# DECISION OF THE ITALY NORTH REGULATORY AUTHORITIES

# ON

THE D-2 AND INTRADAY COMMON CAPACITY
CALCULATION METHODOLOGY IN ACCORDANCE
WITH ARTICLE 21 OF COMMISSION REGULATION
2015/1222 OF 24 JULY 2015 ESTABLISHING A
GUIDELINE ON CAPACITY ALLOCATION AND
CONGESTION MANAGEMENT

24 July 2020

# I. Introduction and legal context

This document elaborates an agreement of the Italy North Regulatory Authorities (in the following: IN NRAs), agreed on 24 July 2020 at Italy North Energy Regulators' Regional forum, on the D-2 and intraday common capacity calculation methodology (in the following: IN CCM) submitted by the Italy North Transmission System Operators (in the following: IN TSOs) as required by Article 20 and in accordance with Article 21 of Commission Regulation 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management (in the following: CACM).

This agreement of the IN NRAs shall provide evidence that a decision on the IN CCM does not, at this stage, need to be adopted by ACER pursuant to Article 9(11) of CACM. It is intended to constitute the basis on which the IN NRAs will each subsequently issue a national decision to approve the IN CCM pursuant to Article 9(10) of CACM.

The legal provisions that lie at the basis of the IN CCM, and this IN NRAs agreement on the above mentioned methodology, can be found in Articles 3, 8, 9, 14, 20, 21, 22, 23, 24, 25, 26, 29, 30, 46 and 58 of CACM, in Article 5 of the Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (recast) (in the following: recast ACER Regulation) and in Article 16 of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on internal market for electricity (in the following: IME Regulation). They are set out here for reference.

#### **CACM**

#### **Article 3**

#### Objectives of capacity allocation and congestion management cooperation

This Regulation aims at:

- (a) Promoting effective competition in the generation, trading and supply of electricity;
- (b) Ensuring optimal use of the transmission infrastructure;
- (c) Ensuring operational security;
- (d) Optimising the calculation and allocation of cross-zonal capacity;
- (e) (...);
- (f) (...);
- (g) Contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union;
- (h) (...);
- (i) (...);
- (i) (...).

#### **Article 8**

#### TSOs' tasks related to single day-ahead and intraday coupling

- 1. In Member States electrically connected to another Member State all TSOs shall participate in the single day-ahead and intraday coupling.
- 2. TSOs shall:
  - [...]
  - (c) establish and perform capacity calculation in accordance with Articles 14 to 30;
  - [...]
  - (e) calculate and send cross zonal capacities and allocation constraints in accordance with Articles 46 and 58;
  - [...]

#### Adoption of terms and conditions or methodologies

- 1. TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to the competent regulatory authorities within the respective deadlines set out in this Regulation. Where a proposal for terms and conditions or methodologies pursuant to this Regulation needs to be developed and agreed by more than one TSO or NEMO, the participating TSOs and NEMOs shall closely cooperate. TSOs, with the assistance of ENTSO for Electricity, and all NEMOs shall regularly inform the competent regulatory authorities and the Agency about the progress of developing these terms and conditions or methodologies.
- 5. Each regulatory authority shall approve the terms and conditions or methodologies used to calculate or set out the single day-ahead and intraday coupling developed by TSOs and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 6, 7 and 8.
- 6. (...)
- 7. The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities of the concerned region:
  - a. the common capacity calculation methodology in accordance with Article 20(2); [...]
- 8. (...)
- 9. The proposal for terms and conditions or methodologies shall include a proposed timescale for their implementation and a description of their expected impact on the objectives of this Regulation. Proposals on terms and conditions or methodologies subject to the approval by several or all regulatory authorities shall be submitted to the Agency at the same time that they are submitted to regulatory authorities. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within three months on the proposals for terms and conditions or methodologies.
- 10. Where the approval of the terms and conditions or methodologies requires a decision by more than one regulatory authority, the competent regulatory authorities shall consult and closely cooperate and coordinate with each other in order reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, within six months following the receipt of the terms and conditions or methodologies by the regulatory authority or, where applicable, by the last regulatory authority concerned.
- 11. (...)
- 12. In the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions or methodologies within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraphs (6) and (7) within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009. If the relevant TSOs or NEMOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in paragraph 4 of this Article shall apply.

