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Italy North 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

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TSOs of the Italy North Region taking into account the following:

### Whereas

- (1) Commission Regulation (EU) 2015/1222 establishes a guideline on capacity allocation and congestion management (hereinafter referred to as the “CACM Regulation”), which entered into force on 14 August 2015.
- (2) This document is a common proposal developed by all Transmission System Operators (hereafter referred to as “TSOs”) of the Italy North Capacity Calculation Region (hereafter referred to as “Italy North Region”), as defined in accordance with Article 15(1) of Regulation (EU) 2015/1222 on Capacity Allocation and Congestion Management (the “CACM Regulation”), for the methodology for Coordinated Redispatching and Countertrading (hereafter referred to as “Italy North RD and CT Methodology”). This proposal is required by Article 35(1) of the CACM Regulation.
- (3) This proposal takes into account the TSOs' proposal for a day-ahead and intraday capacity calculation methodology in accordance with Article 20 of the CACM Regulation. In addition, this proposal takes into account the effective structure of the grid and, in line with the TSOs' proposal for day-ahead and intraday capacity calculation methodology, it includes the border between Italy and Switzerland. Therefore, this proposal is developed by TSOs of the Italy North Capacity Calculation Region together with Swissgrid.
- (4) This proposal takes into account the general principles and goals set in Commission Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management (hereafter referred to as the “CACM Regulation”).
- (5) Article 35(1) of CACM Regulation requires the proposal on coordinated redispatching and countertrading shall be subject to consultation in accordance with Article 12. The Italy North RD and CT Methodology was consulted from 23/02/2018 until 23/03/2018 in accordance with Article 12 of CACM Regulation.
- (6) Article 9 (9) of the CACM Regulation requires that the proposed timescale for the implementation and the expected impact of the Italy North RD and CT Methodology Proposal on the objectives of the CACM Regulation is described. The impact is presented below (point (7) of this Whereas Section).
- (7) The Italy North RD and CT Methodology Proposal contributes to and does not in any way hinder the achievement of the objectives of Article 3 of the CACM Regulation:

Article 3 (a) of the CACM Regulation aims at promoting effective competition in the generation, trading and supply of electricity. The Italy North RD and CT Methodology Proposal serves the objective of promoting effective competition in the generation, trading and supply of electricity by defining a set of harmonized rules for effectively relieving physical congestion at the minimum cost.

Article 3 (b) of the CACM Regulation aims at ensuring optimal use of the transmission infrastructure. The Italy North RD and CT Methodology Proposal contributes to achieve the objective of ensuring optimal use of the transmission infrastructure by using last available inputs based on the best possible forecast of transmission systems and market results at the time the



security monitoring is performed for the detection of Coordinated Redispatching and Countertrading needs.

Article 3 (c) of the CACM Regulation aims at ensuring operational security. The Italy North RD and CT Methodology Proposal contributes to achieve the objective of ensuring operational security by coordinating the Redispatching and Countertrading at regional level to ensure its reliability and effectiveness for all the TSOs.

Article 3 (d) of the CACM Regulation aims at optimizing the calculation and allocation of cross-zonal capacity. The Italy North RD and CT Methodology Proposal contributes to achieve the objective by defining the rules for detecting and activating coordinated Redispatching and Countertrading contributing to ensure the availability and firmness of the capacity and by integrating the timings of the Coordinated Redispatching and Countertrading process into the timings of the Capacity Calculation process steps for different timeframes.

- (8) Coordinated Countertrading is by definition limited to relieve physical congestions by means of a cross zonal exchange initiated by system operators between two bidding zones. TSOs may also agree on other cross-zonal exchange procedure for reasons other than relieving physical congestions. Such arrangements are not within the scope of this RDCT Methodology Proposal.
- (9) The Redispatching and Countertrading Methodology Proposal shall also consider the requirements of Commission Regulation (EU) 2017/1485 establishing a guideline on System Operation (“ hereinafter referred to as “SO GL”) considering the interrelation with articles 75 and 76 of this Regulation.
- (10) In conclusion, the coordinated Redispatching and Countertrading Methodology Proposal contributes to the general objectives of the CACM Regulation.

