Derogation request of APG

from the obligation under Article 16(8) pursuant to Article 16(9) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity for the Capacity Calculation Region Core

Introduction

- (1) In accordance with Article 16(8) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity ("Regulation 2019/943") 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. The minimum levels of available capacity for crosszonal trade are reached:
 - 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. This is determined in accordance with the capacity allocation and congestion management guideline adopted on the basis of Article 18(5) of the Regulation 2009/714 (EC) 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 and repealing Regulation ("Regulation 2009/714").
 - for borders using a flow-based approach, the minimum capacity shall be a margin set in the capacity calculation process 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 the Regulation 2009/714.
- (2) However, in case a transmission system operator cannot comply with the minimum capacity of 70% to be made available to market participants due to operational security risks on foreseeable grounds, such transmission system operator may request from the relevant regulatory authorities a derogation from Article 16(8) of the Regulation 2019/943. 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. In absence of an unanimous decision by the regulatory authorities such decision is incumbent upon ACER.
- (3) ACER issued a Recommendation (No. 01/2019), published on 9 August 2019, describing a unified way on how to monitor the capacities made available to the market in relation to the 70% target for all considered timeframes and all coordination areas.
- (4) In accordance with the Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management ("CACM Regulation") and the Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation ("SOGL"), TSOs are required to develop and deliver the proposals on the methodologies in which the essential elements related to the coordinated capacity calculation and coordinated usage of non-costly and costly remedial actions are to be defined. The common flow-based day ahead capacity calculation and allocation within the Core Capacity Calculation Region ("CCR") went into operation with 9 July 2022 (first day of delivery), which can be seen as a major step towards the optimized and harmonised usage of the central European transmission systems. Nevertheless, the following methodologies, already submitted by Core TSOs, will not yet be (fully) implemented by the Beginning of 2023:
 - a. The Capacity Calculation Methodologies for the Core CCR as referred to in Article 21 of the CACM Regulation ("Core CCM").

- b. The Coordinated Redispatching and Countertrading Methodology for the Core CCR as referred to in Article 35 of the CACM Regulation ("CACM 35").
- c. The Redispatching and Countertrading Cost-Sharing Methodology for the Core CCR as referred to in Article 74 of the CACM Regulation ("CACM 74").
- d. The operational security coordination methodology for the Core CCR as referred to in Article 76 of the SOGL Regulation ("SOGL 76").
- (5) Austrian Power Grid AG (hereinafter referred to as "APG") is operating the Austrian transmission system for electricity and therefore ensuring the trans-regional national exchange of electricity as well as the exchange with neighbouring countries between generators and consumers. APG has been certified as Independent Transmission Operator on 12 March 2012.

Essentially, the present request refers to the obligation deriving from Article 16(8) of the Regulation 2019/943, which applies to APG in its role as transmission system operator from 01 January 2020.

- (6) As operational security would have been endangered, pursuant to Article 16 (9) of the Regulation 2019/943, APG filed a request for the grant of a derogation from the obligations laid down under Article 16 (8) of the Regulation 2019/943 in relation to the bidding zone borders AT/DE, AT/CZ, AT/HU and AT/SI for the years 2020, 2021 and 2022.
- (7) These derogation requests were approved by the Austrian national Regulatory Authority, E-Control. The positive decisions are linked to requirements regarding transparency and implementation of the measures and projects to be implemented to mitigate the foreseeable grounds of the derogation request. The current derogation is valid until the end of 31 December 2022, provided that the solutions and projects do not enable the requirements of Article 16 (8) of the Regulation 2019/943 to be achieved at an earlier point in time.
- (8) In December 2020, the Federal Minister of Climate Action decided to adopt an action plan¹ in accordance with Article 15 of the Regulation 2019/943, including a linear trajectory for the annual increase of the minimum capacity made available for cross-zonal trade until 31 December 2025.
- (9) With regard to the current status, APG is making efforts and has taken concrete measures to mitigate derogation grounds of the derogation according to point (7). In addition to the expansion of cross-border redispatch contracts (as stated in the mitigation measures of the derogation for the year 2020), major developments were made in capacity calculation tools (as stated in the mitigation measures of the derogation for the year 2021). With the go-live of the common flow-based day ahead capacity calculation in June 2022, the measures related to uncertainties were also partially adapted. According to current status, the mitigation of those reasons for derogation, which can only be remedied through international cooperation, will not be ready by the end of 2022 as key methodologies from CACM Regulation and SOGL Regulation (see point 4 above) will not be implemented until 31 December 2022 and APG therefore cannot rely on these methodologies per 1 January 2023.
- (10)Against this background and pursuant to Article 16 (9) of the Regulation 2019/943, APG files the present request for the grant of a derogation from the obligations laid down under Article 16 (8) of the Regulation 2019/943 in relation to the bidding zone borders AT/DE,

