

Implementation network codes: status, feedback & next steps

25 March 2016 – UG Working Group Belgian Grid

Overview

1. Adoption of the network codes: status
2. Feedback from the Expert Groups “Implementation Network Codes”
3. Next steps with respect to the Expert Groups “Implementation Network Codes”
4. Inquiry for non-NC driven changes to the “Federal Grid Code”

+ Introduction to: Power Quality, Robustness & Fault Ride Through

+ 1st discussion on “Modernization of connection point”

1. Adoption of the network codes: status (status on 15/3/2016)

Network Code	Status	Best guess(!) for completing the process, i.e. "entry into force"
Market codes:		
Capacity Allocation and Congestion Management (CACM)	Entered into force	14/8/2015
Forward Capacity Allocation (FCA)	Approved in Comitology (30/10/2015)	August 2016
Electricity balancing (EB)	Recommended for adoption by ACER	Q1/Q2-2017
Connection codes:		
Requirements for generators (RfG)	Approved in Comitology (26/6/2015)	April 2016
Demand Connection Code (DCC)	Approved in Comitology (16/10/2015)	August 2016
HVDC (HVDC)	Approved in Comitology (11/9/2015)	August 2016
Operational codes:		
Operational Security (OS)	Comitology ongoing (aimed to end 4/5/2016)	November 2016
Operational Planning & Scheduling (OPS)		
Load Frequency Control & Reserve (LFCR)		
Emergency & Restoration (E&R)	Submitted to ACER for recommendation	Q1/Q2-2017

Merged in one code

2. Feedback EG “Implementation Network Codes”

Overall status

- **Expert Groups have continued their work, 3 EG meetings took place on 25/2/2016:**
 - “Significant Grid Users (1st iteration)”: closed, approval process for MoM ongoing
 - “Connection and compliance process”: closed, approval process for MoM ongoing
 - Reactive power management & voltage: started
- **Next meetings have been planned** according to a Doodle-poll among stakeholders
 - 26/4, 30/5, 7/6, 13/9 : see <http://www.elia.be/en/users-group/Implementation-EU-Network-Codes/Experts-Group-Implementation-nc/Agenda>
 - Following topics are currently foreseen:
 - Reactive power management & voltage
 - Robustness & Fault Ride Through
 - Power quality
 - Frequency stability & management
 - Short-circuit-power
 - Protection & control/connection
- As already mentioned previous WG Belgian Grid, **possibly one or two extra topics** (triggered by the operational codes) will be launched before summer (e.g. information exchange).

2. Feedback EG “Implementation Network Codes”

Feedback from the EG meetings on 25/2/2016

- **In general**
 - Wide representation from different stakeholders, incl. regulators.
 - Extra written inputs were received from stakeholders on the first iteration of SGU.
 - All presentations, inputs, approved MoM are available on the public website.
 - <http://www.elia.be/en/users-group/Implementation-EU-Network-Codes>
 - From a practical point of view, it was asked to provide more information on beforehand on which aspects will be covered during the different EG meetings.

2. Feedback EG “Implementation Network Codes”

Feedback from the EG meetings on 25/2/2016

- **Significant Grid Users**
 - Several **questions & issues** raised during previous meetings have been dealt with and discussed
 - Clarification of “Generation unit” and “storage system”
 - Description of “Power Generating Units” and difference with the existing “unité de production/productie-eenheid”
 - Coordination on the need for synthetic inertia
 - Elia presented **extra elements supporting the Elia-proposal for limits B-C and C-D.**
 - A **consolidation of the first iteration** was presented by Elia. This consolidation started from Elia’s initial proposal (and Synergrid’s proposal for limit A-B), which is now complemented with several issues raised by all stakeholders.
 - ➔ There is currently **no overall consensus** on the package for categories A-B-C-D. In particular, BGA has proposed a different set of limits to define categories A-B-C-D.
 - ➔ There appears to be **some consensus on some specific issues** and pragmatic interpretation of some aspects of the NCs. This certainly facilitates any further discussion.
 - ➔ However, the discussion allowed to clearly **identify which items are considered more constraining than others** and thereby provide more concrete input for the Expert Groups dealing with specific technical topics.
 - ➔ **Other stakeholder arguments** were raised which according to Elia could not directly be taken into account in the consolidation, but which should remain on the radar and should be kept in mind/tackled during the following technical Expert Groups