**SUBMIT THE FOLLOWING COORDINATED REDISPATCHING AND COUNTERTRADING METHODOLOGY PROPOSAL TO THE NATIONAL REGULATORY AUTHORITIES OF THE REGION:**



## **Article 1**

### **Subject matter and scope**

The methodology for coordinated redispatching and countertrading as determined in this Proposal is the common proposal of all TSOs of the Italy North Region in accordance with Article 35 of the CACM Regulation. Considering the structure of the grid, and in line with the capacity calculation methodology defined for the same Capacity Calculation Region, also the border Italy North – Switzerland is included in the scope of this methodology. The participating TSOs to the coordinated redispatching and countertrading are therefore Terna (Italy), RTE (France), APG (Austria), ELES (Slovenia) and Swissgrid (Switzerland).

## **Article 2**

### **Definitions and interpretation**

1. For the purposes of the coordinated Redispatching and Countertrading methodology Proposal, the terms used shall have the meaning set forth in Article 2 of Regulation (EC) 714/2009, Article 2 of Regulation (EC) 543/2013, which amends the previous, Article 2 of Regulation (EC) 2015/1222 and Article 3 of SOGL.
2. In addition, the following definitions shall apply:
  - a) 'Terna' is the Italian Transmission System Operator;
  - b) 'RTE' is the French Transmission System Operator;
  - c) 'Swissgrid' is the Swiss Transmission System Operator;
  - d) 'APG' is the Austrian Transmission System Operator;
  - e) 'ELES' is the Slovenian Transmission System Operator;
  - f) 'Sensitivity of a critical network element to a resource' means the variation of the flow over one critical network element with a change of 1MW of resources activated.
3. In this coordinated redispatching and countertrading methodology Proposal, unless the context requires otherwise:
  - a) the singular indicates the plural and vice versa;
  - b) headings are inserted for convenience only and do not affect the interpretation of this proposal; and
  - c) 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.

## **Article 3**

### **Application of this proposal**

This proposal applies solely to the methodology for coordinated redispatching and countertrading within the Italy North Region.

## **Article 4**

### **Area of Common Interest (ACI) and definition of Cross-Border Relevance**

1. The methodology for coordinated redispatching and countertrading shall include actions of cross-border relevance.
2. An action of cross-border relevance or a cross-border relevant remedial action is a remedial action that relieves a congestion on a network element of cross-border relevance. A network element of cross-border relevance is a critical network element as defined in the North Italy Capacity Calculation



Methodologies. Other cross border impacting remedial actions will be coordinated according to the methodologies required by SOGL articles 75 and 76.

3. The methodology for coordinated redispatching and countertrading shall enable all TSOs of the Italy North capacity calculation region to effectively relieve physical congestion on the elements of cross border relevance of the region which constitute the Area of Common Interest (ACI), irrespective of whether the reasons for the physical congestion fall mainly outside their control area or not. The coordination of redispatching and countertrading for the elements which are not part of the ACI is going to be defined with methodologies to be defined according to SOGL.
4. In the scope of this methodology for coordinated redispatching and countertrading the extent of the Area of Common Interest is possibly reduced by evaluating the effect of redispatching and countertrading on all its elements. Elements not or lowly affected by redispatching and countertrading are removed from the ACI.
5. The influence of the application of countertrading and redispatching in one or more TSOs control areas is considered on all the flows of the elements of the ACI irrespective of whether they are inside or outside those TSOs control areas.

## **Article 5**

### **Resources for redispatching and countertrading**

1. Each TSO may redispatch all available generation units and loads in accordance with the appropriate mechanisms and agreements applicable to its control area, including interconnectors.
2. Each TSO shall define for each time-frame its resources available for redispatching and countertrading and their prices. The available volumes of a TSO shall not compromise the provision of ancillary services and not endanger the security of supply of its control area while maintaining its system in Normal state. The resources will be defined for two different services:
  - d) increasing the control area balance or nodal injection (e.g. increasing generation/decreasing load);
  - e) decreasing the control area balance or nodal injection (e.g. decreasing generation/increasing load).
3. Depending on the mechanisms and agreements applicable to its control area, each TSO shall provide the actual prices of the redispatching and countertrading resources available in its control area or the best estimation of the incurred costs calculated transparently.
4. As regarding redispatching, each TSO commits to activate localized units (generation/load).
5. As regarding countertrading, each TSO commits to activate resources for a total amount without any commitment on the localized units (generation/load) which will be activated according to the merit order and the mechanisms and agreements applicable to its control area.