¹ https://www.bmk.gv.at/dam/jcr:bb4181fc-41cd-4c96-9f68-26350c69f712/Action_Plan_Austria.pdf

AT/CZ, AT/HU and AT/SI for the year 2023. This derogation is applied on the basis of the foreseeable grounds justified in the Article 3.

(11)The national regulatory authorities (hereinafter referred to as "NRAs") adopted on 29th June 2020 a common note, which gives a guidance for the TSOs on the necessary content of derogation requests in line with Article 16(9) of the Regulation 2019/943 as well as the assessment criteria. This request for derogation prepared by APG takes into account the requirements of the common NRAs' note.

Article 1 Subject Matter and Scope

- 1.1 APG requests a derogation from the implementation of the minimum margin available for cross-zonal trade as established in Article 16(8) and in accordance with Article 16(9) of the Regulation 2019/943 for a period of the year 2023 with regard to its Core bidding zone borders AT/DE, AT/CZ, AT/HU as well as AT/SI.
- 1.2 This request for derogation is based on foreseeable grounds for deviating from the 70% capacity criterion as established in Article 16(8) of Regulation 2019/943 respectively from the target capacity value according to the action plan as further described in Article 3, justifying the approval of a derogation. The foreseeable grounds would impact the operational security in case of non-consideration, while a minimum target capacity is to be achieved.

Article 2 Definitions and abbreviations

CC	Capacity Calculation
CCR	Capacity Calculation Region
CEP	Clean Energy Package
CGM	Common Grid Model
CNE(C)	Critical Network Element (with Contingency)
CWE	Central Western Europe
D-2	Two-Days Ahead
FB	Flow Based
FRM	Flow Reliability Margin
$LF_{accepted}$	Acceptable level of the loop flows
<i>LF_{calc}</i>	Calculated level of the loop flows
MACZT	Margin Available for Cross-Zonal Trade
MACZTmin	Relevant target capacity
minRAM	Minimum Remaining Available Margin
MNCC	Margin from Non-Coordinated Capacity Calculation
MCCC	Margin from Coordinated Capacity Calculation
MTU	Market Time Unit
PFC	Power Flow Colouring
PST	Phase-Shifting Transformer
RAM	Remaining Available Margin

Article 3 Foreseeable grounds impacting operational security

Acknowledging that key methodologies from the CACM and SOGL Regulations mentioned in the Introduction are still not implemented in the CCRs in which APG is actively involved as a member TSO, APG cannot count on them in relation to the assessment and fulfilment of the 70% capacity criterion, respectively a lower target capacity according to the national action plan as of 1 January 2023 (hereinafter "relevant target capacity" or " $MACZT_{min}$ ").

Based on this, the application of the minimum capacity in accordance with Article 16(8) of the Regulation 2019/943 respectively the target capacity according to the national action plan (for borders using a coordinated net transmission capacity and for borders using a flow-based approach) from 01 January 2023 on, endangers the operational security due to the foreseeable ground stated in Table 1, which is further elaborated in this Article. This foreseeable ground is relevant for all Austrian borders of the Core CCR (AT/CZ, AT/HU, AT/SI and AT/DE) if not explicitly specified otherwise.