2. Feedback EG “Implementation Network Codes”

Feedback from the EG meetings on 25/2/2016

- **Connection & compliance process**
 - Elia replied to **questions** raised in the previous session (e.g. quid notification procedure for auxiliary loads?)
 - The procedure for “demand response services” was presented and discussed with a distinction for demand units $\leq 1000V$ and $>1000V$
 - ➔ The EG contributed to better framing the topic, discussing the overall philosophy for its implementation in Belgium and clarifying specific issues from the codes and dealing with specific stakeholder concerns.
 - ➔ The **overall philosophy of embedding the new requirements in the existing process** without overthrowing the existing process is generally supported. Although some aspects may require further detailing (e.g. duration of some periods), there are **no major elements of disagreement** left.

2. Feedback EG “Implementation Network Codes”

Feedback from the EG meetings on 25/2/2016

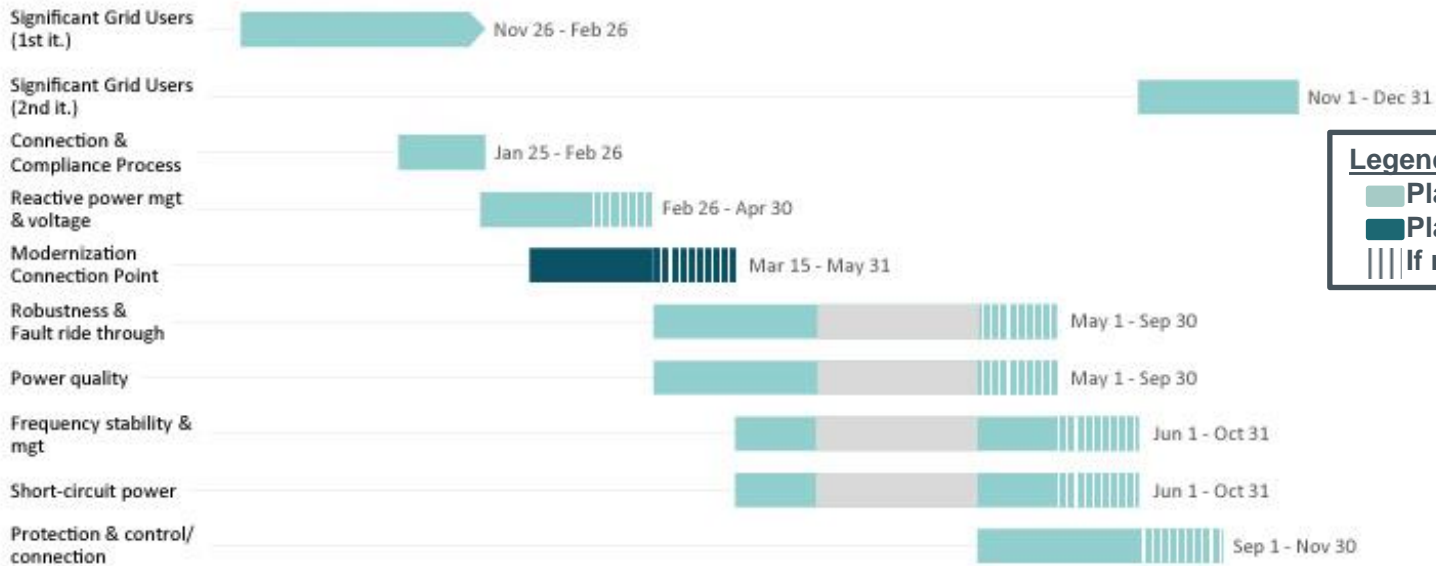
- **Reactive power management & voltage**
 - Elia sketched the **overall context** of reactive power management and the challenges ahead
 - Elia outlined the **approach** for the different sessions:
 - 1.Comparison between FTR-C10/11 and NC RfG + first interpretation + detection of possible quick wins
 - 2.See what additional possibilities this gives @ TSO-DSO level on short term and on long term
 - 3.Discussion of first results and on extra requirements for PGM owners (with FB on quick-wins), Demand facilities, Distribution System Operators (DSOs + CDSOs), Transmission System Operators (Next Experts Groups)
 - 4.How to use the available reactive capabilities to ensure secure operation
 - Discussion and proposal on requirements from RfG and DCC, including a conceptual proposal of “rotated diagram” for Type C
 - ➔ The first meeting served to **set the scene on this technical topic**. Discussions and questions also dealt with (very) technical aspects.
 - ➔ Next meetings will further explore the topic.
 - ➔ Goal remains to end with concrete proposals (incl. input for second iteration SGU)

