Greece-Italy TSOs proposal for common provisions 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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TSOs of the Greece-Italy Region, taking into account the following:

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) This document, including its annexes, is a common proposal developed by all Transmission System Operators (hereafter referred to as "TSOs") of the Greece-Italy Capacity Calculation Region (hereafter referred to as "GRIT Region"), as 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"), for the methodology for regional operational security coordination (hereafter referred to as "GRIT ROSC methodology Proposal") inside the GRIT Region, required by Article 76(1) of the SO Regulation.

(3) This ROSC methodology Proposal takes into account the principles and goals set out in the SO Regulation, as well as those of the CACM Regulation, Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity (hereafter referred to as "Regulation (EC) No 714/2009"). Moreover, this ROSC methodology Proposal 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.

(4) In accordance with Article 76(1) of the SO Regulation, the ROSC methodology proposal "*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."

(5) In accordance with Article 77(1) of the SO Regulation, the ROSC methodology proposal "*shall also include common provisions concerning the organisation of regional operational security coordination, including at least:*

(b) the appointment of the regional security coordinator(s) that will perform the tasks in paragraph 3 for that capacity calculation region;

(c) rules concerning the governance and operation of regional security coordinator(s), ensuring equitable treatment of all member TSOs;

(d) 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."

(6) 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.

(7) This ROSC methodology Proposal 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.

(8) 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)"*

(9) 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.

(10) 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 no 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 this Proposal 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 ROSC methodology Proposal shall be subject to consultation for a duration of not less than one month. The GRIT ROSC methodology Proposal was consulted from 22/10/2019 until 24/11/2019. The TSOs of GRIT Region duly considered the views of stakeholders resulting from the public consultation prior to its submission for regulatory approval. To this end, a separate document has been created summarising the feedback received by the stakeholders and a sound justification for including or not including the views resulting from the consultation.

(11) 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 "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) 943/2019 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.

(12) Article 6(6) of the SO Regulation requires that the proposed timescale for the implementation and the expected impact of the GRIT ROSC methodology Proposal on the objectives of the SO Regulation shall be described. The timescale for implementation is detailed Article 23 of this ROSC methodology Proposal. The impact is presented below (point (13) of this Whereas Section).

(13) The goal of the SO Regulation is to safeguard operational security, frequency quality and the efficient use of the interconnected system and resources. The ROSC methodology Proposal 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 Proposal 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 proposal 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 Proposal 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 Proposal 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 Proposal 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 Proposal 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.

(14) In conclusion, this ROSC methodology proposal contributes to the general objectives of the SO Regulation.

SUBMIT THE FOLLOWING GRIT ROSC METHODOLOGY PROPOSAL TO THE NATIONAL REGULATORY AUTHORITIES OF THE GRIT REGION:

TITLE 1
General Provisions

Article 1
Subject matter and scope

1. The ROSC methodology as determined in this Proposal is the common proposal of all TSOs of the GRIT Region in accordance with Article 76 of the SO Regulation.
2. This Proposal shall cover the day-ahead and intraday regional operational security coordination within GRIT Region. This Proposal shall apply to all TSOs and RSCs within GRIT Region.

Article 2
Definitions and interpretation

2. For the purposes of this Proposal, 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) ‘Terna’ is the Italian Transmission System Operator;

b) ‘ADMIE’ is the Greek Transmission System Operator;

c) '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;

d) '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;

e) Remedial Action' or 'RA' means any measure applied by a TSO or several TSOs, manually or automatically, in order to maintain operational security.

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 this Proposal, 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 ROSC methodology Proposal;

c) References to an "Article" are, unless otherwise stated, references to an article of this ROSC methodology Proposal;

d) References to a "paragraph" are, unless otherwise stated, references to a paragraph included in the same article of this ROSC methodology Proposal 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 methodology for regional operational security coordination shall include actions of cross-border relevance.

2. The methodology for regional operational security coordination shall enable the RSC and all TSOs of the GRIT Region to 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 this methodology for regional operational security coordination 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 coordinated redispatching and countertrading methodology for Greece Italy Region (“Greece-Italy TSOs proposal for Coordinated Redispatching and Countertrading methodology in accordance with Article 35 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management”).