No.	Description	
3.1	 Systemic issues Usage of CNEC capacity > threshold by loop flows and PST flows (lack of cross-CCR coordination), margin for uncoordinated transits and absence of consideration of 3rd country flows in the capacity calculation. 	

TABLE 1. LIST OF FORESEEABLE GROUNDS THAT ENDANGER THE OPERATIONAL SECURITY

As further elaborated in this Article all these arguments related to the request for derogation pursuant to Art 16(9) of the Regulation 2019/943 are foreseeable, they directly impact APG's operational processes and are of major importance for maintaining the operational security.

The scope in relation to foreseeable grounds has been further decreased in comparison with the previously approved derogations. With the go-live of the day ahead capacity calculation in Core in June 2022, the measures of the derogation for the year 2022 have been adapted to the new operational reality. As the borders AT/CZ, AT/HU, AT/SI and AT/DE have been integrated into the Core CCR, the size of coordination area has been enlarged and it lead to a partial reduction of uncertainties, which are to be covered over the margin for uncoordinated transit. This fact will be also reflected in the mitigations for 2023.

3.1 Systemic issues

According to the Regulation 2019/943, when applying a $MACZT_{min}$ of 70%, the total amount of 30% of capacity on each CNE can be used for the reliability margins, loop flows and internal flows.

Margin for uncoordinated transits (unreliable forecast)

For the determination of the capacities to be offered for the cross-zonal trade according to ACERs Recommendation (No. 1/2019), netting of flows outside of the coordination area (MNCCs) is envisaged. These MNCCs are to be calculated based on non-coordinated and non-harmonized forecasts. With the go-live of the flow-based day ahead capacity calculation in Core CCR (June 2022), the coordination area was notably enlarged, leading to a common net position forecast and a decreased number of external borders with schedules contributing to the MNCC in Core region. Still, the Austrian transmission grid, due to its position between two larger CCRs, is heavily affected by the exchanges outside the Core region (Italy North, Switzerland, Balkan), and therefore a distinct level of uncertainties remain. The situation for APG in this context differs from many other TSOs

located far away from the IN CCR and/or 3rd countries, and has to be respected in terms of uncertainty determination in the capacity calculation phase and consequently in its influence on network security. Neglecting these evident and foreseeable uncertainties can lead to high overloads and potentially to operational situations where the available remedial action portfolio (incl. redispatch) is insufficient. This would endanger the operational security severely.

Usage of CNECs capacity > threshold by loop or PST flows (lack of cross-CCR coordination)

Based on the calculations performed with historical data, the volume of loop flows and PST flows is sometimes very high on some CNECs. This inevitably leads to the fact that minimal margin available for cross-zonal trade cannot be fully given to the market without endangering network security, as a large amount of capacity is blocked by loop flows and PST flows. The reason for this can be found in the not yet implemented coordinated capacity calculation methods according to the CACM Regulation in the different CCRs (calculation of loop flows and its limitation is foreseen in the Core CCM), the pending implementation of proper methods for operational security coordination and the non-existence of adequate cross-CCR coordination, as for example between Core and Italy North CCR.

• Absence of consideration of 3rd country flows in the capacity calculation

According to the guidance given by EC in its letter from 16 July 2019, the consideration of the non-EU country flows in the capacity calculation and counting these flows towards the relevant target capacities should be possible on the condition that an agreement has been concluded by all TSOs of a CCR with TSO of the third country, approved by the respective NRAs. This agreement should be fully in line with EU capacity calculation principles and rules, and should cover at least:

- Consideration of internal third country constraints for intra-EU capacity calculation
- Consideration of EU internal constraints for capacity calculation on the border with third countries, and
- Cost-sharing of remedial actions

However, the physical flows caused by the 3rd countries are present on the CNECs and cannot be artificially neglected in the calculation process. It also needs to be pointed out that non-consideration of third country flows leads to a different treatment of the EU Members States TSOs with the regard to fulfilment of a relevant target capacity requirement, with a significant disadvantage for those with higher exposure to flows of 3rd countries.