- 13. TSOs or NEMOs responsible for developing a proposal for terms and conditions or methodologies or regulatory authorities responsible for their adoption in accordance with paragraphs 6, 7 and 8, may request amendments of these terms and conditions or methodologies. The proposals for amendment to the terms and conditions or methodologies shall be submitted to consultation in accordance with the procedure set out in Article 12 and approved in accordance with the procedure set out in this Article.
- 14. TSOs and NEMOs responsible for establishing the terms and conditions or methodologies in accordance with this Regulation shall publish them on the internet after approval by the competent regulatory authorities or, if no such approval is required, after their establishment, except where such information is considered as confidential in accordance with Article 13.ù

#### Capacity calculation time-frames

- 1. All TSOs shall calculate cross-zonal capacity for at least the following time-frames:
  - (a) day-ahead, for the day-ahead market;
  - (b) intraday, for the intraday market.
- 2. For the day-ahead market time-frame, individual values for cross-zonal capacity for each day-ahead market time unit shall be calculated. For the intraday market time-frame, individual values for cross-zonal capacity for each remaining intraday market time unit shall be calculated.
- 3. For the day-ahead market time-frame, the capacity calculation shall be based on the latest available information. The information update for the day-ahead market time-frame shall not start before 15:00 market time two days before the day of delivery.
- 4. All TSOs in each capacity calculation region shall ensure that cross-zonal capacity is recalculated within the intraday market time-frame based on the latest available information. The frequency of this recalculation shall take into consideration efficiency and operational security.

#### Article 20

#### Introduction of flow-based capacity calculation methodology

- 1. For the day-ahead market time-frame and intraday market time-frame the approach used in the common capacity calculation methodologies shall be a flow-based approach, except where the requirement under paragraph 7 is met.
- 2. No later than 10 months after the approval of the proposal for a capacity calculation region in accordance with Article 15(1), all TSOs in each capacity calculation region shall submit a proposal for a common coordinated capacity calculation methodology within the respective region. The proposal shall be subject to consultation in accordance with Article 12. [...]
- 3. The TSOs from the capacity calculation region where Italy, as defined in point (c) of point 3.2 of Annex I to Regulation (EC) No 714/2009, is included, may extend the deadline without prejudice to the obligation in paragraph 1 for submitting the proposal for a common coordinated capacity calculation methodology using flow-based approach for the respective region pursuant to paragraph 2 up to six months after Switzerland joins the single day-ahead coupling. The proposal does not have to include bidding zone borders within Italy and between Italy and Greece.

### [...]

7. TSOs may jointly request the competent regulatory authorities to apply the coordinated net transmission capacity approach in regions and bidding zone borders other than those referred to in paragraphs 2 to 4, if the TSOs concerned are able to demonstrate that the application of the capacity calculation methodology using the flow-based approach would not yet be more efficient compared to the coordinated net transmission capacity approach and assuming the same level of operational security in the concerned region.

# Article 21 Capacity calculation methodology

- 1. The proposal for a common capacity calculation methodology for a capacity calculation region determined in accordance with Article 20(2) shall include at least the following items for each capacity calculation time-frame:
  - (a) methodologies for the calculation of the inputs to capacity calculation, which shall include the following parameters:
    - (i) a methodology for determining the reliability margin in accordance with Article 22;
    - (ii) the methodologies for determining operational security limits, contingencies relevant to capacity calculation and allocation constraints that may be applied in accordance with Article 23:
    - (iii) the methodology for determining the generation shift keys in accordance with Article 24:
    - (iv) the methodology for determining remedial actions to be considered in capacity calculation in accordance with Article 25.
  - (b) a detailed description of the capacity calculation approach which shall include the following:
    - (i) a mathematical description of the applied capacity calculation approach with different capacity calculation inputs;
    - (ii) rules for avoiding undue discrimination between internal and cross-zonal exchanges to ensure compliance with point 1.7 of Annex I to Regulation (EC) No 714/2009;
    - (iii) rules for taking into account, where appropriate, previously allocated cross-zonal capacity;
    - (iv) rules on the adjustment of power flows on critical network elements or of cross-zonal capacity due to remedial actions in accordance with Article 25;
    - (v) (...)
    - (vi) for the coordinated net transmission capacity approach, the rules for calculating crosszonal capacity, including the rules for efficiently sharing the power flow capabilities of critical network elements among different bidding zone borders;
    - (vii) (...)
  - (c) a methodology for the validation of cross-zonal capacity in accordance with Article 26.
- 2. For the intraday capacity calculation time-frame, the capacity calculation methodology shall also state the frequency at which capacity will be reassessed in accordance with Article 14(4), giving reasons for the chosen frequency.
- 3. The capacity calculation methodology shall include a fallback procedure for the case where the initial capacity calculation does not lead to any results.
- 4. [...]

