

Methods and projects to reduce the “*foreseeable grounds impacting operational security*”, listed in Article 3 of the derogation request for Core CCR of APG regarding the implementation of Article 16(8) (EU) 2019/943

1. Introduction

Pursuant to Article 16 (9) of the Regulation (EU) 2019/943, APG filed a request for the grant of a derogation from the obligations laid down under Article 16 (8) of the Regulation (EU) 2019/943 in relation to the bidding zone borders within the Core CCR (AT/DE, AT/CZ, AT/HU, AT/SI)¹.

The request for derogation was submitted to the National Regulator E-Control on 20 October 2020 and has been granted by Austrian Regulatory Authority E-Control on 21.12.2020². The derogation applies from 01 January 2021 to 31 December 2021, unless the methods and projects published by APG in this document (in accordance with obligation 1.1 of the E-Control decision) enable an earlier achievement of the requirements of Article 16 (8) of the Regulation (EU) 2019/943.

¹ <https://www.apg.at/api/sitecore/projectmedia/download?id=5bd3a33d-ac98-42fa-bae1-1afcd0034515>

² https://www.e-control.at/documents/1785851/0/V+ELBM+05_20_1+Bescheid+an+Power+Grid+AG+-+Austrian+Power+Grid+AG+%281%29.pdf/3d102b82-97e6-5240-41b3-80c3e33ce076?t=1611842978619

2. Overview on Work Packages

On the basis of Article 3 and Article 4 of APG's derogation, two (2) Work Packages have been defined to tackle the foreseeable grounds endangering operational security related to the 70% CEP target. In addition APG will ensure to be compliant with the relevant transparency requirements.

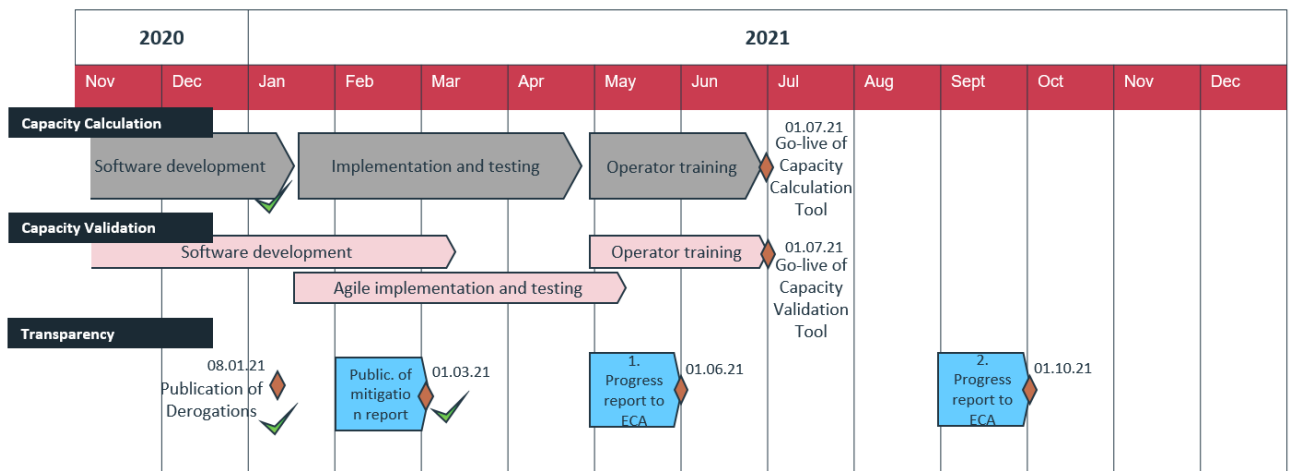
The following figure gives an overview of these working packages and their main contents. More information to the working packages can be found in Article 4 of this document.

Capacity Calculation	Capacity Validation	Transparency and Monitoring
Specification, tendering and development of new IT tools for the calculation of the "70% criterion" - compliant capacities for NTC and FB borders	Specification, tendering and development of a validation tool to verify the calculated capacities with regard to network security and to correct the capacities if necessary	Compliance with ECA requirements (publications and information) and preparation of requested data deliveries for monitoring by NRAs / ACER

It should be noted that APG cannot mitigate all the foreseeable grounds endangering operational security related to the 70% CEP target on its own, as some of these are depending on coordinated processes and concepts that need to be developed within the CCR (Capacity Calculation Region). For example, the currently ongoing development of a coordinated CT&RD (Countertrading & Redispatching) method as well as the development of a coordinated capacity calculation method for the CCR Core are heavily dependent on external factors. Also, the still open points regarding the consideration of (market) flows from third countries or the expansion of multinational coordination with regard to net position forecasts and the use of PSTs, have to be resolved jointly by all relevant parties.