As the cross-zonal capacities of APG are significantly influenced by the import/export of Switzerland, the consideration of these flows has significant influence on secure grid operation. With a focus on Switzerland, the methodological specifics and the governance for the inclusion are currently being investigated within the Core CCR in close coordination with the European Commission, ACER and the NRAs including the Swiss parties. Depending on the resulting solution a contractual framework is planned to be established. Nevertheless the timeline to fulfil all the preconditions related to the inclusion of third countries into the determination of MACZT stated above is very tight. Under consideration of the status and the remaining open issues, it is rather unlikely and not in the sphere of APG that an appropriate contractual framework can be concluded before 1 January 2023. In order to fulfil the relevant target capacity requirement without considering CH, APG would need to artificially increase available capacity/RAM on some CNECs. Based on analysis performed with historical data, some CNECs are highly influenced by third country flows. A further artificial increase of capacity/RAM would increase the risk for operational security risk and endanger the network security.

Foreseeable grounds stated in Article 3.1 clearly justify the necessity of the derogation from the implementation of the minimum margin available for cross-zonal trade as established in Article 16(8) and in accordance with Article 16(9) of the Regulation 2019/943 for maintaining security of supply.

Meanwhile and besides the demanding developments within Core, APG has made huge efforts and in advancing and implementing the mitigation measures from the approved derogations of the previous years. The processes and methods for mitigating the foreseeable grounds were published based on the decision of the national Regulatory Authority, E-Control and APG is making best efforts for their implementation. Besides that, progress reports were and will be provided to E-Control to ensure transparency on the progress of the developments.

Article 4 Mitigation measures

In order to be able to fulfil the capacity requirements of Art 16(8) of the Regulation 2019/943, respectively the target capacities according to the action plan, and to conclude with a reasonable certainty whether the cross-zonal capacities could meet those requirements, APG developed the necessary methods and concepts, as well as the necessary IT-tools as an interim step until the relevant key methodologies according to the CACM Regulation and the SOGL are implemented (see Introduction (4)).

In parallel, APG is intensively working together with the other Core TSOs to implement these relevant methodologies in line with the Regulation 2019/943. These methodologies are expected to be a major step towards an adequately coordinated capacity calculation in the highly meshed system of Continental Europe.

This article lists concrete steps and projects to mitigate the foreseeable ground for derogation as presented in Article 3.

4.1 Mitigation of systemic issues

The methodologies that provide an interim solution to the issues that the request for derogation addresses, are based on the concepts introduced with the ACER Recommendation No. 01/2019, and aim to fulfil the following equation in the capacity calculation phase:

$$MCCC(MTU) + MNCC(MTU) \ge MAZCT_{min}(MTU)$$

Where:

 $MAZCT_{min}$ is the minimum MACZT target level for a CNEC and MTU considering the relevant target capacity MCCC is the margin from coordinated capacity calculation

 $M \ensuremath{\textit{NCC}}$ is the margin from non-coordinated capacity calculation

This method takes the CGMs as basis for calculation and applies the general principles as follows:

- a) A margin to deal with the uncertainties related to the insufficiently coordinated forecast of transit flows is calculated and applied for the Austrian CNECs as described in 4.1.1
- b) After the initial load flow and power flow decomposition calculation, the loop flows are calculated and $MACZT_{min}$ is applied for the Austrian CNECs as described in 4.1.2. For the

avoidance of doubt, if the loop flows are below the acceptable level defined in paragraph f) of 4.1.2, the $MACZT_{min}$ will not be reduced due to the loop flows.