## Reliability margin methodology

- 1. The proposal for a common capacity calculation methodology shall include a methodology to determine the reliability margin. The methodology to determine the reliability margin shall consist of two steps. First, the relevant TSOs shall estimate the probability distribution of deviations between the expected power flows at the time of the capacity calculation and realised power flows in real time. Second, the reliability margin shall be calculated by deriving a value from the probability distribution.
- 2. The methodology to determine the reliability margin shall set out the principles for calculating the probability distribution of the deviations between the expected power flows at the time of the capacity calculation and realised power flows in real time, and specify the uncertainties to be taken into account in the calculation. To determine those uncertainties, the methodology shall in particular take into account:
  - (a) unintended deviations of physical electricity flows within a market time unit caused by the adjustment of electricity flows within and between control areas, to maintain a constant frequency;

- (b) uncertainties which could affect capacity calculation and which could occur between the capacity calculation timeframe and real time, for the market time unit being considered.
- 3. In the methodology to determine the reliability margin, TSOs shall also set out common harmonised principles for deriving the reliability margin from the probability distribution.
- 4. On the basis of the methodology adopted in accordance with paragraph 1, TSOs shall determine the reliability margin respecting the operational security limits and taking into account uncertainties between the capacity calculation time-frame and real time, and the remedial actions available after capacity calculation.
- 5. For each capacity calculation time-frame, the TSOs concerned shall determine the reliability margin for critical network elements, where the flow-based approach is applied, and for cross-zonal capacity, where the coordinated net transmission capacity approach is applied.

### Methodologies for operational security limits, contingencies and allocation constraints

- 1. Each TSO shall respect the operational security limits and contingencies used in operational security analysis.
- 2. If the operational security limits and contingencies used in capacity calculation are not the same as those used in operational security analysis, TSOs shall describe in the proposal for the common capacity calculation methodology the particular method and criteria they have used to determine the operational security limits and contingencies used for capacity calculation.
- 3. If TSOs apply allocation constraints, they can only be determined using:
  - (a) constraints that are needed to maintain the transmission system within operational security limits and that cannot be transformed efficiently into maximum flows on critical network elements; or
  - (b) constraints intended to increase the economic surplus for single day-ahead or intraday coupling.

#### Article 24

#### Generation shift keys methodology

- 1. The proposal for a common capacity calculation methodology shall include a proposal for a methodology to determine a common generation shift key for each bidding zone and scenario developed in accordance with Article 18.
- 2. The generation shift keys shall represent the best forecast of the relation of a change in the net position of a bidding zone to a specific change of generation or load in the common grid model. That forecast shall notably take into account the information from the generation and load data provision methodology.

#### Article 25

#### Methodology for remedial actions in capacity calculation

- 1. Each TSO within each capacity calculation region shall individually define the available remedial actions to be taken into account in capacity calculation to meet the objectives of this Regulation.
- 2. Each TSO within each capacity calculation region shall coordinate with the other TSOs in that region the use of remedial actions to be taken into account in capacity calculation and their actual application in real time operation.
- To enable remedial actions to be taken into account in capacity calculation, all TSOs in each capacity calculation region shall agree on the use of remedial actions that require the action of more than one TSO.
- 4. Each TSO shall ensure that remedial actions are taken into account in capacity calculation under the condition that the available remedial actions remaining after calculation, taken together with the reliability margin referred to in Article 22, are sufficient to ensure operational security.
- 5. Each TSO shall take into account remedial actions without costs in capacity calculation.
- 6. Each TSO shall ensure that the remedial actions to be taken into account in capacity calculation are the same for all capacity calculation time-frames, taking into account their technical availabilities for each capacity calculation timeframe.

#### Cross-zonal capacity validation methodology

- 1. Each TSO shall validate and have the right to correct cross-zonal capacity relevant to the TSO's bidding zone borders or critical network elements provided by the coordinated capacity calculators in accordance with Articles 27 to 31.
- Where a coordinated net transmission capacity approach is applied, all TSOs in the capacity calculation region shall include in the capacity calculation methodology referred to in Article 21 a rule for splitting the correction of cross- zonal capacity between the different bidding zone borders.
- 3. Each TSO may reduce cross-zonal capacity during the validation of cross-zonal capacity referred to in paragraph 1 for reasons of operational security.
- 4. Each coordinated capacity calculator shall coordinate with the neighbouring coordinated capacity calculation and validation.
- 5. Each coordinated capacity calculator shall, every three months, report all reductions made during the validation of cross-zonal capacity in accordance with paragraph 3 to all regulatory authorities of the capacity calculation region. This report shall include the location and amount of any reduction in cross-zonal capacity and shall give reasons for the reductions.

[...]

#### Article 29

#### Regional calculation of cross-zonal capacity

[...]