3. Implementation Plan

The figure below shows the implementation plan for each working package. In Addition, the relevant milestones regarding the foreseen monitoring are as well included.



4. Description of Work Packages

WORK PACKAGE	CAPACITY CALCULATION	PLANNED COMPLETION	30.06.2021
---------------------	-----------------------------	---------------------------	-------------------

Description

The work package “Capacity Calculation” contains concrete steps, methods and tools to partially mitigate insufficient concepts and IT-tools for capacity calculation as well as uncertainties in the capacity calculation process related to non-existence of a common coordinated forecast process in Europe (foreseeable grounds stated in the Article 3.1 and Article 3.2 of derogation granted by E-Control on 21.12.2020).

For the determination of the Net Transfer Capacities (NTCs) at the AT/CZ, AT/HU and AT/SI borders, a capacity calculation methodology that considers the requirements of Article 16 (8) (EU) 2019/943 was developed. The methodology considers the ACER Recommendation on minimum margin available for cross-zonal trade (No. 01/2019), and also general concepts described in the APG derogations approved by E-Control. The goal of the methodology is the calculation of simultaneously feasible NTCs based on the forecasted network situation. The consideration of coordinated (MCCC) and non-coordinated capacities (MNCC) given in the ACER Recommendation 01/2019 is taken into account within this calculation method.

The tendering process was finalised in June 2020, the development of the new tool on the side of the external IT-provider in January 2021.

At current state, APG together with the IT-provider entered the testing phase of the new capacity calculation tool. The central location of the Austrian transmission system on the continent, between CWE and CEE region, leads to a high complexity and responsibility when it comes to the calculation of simultaneous feasible NTCs for all three borders AT/CZ, AT/HU and AT/SI, as well as minRAMs for CWE, especially under consideration of the challenging minimum capacity requirement. Therefore, APG currently allocates enough resources in the testing of the new functions as well as to ensure an intuitive and safe user experience for the operators.

After the testing, parametrisation and functionality evaluation, an operators training is foreseen. A safe commissioning of this tool is foreseen with the beginning of July 2021 at the latest, as already stated in the derogation.

The milestones listed below are best estimates, which are based on current knowledge and are also dependent on external parties (e.g. IT-vendors). Any changes to the milestones will be made available in the progress reports to E-Control.

Milestones	Planned Completion
Software development	Completed in January 2021
IT-implementation, testing and parametrisation	April 2021
Operator training	June 2021
Go live of Capacity Calculation Tool	July 2021

WORK PACKAGE	CAPACITY VALIDATION	PLANNED COMPLETION	30.06.2021
---------------------	----------------------------	---------------------------	-------------------

Description

The work package “Capacity Validation” contains concrete steps, methods and tools to partially mitigate insufficient concepts and IT-tools for capacity validation (foreseeable grounds stated in the Article 3.1 of derogation granted by E-Control on 21.12.2020).

In order to ensure grid security in every point in time, suitable and reliable methods, including respective software tools to validate the calculated capacities are of utmost importance. In case the grid security is endangered, NTCs or minRAM values have to be reduced accordingly.

After a first general assessment, APG has commissioned a qualified vendor in order to create an IT-tool for the purpose of NTC validation in October 2020. The tool combines the CWE flow based domain on the one hand with the NTC AT-SI/CZ/HU on the other hand. The resulting domain is then cross-checked for operational security, taking the RD potential in consideration.

After the ongoing development of the validation tool are finished, the tool needs to be integrated, properly tested and parameterized to ensure reliable functions. Training of operators staff within APG will take place before the operational go-live of the capacity validation process. This go live is foreseen, at the latest, with the beginning of July 2021, as already stated in the derogation.

The milestones listed below are best estimates, which are based on current knowledge and are also dependent on external parties (e.g. software vendors). Any changes to the milestones will be made available in the progress reports to E-Control.

Milestones	Planned Completion
Software development	March 2021
IT-Implementation and testing	May 2021
Operator training	June 2021
Go live of Capacity Validation Tool	July 2021

WORK PACKAGE	TRANSPARENCY	PLANNED COMPLETION	31.12.2021
---------------------	---------------------	---------------------------	-------------------

Description

In accordance with the positive decision of E-Control on the derogation request of APG, the following steps will be taken to ensure transparency:

Milestones	Planned Completion
Publication of derogations	Completed on 08.01.2021
Publication of projects and methods	Completed on 01.03.2021
First progress report to E-Control	01.06.2021
Second progress report to E-Control	01.10.2021