- c) During the validation phase, operational security limits are assessed. This implies the detection of congested grid elements and their relieving through the application of non-costly and costly remedial actions.
- d) As long as operational security limits of the transmission grid can be respected, the calculated $MACZT_{min}$ is provided to the day-ahead market. If operational security limits of the transmission system cannot be kept, the available cross-zonal capacity will be reduced to a level that respects these operational limits.
- e) The minimum capacity available for cross-zonal trade shall in any case respect the minimum values as defined in Article 6.

The approach used in this derogation request defines capacity calculation rules and includes, where needed, mathematical equations.

<u>4.1.1 Determination of margin for forecast error related to the non-coordinated transit flows</u> <u>calculation</u>

- The application of a capacity calculation process in line with Article 16(8) of the Regulation 2019/943 on relatively small coordination areas respectively on grid areas located at the edge of different coordination areas leads to large uncertainties, which cannot be covered with the low reliability margins.
- Due to the central location of APG's transmission system, high MNCC values as well as high 0 uncertainties in the determination of MNCC for the Austrian CNECs are the consequence. These uncertainties are partially decreased on some Austrian CNECs with the implementation of Core CCM, including the respectively coordinated and more reliable netposition or exchange forecast processes. Still, a distinct level of uncertainties remain, as the Austrian transmission grid (due to its position between two larger CCRs) is heavily affected by the exchanges outside the Core region (Italy North, Switzerland, Balkan). The situation for APG in this context differs from many other TSOs located far away from IN CCR and/or 3rd countries, and has to be respected in terms of uncertainty determination in the capacity calculation phase. Due to the high uncertainties and resulting forecast errors of non-coordinated transits, it is necessary to apply a dedicated margin for MNCC forecasting errors in order to ensure operational security. **Neglecting these evident and foreseeable** uncertainties can lead to high overloads and potentially to operational situations where the available remedial action portfolio (incl. redispatch) is insufficient. This would endanger the operational security severely. This MNCC margin, which is to be considered as a part of the MNCC, shall be included in the capacity calculation methodology. By taking this into account, MNCC shall be calculated as follows:

$$MNCC = MNCC_{CGM} + MNCC_{margin}$$

Where:

MNCC is the margin from non-coordinated capacity calculation

MNCC_{CGM} is the forecasted non-coordinated transit flow induced by cross-zonal exchanges outside of respective coordination area. The flow is calculated in the common Core capacity calculation tool using the best available forecast of the bidding zones net positions and by including exchanges between 3rd countries and EU countries, respectively between 3rd countries only (see Article 4.1.3).

MNCC_{margin} is the margin necessary to cover the uncertainties related to the forecasted non-coordinated transit flows induced by cross-zonal exchanges outside of the coordination area. The margin is given per CNEC and calculated using the probability distribution of deviations between the forecasted non-coordinated transit flows at the time of the capacity calculation and the realised non-coordinated transit flows. In the second step, the 90th percentiles of the probability distributions of all CNECs shall be calculated². This means that APG applies a risk level of 10% and thereby the margin values cover 90% of the historical forecast errors within the observation period.

4.1.2 Determination of acceptable level of loop flows

- a) This foreseeable ground for derogation cannot be solved solely by APG as the loop flows originate from external sources for which the volume over the Austrian CNECs cannot be influenced by APG. Furthermore, as the network of APG is located on the edge of two regions, the mutual influence of the different CCRs is especially visible on APG's CNECs and this requires close coordination and clear rules for network operation. This counts especially for the application of remedial actions (e.g. control of PSTs), where such rules are currently not in place, but are foreseen with the implementation of Articles 21 and 35 of the CACM Regulation as well as Articles 75 and 76 SOGL.
- b) Article 16(8) of the Regulation 2019/943 stipulates that 30% of Fmax of CNE under consideration of contingencies (CNEC) is to be used to accommodate loop flows, internal flows and transmission reliability margin. Due to the reasons stated in Article 3.1, it is necessary to establish an approach to calculate an acceptable level of loop flows.
- c) Loop flows are to be estimated during the capacity calculation process by using the CGM. In order to obtain the level of expected loop flows per CNEC, net positions of the different bidding zones in the CGM will be shifted to zero-balance:

$$F_{0,all} = F_{ref} - PTDF_{all}\overline{NP}_{ref,all}$$

Where:

 $F_{0,all}$ is the total flow per CNEC in situation without any commercial exchange between bidding zones

 F_{ref} is the flow per CNEC in CGM (with commercial exchanges)

- $\ensuremath{\textit{PTDF}_{all}}$ is the power transfer distribution factor matrix which contains all bidding zones and all CNECs
- $\overline{NP}_{ref,all}$ is the total net positions per bidding zone included in the CGM

This approach for the determination of the total loop flow, which represents a situation without any commercial exchange between bidding zones, is in line with the Article 17.3 of Core CCM.

d) In order to derive the loop flows per CNEC, the following decomposition methodology, also described in the approved RD&CT Cost-Sharing Methodology for the Core CCR, will be applied:

² In line with the flow reliability margin methodology prescribed in Article 8 of the Core CCM.

- a) Cross zonal CNECs: As there are no internal flows over a tie-line, there is no need to decompose flows any further as $F_{0,all}$ defines directly loop flows;
- b) Internal CNECs: a flow decomposition method is required to distinguish the internal flows from loop flows. The Power Flow Colouring (PFC) decomposition method³, which is based on a perfect-mixer principle and is consistent with the European zonal market model, will be used to allow for a complete partitioning of the power flow on each CNEC.
- e) For a given CNEC, LF_{calc} [%] is equal to the loop flow computed following paragraph d) of this Article divided by F_{max} , which is the maximum admissible power.
- f) The values determined according to point e) of this Article shall be compared with the threshold of acceptable level of the loop flows ($LF_{accepted}$ [%]), which is defined for the different types of network elements as follows:
 - a) For cross zonal CNECs, the acceptable level of the loop flows shall be:

 $LF_{accepted}$ [%] = 100% - FRM [%] - MAZCT_{min(before calculation of loop flows)} [%]

b) For internal CNECs, the maximal level of loop flows must be determined under the consideration of internal flows. Since internal lines are predominantly to be used for carrying internal flows, the maximal level of acceptable loop flows shall therefore be:

$$LF_{accepted} [\%] = \frac{1}{10} (100\% - FRM [\%] - MAZCT_{\min(before \ calculation \ of \ loop \ flows)} [\%])$$

As the loop flows constitute a part of Fmax margin of each CNEC, loop flows exceeding the $LF_{accepted}$ shall influence the $MAZCT_{min}$ value per MTU as follows:

 $MAZCT_{min} = MAZCT_{min (before calculation of loop flows)} - max(0; LF_{calc} - LF_{accepted})$

4.1.3 Consideration of flows of 3rd countries in the capacity calculation

- In order to properly consider the flows originating from 3rd countries, APG is actively involved in the Core CCR investigations and discussions on how to integrate 3rd countries in the relevant methodologies.
- With a focus on Switzerland these investigations and developments are currently done in close coordination with the European Commission, ACER and the NRAs.
- The governance and contractual framework is as well in concrete development in close coordination with the European Commission, ACER and the NRAs and planned to be concluded in 2023.
- Until then, the exchanges between 3rd countries and EU countries, respectively between 3rd countries only will be included in MNCC calculation (see Article 4.1.1).