- 8. Each coordinated capacity calculator applying the coordinated net transmission capacity approach shall:
  - (a) use the common grid model, generation shift keys and contingencies to calculate maximum power exchange on bidding zone borders, which shall equal the maximum calculated exchange between two bidding zones on either side of the bidding zone border respecting operational security limits;
  - (b) adjust maximum power exchange using remedial actions taken into account in capacity calculation in accordance with Article 25;
  - (c) adjust maximum power exchange, applying rules for avoiding undue discrimination between internal and cross-zonal exchanges in accordance with Article 21(1)(b)(ii);
  - (d) apply the rules set out in accordance with Article 21(1)(b)(vi) for efficiently sharing the power flow capabilities of critical network elements among different bidding zone borders;
  - (e) calculate cross-zonal capacity, which shall be equal to maximum power exchange adjusted for the reliability margin and previously allocated cross-zonal capacity

[...]

#### Article 30

#### Validation and delivery of cross-zonal capacity

- 1. Each TSO shall validate the results of the regional capacity calculation for its bidding zone borders or critical network elements, in accordance with Article 26.
- 2. (...)
- 3. Each coordinated capacity calculator shall provide the validated cross-zonal capacities and allocation constraints for the purposes of allocating capacity in accordance with Articles 46 and 58.

#### Article 46

#### Provision of input data

1. Each coordinated capacity calculator shall ensure that cross-zonal capacity and allocation constraints shall be provided to relevant NEMOs in time to ensure the publication of cross-zonal capacity and of allocation constraints to the market no later than 11.00 market time day-ahead.

[...]

#### Provision of input data

1. Each coordinated capacity calculator shall ensure that cross-zonal capacity and allocation constraints are provided to the relevant NEMOs no later than 15 minutes before the intraday cross-zonal gate opening time.

[...]

#### **Recast ACER Regulation**

#### Article 5

# Tasks of ACER as regards the development and implementation of network codes and guidelines

[...]

- 3. Where one of the following legal acts provides for the development of proposals for terms and conditions or methodologies for the implementation of network codes and guidelines which require the approval of all the regulatory authorities of the region concerned, those regulatory authorities shall agree unanimously on the common terms and conditions or methodologies to be approved by each of those regulatory authorities:
  - (a) a legislative act of the Union adopted under the ordinary legislative procedure;
  - (b) network codes and guidelines that were adopted before 4 July 2019 and subsequent revisions of those network codes and guidelines; or
  - (c) network codes and guidelines adopted as implementing acts pursuant to Article 5 of Regulation (EU) No 182/2011.

The proposals referred to in the first subparagraph shall be notified to ACER within one week of their submission to those regulatory authorities. The regulatory authorities may refer the proposals to ACER for approval pursuant to point (b) of the second subparagraph of Article 6(10) and shall do so pursuant to point (a) of the second subparagraph of Article 6(10) where there is no unanimous agreement as referred to in the first subparagraph.

The Director or the Board of Regulators, acting on its own initiative or on a proposal from one or more of its members, may require the regulatory authorities of the region concerned to refer the proposal to ACER for approval. Such a request shall be limited to cases in which the regionally agreed proposal would have a tangible impact on the internal energy market or on security of supply beyond the region.

[...]

6. Before approving the terms and conditions or methodologies referred to in paragraphs 2 and 3, the regulatory authorities, or, where competent, ACER, shall revise them where necessary, after consulting the ENTSO for Electricity, the ENTSO for Gas or the EU DSO entity, in order to ensure that they are in line with the purpose of the network code or guideline and contribute to market integration, non-discrimination, effective competition and the proper functioning of the market. ACER shall take a decision on the approval within the period specified in the relevant network codes and guidelines. That period shall begin on the day following that on which the proposal was referred to ACER.

#### **IME Regulation**

#### Article 16

#### General principles of capacity allocation and congestion management

3. Regional coordination centres shall carry out coordinated capacity calculation in accordance with paragraphs 4 and 8 of this Article, as provided for in point (a) of Article 37(1) and in Article 42(1). Regional coordination centres shall calculate cross-zonal capacities respecting operational security limits using data from transmission system operators including data on the technical availability of remedial actions, not including load shedding. Where regional coordination centres

conclude that those available remedial actions in the capacity calculation region or between capacity calculation regions are not sufficient to reach the linear trajectory pursuant to Article 15(2) or the minimum capacities provided for in paragraph 8 of this Article while respecting operational security limits, they may, as a measure of last resort, set out coordinated actions reducing the cross-zonal capacities accordingly. Transmission system operators may deviate from coordinated actions in respect of coordinated capacity calculation and coordinated security analysis only in accordance with Article 42(2). By 3 months after the entry into operation of the regional coordination centres pursuant to Article 35(2) of this Regulation and every three months thereafter, the regional coordination centres shall submit a report to the relevant regulatory authorities and to ACER on any reduction of capacity or deviation from coordinated actions pursuant to the second subparagraph and shall assess the incidences and make recommendations, if necessary, on how to avoid such deviations in the future. If ACER concludes that the prerequisites for a deviation pursuant to this paragraph are not fulfilled or are of a structural nature, ACER shall submit an opinion to the relevant regulatory authorities and to the Commission. The competent regulatory authorities shall take appropriate action against transmission system operators or regional coordination centres pursuant to Article 59 or 62 of Directive (EU) 2019/944 if the prerequisites for a deviation pursuant to this paragraph were not fulfilled. (...)