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.

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 will perform 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 GRIT Region areas of interest described under Article 3, network element belonging 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 CCR. They are thus excluded from the list of XNE, 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 XNEs consist, thus, in all the elements of the ACI as defined under Article 3(4)

Article 6

Procedure for exchanging the information between relevant TSOs and the RSC

1. TSOs of GRIT Region shall build their 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 network elements included in the ACI.

2. When there is a significant change on its grid, the relevant TSO of GRIT Region shall update their contingency list. In any case, TSOs of GRIT Region may review this list on a yearly basis and 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 to the RSC 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 RDCT 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) of this ROSC methodology.

Article 7

Creation of Individual Grid Models

1. For the day-ahead timeframe, each TSO shall build and deliver its IGM for 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 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 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;
4. If an agreement is reached then the Remedial Action is defined as cross-border relevant; If a RAs 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 appointed 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 commonly agreed 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 operational security violations in a coordinated way on ACI XNECs 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 appointed 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 appointed RSC shall perform the day-ahead coordinated operational security assessment using the data listed in Article 6 and the CGM built in accordance with the CGM methodology developed in accordance with Article 67(1) and 70(1) of the SO Regulation.
3. The day-ahead coordinated operational security assessment is performed by the appointed 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 appointed 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 appointed 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.
2. The appointed 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 developed in accordance with Article 67(1) and 70(1) of the SO Regulation.
3. The intraday coordinated regional operational security assessment is performed by the appointed 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) CSAm, when the appointed 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 appointed 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. In line with Article 5, 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 in the ATI are performed by Terna since ATI elements are not deemed as XNEs and thus do not need to be managed in a coordinated way.

2. 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 of 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 Security-Constrained Optimal Power Flow (SCOPF) function which guarantees the security of the ATI at the minimum cost. When such a continuous 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 market time unit, 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 will be 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 the regular processes could not be properly applied (e.g. missing data, tools failure).

3. The Fast Activation process for coordinated cross-border remedial actions would be 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. Costly RAs are applied if non-costly RAs are not sufficient to relieve congestions of elements belonging to the ACI and ATI.
2. Costs related to the activation of a RA or a set of RAs used to relieve a congested element belonging to the ACI and ATI shall be shared among the TSOs of GRIT Region according to the cost-sharing methodology developed under Article 74 of the CACM Regulation.

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

All TSOs of GRIT Region appoint XXX as the regional security coordinator of GRIT Region that will perform the tasks listed in Article 22 of this Proposal.

Article 21
General rules concerning the governance and operation of regional security coordinator

The rules concerning governance of RSC will be reported here: they will be defined once the RSC is identified.

Chapter 6
Tasks of regional security coordinator

Article 22
Delegation of tasks to regional security coordinator

1. TSOs of GRIT Region shall agree on delegation of tasks and responsibilities to the appointed RSC.
2. In accordance with Article 77(3) of the SO Regulation all TSOs shall delegate at least the following tasks to the appointed RSC for the GRIT CCR related to TSO regional coordination in GRIT Region:
   a) regional operational security coordination in accordance with Article 14 and Article 15;
   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;

d) regional adequacy assessment coordination in accordance with Article 81 of SO Regulation.

TITLE 4
Implementation

Article 23
Timescale for publication and implementation of the proposal

1. In accordance with Article 8(1) of the SO Regulation the TSOs of GRIT Region shall publish this ROSC methodology Proposal without undue delay after a decision has been taken by the NRAs of GRIT Region.
2. This ROSC methodology Proposal shall be implemented no later than 12 months after the following conditions are met:
   a) the DA and ID 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 this ROSC methodology Proposal 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 XXX to the NRAs and shareholder TSOs on the development, testing and implementation of the systems under Article 23(2)(b)

TITLE 5
Final provisions

Article 24
Language

The reference language for this ROSC methodology Proposal shall be English. For the avoidance of doubt, where TSOs need to translate this proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 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 proposal.

Annex 1

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