³ Dusan Vlaisavljevic et al, "Power Flow Colouring: A Novel Power Flow Tracing Methodology Tailored for the European Zonal Electricity Market Design", Proceedings of IEEE ISGT Conference (Bucharest, October 2019)

Article 5 Extent and duration of the Derogation

- (1) APG requests the derogation for one year (starting from 1st of January 2023).
- (2) The extent of the actual request for derogation is decreased in relation to the previous derogations granted, and is adapted to the new situation since the go live of the common flow-based day ahead capacity calculation in Core (adaption of the mitigation measure regarding MNCC uncertainty of the derogation for 2022). The extent of the derogation for 2023 is covering systemic issues only (in accordance with article 4.1), which are not under the control of APG (loop flows, third country flows and security margin related to unscheduled transits), and as such, cannot be solely mitigated by APG.
- (3) This request is applicable for all the APG CNECs used in day ahead capacity calculation within the Core CCR.
- (4) In case that the technical grounds described in Article 3 of this derogation request cannot be fully tackled (either by APG or jointly within the Core CCR), before the expiry of the derogation period, APG might have to request a renewal of the derogation. If such a case should occur, APG will provide a detailed justification for a renewal of the derogation.

Article 6 Proportionality regarding maintaining the operational security

In light of the foreseeable grounds outlined in Article 3 (high loop flows, uncertainties regarding the forecast of non-coordinated transit flows as well as related to the consideration of 3rd country flows in the capacity calculation), it is not possible for APG to fulfil the relevant target capacity from 1 January 2023 at all hours, without endangering operational security.

Concerning the requirements of Art 16(8) of the Regulation 2019/943 and under consideration of the ACER Recommendation 01/2019, APG developed methods and IT-tools necessary for calculation and verification of cross-zonal capacities as an interim step until the relevant key methodologies according to the CACM Regulation and the SOGL are implemented.

Though this interim step does not provide for a solution for the remaining foreseeable grounds according to Article 3, these developments enable APG to evaluate the $MACZT_{min}$ at the stage of capacity calculation, which is a precondition to draw conclusions with reasonable certainty, whether the cross-zonal capacities meet the requirements of Art 16(8) of the Regulation 2019/943 under the respective framework conditions (e.g. MNCC uncertainties, level of loop and PST flows, 3^{rd} country flows).

APG shall make its best efforts to offer the following cross-zonal capacities in the day ahead capacity calculation:

- Per CNEC, a calculated minRAM necessary to fulfil the $MACZT_{min}$ criterion as described in Article 4.1.
- Per CNEC, a minimum value of 20% of Fmax for cross-zonal trades within the Core region.
- The currently applied process of the long-term capacity inclusion will be taken into account.

APG will report the achieved $MACZT_{min}$ to E-Control along with any deviation from the equations in this derogation and a justification why the deviation was required in order to respect operational security limits.

The scope of the derogation therefore does not go beyond what is necessary to maintain operational security, as set out in Article 3 and does not relate to curtailment of capacities already allocated (Article 8).

Article 7 Non-Discrimination

The proposed derogation aims at a $MACZT_{min}$ criterion implementation in a non-discriminatory manner. Any currently applicable methodologies with respect to the calculation of FB capacities or any future methodologies which still need to be developed, do and will not contain any measures resulting in a discrimination between internal and cross-zonal exchanges.

The methodological approaches described in Articles 4 and 6, aim at an increased transparency that undue discrimination between internal and cross-zonal exchanges is avoided and the relevant target capacities can be met as long as loop flows remain below an acceptable level (defined by threshold $LF_{accepted}$) and operational security can be guaranteed.

Article 8 No curtailment procedures of capacities already allocated pursuant to Art 16 Abs 2

The proposed derogation shall apply solely to the determination of capacities on all Core CCR borders of APG, which will be made available for cross-zonal exchanges. The derogation does not provide any grounds for the curtailing of any already allocated capacities. Curtailments of already allocated capacities remain subject to respective Network Codes/Guidelines.

Article 9 Request

For all the above mentioned reasons, and as previously mentioned in Article 1, APG, in accordance with Article 16 (9) of Regulation 2019/943 seeks to be granted a request for derogation from the obligations under Article 16 (8) of Regulation (EC) No 2019/943 with regard to the bidding zone borders AT/DE, AT/CZ, AT/HU and AT/SI for a period of one year (2023).