4. The maximum level of capacity of the interconnections and the transmission networks affected by cross-border capacity shall be made available to market participants complying with the safety standards of secure network operation. Counter-trading and redispatch, including cross-border redispatch, shall be used to maximise available capacities to reach the minimum capacity provided for in paragraph 8. A coordinated and non-discriminatory process for cross-border remedial actions shall be applied to enable such maximisation, following the implementation of a redispatching and counter-trading cost-sharing methodology.

*(…)* 

- 8. Transmission system operators shall not limit the volume of interconnection capacity to be made available to market participants as a means of solving congestion inside their own bidding zone or as a means of managing flows resulting from transactions internal to bidding zones. Without prejudice to the application of the derogations under paragraphs 3 and 9 of this Article and to the application of Article 15(2), this paragraph shall be considered to be complied with where the following minimum levels of available capacity for cross-zonal trade are reached:
  - a. for borders using a coordinated net transmission capacity approach, the minimum capacity shall be 70 % of the transmission capacity respecting operational security limits after deduction of contingencies, as determined in accordance with the capacity allocation and congestion management guideline adopted on the basis of Article 18(5) of Regulation (EC) No 714/2009:
  - b. for borders using a flow-based approach, the minimum capacity shall be a margin set in the capacity calculation process as available for flows induced by cross-zonal exchange. The margin shall be 70 % of the capacity respecting operational security limits of internal and cross-zonal critical network elements, taking into account contingencies, as determined in accordance with the capacity allocation and congestion management guideline adopted on the basis of Article 18(5) of Regulation (EC) No 714/2009. The total amount of 30 % can be used for the reliability margins, loop flows and internal flows on each critical network element.
- 9. At the request of the transmission system operators in a capacity calculation region, the relevant regulatory authorities may grant a derogation from paragraph 8 on foreseeable grounds where necessary for maintaining operational security. Such derogations, which shall not relate to the curtailment of capacities already allocated pursuant to paragraph 2, shall be granted for no more than one-year at a time, or, provided that the extent of the derogation decreases significantly after the first year, up to a maximum of two years. The extent of such derogations shall be strictly limited to what is necessary to maintain operational security and they shall avoid discrimination between internal and cross-zonal exchanges. Before granting a derogation, the relevant regulatory authority shall consult the regulatory authorities of other Member States forming part of the affected capacity calculation regions. Where a regulatory authority disagrees with the proposed derogation, ACER shall decide whether it should be granted pursuant to point (a) of

Article 6(10) of Regulation (EU) 2019/942. The justification and reasons for the derogation shall be published. Where a derogation is granted, the relevant transmission system operators shall develop and publish a methodology and projects that shall provide a long-term solution to the issue that the derogation seeks to address. The derogation shall expire when the time limit for the derogation is reached or when the solution is applied, whichever is earlier.

[...]

# II. The Italy North TSOs proposals

The IN CCM constitutes of two separate documents, one related to the D-2 common capacity calculation (relevant for day-ahead market) and the other to intraday capacity calculation.

Following an approval of the first release of IN CCM by IN NRAs on 25 October 2019, IN TSOs developed a second release of this methodology aimed to incorporate the provisions about the 70% requirements in accordance with Article 16 of IME Regulation and to improve the transparency of the process as recommended by IN NRAs while approving the first release.

The new release of both D-2 and intraday documents was consulted by the IN TSOs through the website of ENTSO-E for one month from 15 October 2019 to 17 November 2019, in line with Article 20 and Article 12 of CACM<sup>1</sup>. The proposals were received by the last Regulatory Authority of the Italy North Capacity Calculation Region on 24 January 2020. Article 9(10) of CACM requires IN NRAs to consult and closely cooperate and coordinate with each other in order to reach an agreement and take a decision within six months following receipt of submissions of the last Regulatory Authority concerned. A decision is therefore required by 24 July 2020.