## **Article 6**

### **Overall process for coordinated redispatching and countertrading**

1. The methodology for coordinated redispatching and countertrading shall enable all TSOs of the Italy North capacity calculation region to effectively relieve physical congestion on the elements of the Area of Common Interest (ACI), irrespective of whether the reasons for the physical congestion fall mainly outside their control area or not.
2. The coordinated redispatching and countertrading actions shall be decided after all other available and



effective non-costly actions (e.g. grid topology variations, coordinated use of PSTs) have been coordinated and if network elements within the ACI are still congested.

3. The coordination of remedial actions shall be harmonized and complemented in accordance with the methodologies of Articles 75 and 76 of SO GL. The impact of cross-border relevant remedial action on elements outside the Area of Common Interest and its coordination shall be assessed within the Coordinated Security Analysis Methodology in accordance with Articles 75 and 76 of SO GL.
4. TSOs shall provide information about their available non-costly actions for congestion relieving.
5. The coordinated redispatching and countertrading actions shall be activated after the following preliminary coordinated processes:
  - a) Coordinated security monitoring of the ACI performed by the RSC and identification of the congested grid element belonging to the ACI. This process shall be complemented and harmonized with the one to be defined in accordance with Articles 75 and 76 of SO GL;
  - b) Coordination of the available non-costly remedial actions for relieving or reducing congestions on the elements of the ACI with the support of the RSC. This process shall be complemented and harmonized with the one to be defined in accordance with Articles 75 and 76 of SO GL.
6. The selection of redispatching and countertrading resources shall be performed with the objective to minimize the overall estimated cost for the TSOs of the Italy North capacity calculation region. The estimated cost shall be calculated as the sum of the products of activated resources multiplied by their prices. The volume of each activated resource shall not exceed the volume available of that resource. The sum of all activated resources shall be zero (the system shall remain balanced). The activation of redispatching and countertrading resources shall lead to a situation where no element of the ACI is congested without raising overload in any other part of the system. This shall be achieved by evaluating the impact of activated resources for each element of the ACI as the sum of the products of the activated resources multiplied by the sensitivities of the element to the resources.
7. The redispatching and countertrading resources which have been decided by TSOs at the end of the coordination process shall be included in the common grid model as required by CGM methodologies for following coordinated security analysis.

## **Article 7**

### **Fast activation process for sudden critical situations**

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 at Article 6, a Fast Activation process for coordinated redispatching and countertrading will be adopted in order to cover the time horizon until the Regular process described at Article 6 can be applied effectively.
2. The Fast Activation process for coordinated redispatching and countertrading shall also be considered as a fallback where coordination through the RSC is no longer possible due to an insufficient time and in any case the Regular process described at Article 6 could not be properly applied (e.g. missing data, tools failure).
3. The Fast Activation process for coordinated redispatching and countertrading would be activated by one or more TSOs of the Italy North region who identify overloads on ACI elements during the security monitoring of their own grids which is regularly performed by TSOs in the framework of their operational activities and responsibilities.



4. Before activating the coordinated redispatching and countertrading with the Fast Activation process, the TSOs of the Italy North region shall coordinate the available non-costly remedial actions for relieving or reducing congestions on the elements of the ACI, without raising overload in any part of the system
5. After the available non-costly remedial actions have been considered, the redispatching and countertrading 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 the coordination and calculation of resources may be performed by a TSO instead of the RSC and it may be possible that not all remedial actions available are considered because there is not enough time to evaluate their impact. At least bilateral coordination and information to other TSOs shall be guaranteed, and mostly countertrading could be considered due to its flexibility.

