulation all TSOs shall delegate at least the following tasks to SELENE for the GRIT Region related to TSO regional coordination in GRIT Region:
 - a) regional operational security coordination in accordance with Article 14 and Article 15 of the GRIT ROSC methodology;
 - b) building of common grid model in accordance with Article 79 of SO Regulation. Within ENTSO-E, TSOs will set-up a consistent and harmonized approach at pan-European



- level to ensure that the solutions implemented to build Common Grid Models and operated by RSCs will be compliant with the respective requirements set up in the relevant legislation in force, including Regulation (EU) 2019/943 (notably Article 37 and Annex I), SO Regulation (notably Article 79(5)), the CGM methodology and the CSAM , while ensuring reliability of the CGM delivery process and the aligned use of the resulting unique CGM;
- c) regional outage coordination in accordance with Article 80 of SO Regulation. The service is performed with the aid of an ENTSO-E centralized tool. SELENE shall coordinate outage plans, identify potential constraints and propose measures how to resolve them based on the inputs defined by TSOs;
 - d) regional adequacy assessment coordination in accordance with Article 81 of SO Regulation. The Service is performed with the aid of an ENTSO-E centralized tool. “SELENE shall manage the tool on a rotational basis with other RSCs and, in case of adequacy issues detected in the Region, shall activate procedures to reduce the risk of adequacy problems.
2. At the request of SELENE and in conformity with the intercompany agreements under Article 21(9), subsidiaries of SELENE may provide services related to the execution of tasks under paragraph 1 in the TSO control area where they are established.
 3. At the request of SELENE and in conformity with the intercompany agreements under Article 21(9), an Italian subsidiary of SELENE shall provide services related to coordinated security analysis and regional operational security coordination in Terna control area and specifically on the part of the GRIT Region related to Italian internal bidding zone border.

TITLE 4

Implementation

Article 23

Timescale for publication and implementation of the methodology

1. In accordance with Article 8(1) of the SO Regulation the TSOs of GRIT Region shall publish the GRIT ROSC methodology without undue delay after the approval by the NRAs of GRIT Region.
2. The GRIT ROSC methodology shall be implemented no later than 12 months after the following conditions are met:
 - a) the day ahead and intraday capacity calculation methodology for the GRIT Region developed under Article 21 of CACM Regulation is implemented;
 - b) Development, testing and implementation of the systems required to support the GRIT ROSC methodology is accomplished. This includes the software of the RSC to perform the activities and the communication channels among the RSC and the TSOs (data exchange).
3. A progress report is issued from SELENE to the TSOs served by OSA on the development, testing and implementation of the systems under Article 23(2)(b). Each TSO shall send the progress report to its NRA.



TITLE 5
Final provisions

Article 24
Language

The reference language for the GRIT ROSC methodology shall be English. For the avoidance of doubt, where TSOs need to translate this methodology into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 8(1) of the SO Regulation and any version in another language the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the methodology



Annex 1

The reference times for intraday timeframe shall be 00:00h, 08:00h and 16:00h.