The IN CCM is based on a Coordinated Net Transmission Capacity (in the following: CNTC) approach. With respect to the first release already approved by IN NRAs, this second proposal:

- a) includes the provisions to adjust the cross-zonal capacity according to the minimum level of capacity pursuant to Article 16 of IME Regulation;
- b) lists the data to be published by IN TSOs (e.g., flows, margins, detailed description of regional model, etc.) to ensure transparency of the capacity calculation process;
- c) introduces a consistency check between the capacity computed and allocated in the long-term timeframes:
- d) confirms that both a D-2 and an intraday computation processes are in place within Italy North CCR in accordance with the first release of IN CCM; the new provisions included in the second release will be implemented by complementing these existing processes;
- e) confirms that the intraday calculation of cross-zonal capacities for import to Italy North is run
  only for the early morning D recalculation: the recalculation in the afternoon of D-1 will be
  implemented in parallel with the intraday market model (continuous trading coupled with implicit
  auctions);
- f) confirms that some features for both D-2 and intraday processes will be implemented at a later stage: CNEC selection and reliability margin are expected by November 2020, while the export corner process (computation with some borders in import to Italy and some in export from Italy) by September 2020;
- g) confirms that the implementation of the allocation constraints within the market coupling algorithm depends on the approval of the specific request for change according to the algorithm management procedure;
- h) foresees the implementation of the adjustment of NTC values to comply with the 70% requirement by December 2020.

The proposals include a description of their expected impact on the objectives of CACM, in line with Article 9(9) of CACM.

<sup>&</sup>lt;sup>1</sup> The public consultations are available on the ENTSO-e website: https://consultations.entsoe.eu/markets/italy-north-tsos-proposal-on-the-da-ccm/ and https://consultations.entsoe.eu/markets/italy-north-tsos-proposal-on-the-id-ccm/

Moreover, the proposal includes a timeline for the submission of a flow-based approach, substantiating what was already provided in the first release.

Along with the second release of IN CCM, following a statement in the letter sent by European Commission to Acer on 16 July 2019 about the role of third countries in capacity calculation, IN TSOs submitted a draft of the contractual arrangements between IN TSOs and Swissgrid that acts as technical counterparty for a number of processes in Italy North CCR, including the capacity calculation itself.

# III. The Italy North Regulatory Authorities position

# NRAs recommendations in the approval paper

While approving the first release of the IN CCM, IN NRAs acknowledged that the 70% provisions pursuant to Article 16 of IME Regulation would be incorporated in the second release to be submitted by IN TSOs by November 2019.

In the position paper accompanying the approval last October, IN NRAs issued a number of recommendations to be taken into account in the future releases of the IN CCM:

- a) Restore the yearly review of the CNE list mentioned in the first drafts of the first release of the IN CCM and then deleted in the final version submitted for the approval;
- b) Delete the reference to allocation constraints in the capacity calculation process: this reference would be pertinent in case the allocation constraints remain modelled as computation constraints limiting the cross-zonal capacity offered to the market; with the introduction of these constraints in the Euphemia algorithm, the capacity calculation is no longer limited and thus the reference should be cancelled;
- c) Improve the level of transparency in the capacity calculation process, by making available yet in 2020 some general data (static grid model and CNEC list) and some specific data (CNECs considered in the capacity calculation process for each MTU, along with sensitivities to crosszonal exchanges, PTDF, flows and margin information, forecast information about load, generation and net positions, long-term nominations and adjustment to NTC due to the 70% requirement); IN NRAs were aware that some of these data were already available, but they included them in the list for sake of completeness and in order to harmonize the publication timings with all the other data;
- d) Foresee a publication of the specific data mentioned in letter c) in a quarterly report till 2020 and on a daily basis from 2021 allowing for data retrieval via an API (application program interface).

#### NRAs shadow opinion

During the public consultation on the second release of the IN CCM, IN NRAs issued a shadow opinion containing a number of suggestions and remarks.

IN TSOs should make it clear that the document is intended to be a second release of an already approved release, by mentioning the approval by IN NRAs and by aligning the implementation plan accordingly. References to IME Regulation should be included as well.

Moreover, IN NRAs reiterated the concepts of reviewing the CNE list and on transparency already highlighted while approving the first release and recommended to include a proper methodology to compute the MACZT according to Acer Recommendation 01/19 and a proper criteria to adjust the NTC in case 70% requirement is not matched: a reference to limiting CNECs and the application to the D-2 timeframe is acceptable at this stage, but a fallback process should be added in the intraday CCM to ensure that 70% is offered at least on intraday market, in case the requirement cannot be matched in the day ahead time frame.

#### NRAs position

IN NRAs welcome this second release of IN CCM and the fact that this methodology effectively includes the provisions about the monitoring of the 70% requirement and the adjustment to the NTC in case this requirement is not matched.

IN NRAs are nonetheless disappointed by the fact that IN TSOs didn't take into duly account all the remarks, suggestions and recommendations issued while approving the first release and in the shadow opinion on this second release.