### **Article 8**

#### **Timeframes for coordinated redispatching and countertrading application**

1. The methodology for coordinated redispatching and countertrading shall enable the TSOs to relieve physical congestion in all the time frames of the day of delivery.
2. The process for coordinated redispatching and countertrading shall start for each time frame of a day of delivery not before the day-ahead market results for that day are available and it is possible for the TSOs to forecast the physical congestions on the ACI elements.
3. The process for coordinated redispatching and countertrading shall be repeated where needed during the day of delivery, for the remaining time frames of the same day, when the intraday market results are available, and it is possible for the TSOs to forecast the physical congestions on the ACI elements.
4. Considering there may be inaccuracies in the congestion forecasts and that they should diminish getting closer to the real time they refer to, the TSOs of the Italy North region may decide to postpone the actual activation of the redispatching and countertrading resources, necessary to relieve physical congestion on the elements of the ACI in a time frame, when a subsequent process for coordinated redispatching and countertrading is foreseen for the same time frame.
5. All the time frames may be covered by the Fast activation process of Article 7 when the Regular process of Article 6 cannot be applied effectively.

### **Article 9**

#### **Total costs calculation**

1. The methodology for coordinated redispatching and countertrading minimize the total expected costs for physical congestion relieving on the elements of the ACI.
2. The total expected costs to be minimized shall be calculated based on the prices of the resources declared by the TSOs as defined in Article 5.
3. Considering the interrelation with articles 75 and 76 of SO GL which have the objective to coordinate and optimize resources within regions, the TSOs of the Italy North CCR shall harmonize the proposed methodology for Coordinated redispatching and countertrading with the methodologies to be defined in accordance to SO GL.
4. The actual total costs of the coordinated redispatching and countertrading shall be calculated based on the costs the TSOs of the Italy North region incurred at the activation of the actual resources.





## **Article 10**

### **Publication and Implementation of the coordinated redispatching and countertrading methodology Proposal**

1. The TSOs of Italy North region shall publish the coordinated redispatching and countertrading methodology without undue delay after relevant national regulatory authorities have approved the proposed coordinated redispatching and countertrading methodology or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 9 (10), Article 9 (11) and 9 (12) of the CACM Regulation.
2. The implementation of this RD and CT Methodology is subject to:
  - a) Regulatory approval of this RD and CT Methodology in accordance with Article 9 of the CACM Regulation;
  - b) Regulatory approval of Redispatching and Countertrading Cost Sharing Methodology required by Article 74 of the CACM Regulation in accordance with Article 9 of the CACM Regulation;
  - c) Regulatory approval of Common Coordinated Capacity Calculation Methodology required by Article 20 of the CACM Regulation in accordance with Article 9 of the CACM Regulation and its implementation;
  - d) Development of the systems required to support the RD and CT Methodology.
3. Considering the interrelation with articles 75 and 76 of SO GL, the TSOs of the Italy North CCR shall subject the implementation of this RD and CT Methodology to the approval of the methodologies according to articles 75 and 76 of SO GL and its implementations in order to have harmonized methodologies and processes.
4. The TSOs of Italy North region shall implement the proposed coordinated redispatching and countertrading methodology no later than 24 months after the conditions specified Article 10.2 and Article 10.3 are fulfilled and provide a more detailed description of the cost minimization algorithm within the first 12 months.

## **Article 11**

### **Language**

1. The reference language for this common capacity calculation Proposal shall be English.
2. For the avoidance of doubt, where TSOs need to translate this methodology Proposal for Coordinated Redispatching and Countertrading into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 9 (14) of the CACM Regulation and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of this Proposal for Coordinated Redispatching and Countertrading to their relevant national regulatory authorities.

## **Article 12**

### **Confidential treatment of information**

1. The information and data handled during RDCT process is sensitive and should on this basis be treated as confidential. As a result, all information gathered, analysis performed and other data available to the involved Parties are deemed confidential and shall be managed in accordance with article 13 of CACM and procedure to ensure its protection.
2. The information provided by generation units and loads or any other relevant costs for calculating the



countertrading cost shall be shared between the relevant TSOs for countertrading purposes only, including reporting and monitoring obligations defined within the methodology of Article 74.5 of CACM Regulation.

3. The parties will prepare ad hoc non-disclosure agreements.