IN CCM doesn't include some specific data about flows explicitly required by IN NRAs and doesn't foresee a publication via an API-based platform. The reference to allocation constraints in the capacity calculation process is still present and detailed provisions on how to comply with the 70% requirement in the intraday process are missing. Moreover, clear criteria on how to check the 70% requirement in case more limiting CNECs are identified<sup>2</sup> are not provided.

IN NRAs intend thus to exploit the provision included in Article 5(6) of recast Acer Regulation, about the duty for regulatory authorities to revise terms and conditions and methodologies where necessary, before approving them: according to IN NRAs a revision of the IN CCM proposal is needed in order to improve the transparency of the process and to describe how NTC can be adjusted in the intraday timeframe in case the 70% requirement is not complied with in the D-2 process. Moreover, a direct revision by IN NRAs is the most efficient way to proceed in this context, since issuing a standard RfA would delay the approval of the second release of the IN CCM by some months, resulting in a potential delay by IN TSOs in implementing the adjustment of NTC value.

#### NRAs amendments

IN NRAs include a number of amendments to both D-2 and intraday documents.

The main substantial modifications are:

- a) Changes to the implementation plan, foreseeing in the D-2 methodology the go-live of the potential new CNEC threshold by two months after the approval of IN CCM and allowing IN TSOs in both methodologies to change the timeline for the submission of a flow-based proposal, if necessary, provided the relevant reasons are given;
- b) Improvement of transparency provisions, by making available sensitivities used for CNEC selection, Flow reliability margin (FRM), Flow after long term nomination (FLTN), Remaining available margin (RAM), Adjustment for minimum RAM (AMR); IN NRAs are aware that some data are relevant only in a flow-based environment: these data shall be populated with null entry values till the implementation of a flow-based capacity calculation;
- c) Clarification of the role of the coordinated capacity calculator (i.e. the RCC according to Article 37 of the IME Regulation) with respect to the check of the availability of a proper level of remedial actions to ensure the 70% requirement;
- d) Deletion of the reference to allocation constraints in the capacity calculation process, since it is no longer needed because of the prospected implementation of such constraints in the Euphemia Algorithm; a temporary provision is introduced till this prospected implementation;
- e) Inclusion of the same provisions in the intraday methodology of the same provisions about the adjustment for the 70% requirement already included in the D-2 methodology;

Other elements that have been amended are:

- a) Rationalization of the document, by grouping all the reporting provisions in a specific article and all the further steps (e.g. improvements in reliability margin, CNEC threshold, allocation constraint and MNE concept) in the implementation plan; article 9 (validation) and 10 (capacity calculation process) are inverted and some duplicated paragraphs are merged to improve the overall understanding;
- b) Removal of the word proposal since the methodology is directly changed by the NRAs and can no longer be considered as a TSO proposal;

<sup>&</sup>lt;sup>2</sup> This may occur since TSOs identify limiting CNECs as the CNECs loaded at 99% at the end of the capacity calculation process.

- c) Addition of the reference to the already approved first release of the IN CCM and modification of the implementation plan dismissing all the steps already completed;
- d) Addition of the definition of the export corner calculation, along with some missing acronyms;
- e) Addition of a description of what is intended for available remedial actions, following a specific request by IN TSOs during the preliminary interactions.
- f) Improvement in the D-2 methodology of the wording for the consistency check of the NTC value with the capacity allocated in the long term timeframes;
- g) Addition of details about the publication of transparency data: 2020 quarterly report shall include also data about unconstrained (i.e. capacity not limited by allocation constraints) capacity; from 2021 a one centralized web-platform (e.g. JAO) based on API interaction shall be adopted;
- h) Provision in the D-2 methodology of a dedicated report on the consistency of the remedial actions across the different timeframes;
- i) Changes in the formula to compute the margin for each CNEC aimed to specify an index *i* related to the specific CNEC and to specify the splitting factor in coherence with the formula to compute ANTC; in case there are more limiting CNECs the adjustment should be made according to a specific guidance to be provided at a later stage.

The amendments were scrutinised by IN TSOs that provided the following suggestions:

- a) Changes aimed to improve the quality of the text and to add some clarifications; accepted in the final version;
- b) Clarification that the 70% requirement is ensured by remedial actions made available by IN TSOs; accepted in the final version;
- c) Addition of a new validation clause related to the new information about the effective availability of remedial actions; accepted in the final version;
- d) Postponement of the publication of the regional common grid model by six months after the approval (i.e. 24 January 2021); IN NRAs acknowledge the request, by postponing the publication till 31 December 2020;
- e) Clarification that data associated to margins and sensitivities will be provided only when adjustment for minimum capacity and CNEC selection are implemented; accepted in the final version:
- f) Usage of the original formula to compute the margin, without the index *i*; IN NRAs revert to the original formula without index *i*, but they keep the explication of the splitting factor.

IN TSOs provided also an update to the implementation plan to reflect the difficulties faced due to the outbreak of Covid 19 and further issues with external IT providers: in particular IN TSOs propose that the study about reliability margin and the export corner calculation should be postponed up to end 2021 (more than one year delay with respect to the original deadlines, set in November 2020 and in September 2020 respectively); CNEC selection is expected by end January 2021 (two months delay) and the minimum adjustment to cope with 70% requirement expected by Q1 2021 (three months delay).

IN NRAs are profoundly disappointed about the significant delays, particularly for export corner and reliability margin studies. A delay of 2-3 months is acceptable to take into account the impact of the pandemic outbreak, but a postponement of 12 months should have been announced in advance and not only close to the expected go-live date; furthermore, the new timeline should be assessed and discussed with the NRAs.

Consequently, IN NRAs are in a position to accept the original deadlines shifted by 3 months for the CNEC selection and the 70% target<sup>3</sup>. As far the implementation of the export corner calculation and the submission of the study on the reliability margin are concerned, IN TSOs shall reconsider their planning and complete both these tasks by 30/06/2021 at the latest. Any additional delay may trigger IN NRAs to adopt all the enforcement measures allowed by the national and European regulatory framework to ensure a full implementation of the IN CCM. Moreover, IN TSOs:

<sup>&</sup>lt;sup>3</sup> IN TSOs should nonetheless take into account that a derogation from 70% requirement will be nonetheless carefully assessed by the NRAs for 2021; IN TSOs are invited to submit their request in due time.

- a) asked for a guidance on the report about the consistency of the remedial actions across the different timeframes; IN NRAs are willing to provide such guidance and cooperate in detailing the terms of the report with IN TSOs after the approval;
- clarified that the publication of data via a centralized platform allowing API interaction starting from 2020 is subject to a feasibility analysis; IN NRAs respect IN TSOs internal procedures; however, the publication of data in a centralized platform allowing API interaction is of utmost importance for market transparency, and needs to be implemented within the deadline fixed in the methodology;
- recommended IN NRAs to provide a clear guidance on how to comply with the 70% target and to compute the additional NTC in case more limiting CNECs are identified; IN NRAs have this necessity clear in mind; the topic is still under discussion and a guidance will be sent to IN TSOs in due time;
- d) asked for more clarifications about which details about computation of the MACZT for non-limiting CNECs IN NRAs would like to receive in the periodic reports; IN NRAs precise that the formula already discussed with IN TSOs during the assessment of this IN CCM is enough.

#### Contractual arrangements with Swissgrid

IN NRAs deem it useful to further discussing the contractual arrangements with Swissgrid before issuing a positive opinion, above all since IN TSOs have recently provided an update of these arrangements.

For this reason, these arrangements are not approved along with this version of the CCM, but they will be evaluated at a later stage.

#### IV. Conclusions

IN NRAs have consulted, closely cooperated and coordinated to jointly agree that they amend and adopt the IN CCM submitted by IN TSOs pursuant to Articles 20 and 21 of CACM: the legal basis for the direct amendments by GRIT NRAs lies on Article 5(6) of recast ACER Regulation. IN NRAs must make their national decisions to adopt IN CCM, on the basis of this agreement.

Additionally to the content of the methodology itself, IN NRAs would like to address the following requests to IN TSOs:

- a) Italy North TSOs shall present the hypotheses and methodology that are being envisaged for the study on allocation constraints to IN NRAs by 02/11/2020;
- b) Italy North TSOs shall address in written form, before the end of 2020, the concerns raised by market participants via the *Market Parties Platform* in a letter from June 12<sup>th</sup>, 2020, about the concerns on the capacity curtailments on the Italian borders; the answers shall be discussed with IN NRAs before being sent;

Moreover, IN NRAs invite IN TSOs to create and organize a *Consultative Forum* open to all market participants, in which recent progress about developments and implementation having an impact in the Italy North CCR shall be shared with all the parties, as well as the way forward.

The organizational details of the *Forum* shall be presented to IN NRA by 30/09/2020 at the latest: market participants shall be entitled to ask questions, orally and freely, to IN TSOs and to IN NRAs; IN NRAs may request to add topics for discussion into the meeting's agenda; NEMOs active in any bidding zones relevant for of the Italy North CCR countries shall be able to attend. The Forum shall convene at least every six months: the date shall be announced at least 6 weeks in advance and shall be set in order to maximize the participation of IN TSOs and IN NRAs. A first meeting shall take place before 31/12/2020.