3. Next steps Expert Groups “Implementation Network Codes”

Planning of content-discussion in the Users’ Group for connection code topics



Topic:



Legend:

- Planned EG
- Planned WG BG
- If needed

- Each topic is first 'high level' introduced in WG Belgian Grid prior to organising a dedicated Expert Group meeting
- Per topic, 1 Expert Group meeting per month during which the topic is being discussed
- Let's aim for 2 Expert Group meetings per topic, a third meeting is optional

4. Inquiry for non-NC driven changes to the “Federal Grid Code”

As already announced on UG Plenary of 2/7/2015, via the Users’ Group (in practice: WG Belgian Grid):

- Elia will facilitate the creation of an inventory of requests for amending the Federal Grid Code beyond the changes required by the NC implementation.
- Proposed end date for submitting “requests”: 31/5/2016 by e-mail to usersgroup@elia.be
- Unless mentioned explicitly, all received inputs are considered “non-confidential”.
- The inventory will be handed over to the FOD and in all transparency communicated the Users’ Group. FOD can then judge which request should be dealt with according to which priority, planning, etc.

4. Inquiry for non-NC driven changes to the “Federal Grid Code”

For each of your requests, ideas, ... we propose to use the following structure:

Short Name	Full description	Existing Article(s) in the FGC	Proposed type of change	Motivation/driver	Priority	Remarks
<i>A short name which could be used to easily refer to the idea</i>	<i>A description outlining the request, idea. This part describes from a “content” point of view what should be covered (or not) by the FGC and</i>	<i>Reference to the existing Federal Grid Code (as precise as possible). For new aspects, no reference is possible, but an indication on where it could be inserted (given the existing structure of the FGC).</i>	<i>Rewording, deleting, adding, generalizing, ...</i>	<i>Why do you consider this request important? What are the main arguments in favour of this request?</i>	<i>Is the proposed request nice-to-have, must-have, ...? Can this wait until a ‘main batch’ as foreseen in the context of the NCs (or even longer)?</i>	<i>Any other relevant piece of information you wish to share.</i>
Capacity reservation <i>Example</i>	A better alignment between the different steps in decision-making for realizing a project for a production unit and the commitments towards the connection of such production unit to the network are sought	Art. 98-113	<ul style="list-style-type: none"> • Rewording • Adding 	This idea is based on the experience gained with current legislation, from generators and transmission operator, and the industrial realities met by projects developers.	To be taken on board with a first wave.	Recommended by Users’ Group (to be re-confirmed)

4. Inquiry for non-NC driven changes to the “Federal Grid Code”

- Several ideas have already been mentioned in the past in different contexts, such as (*non-exhaustive list, only meant for illustration purposes*):
 - Capacity reservation process (cf. UG proposal)
 - Procurement of losses on the Federal Transmission Grid (Art. 161-162)
 - Embedding the concept of “shared connection” in the FGC
 - Embedding CDS-aspects in the FGC
 - Aspects linked to flexible access (reference to operational rules for shedding)
- Also Elia will list its ideas/requests and add them to the inventory.
- Request/Ideas can (at this stage) be (very) broad, but also very concrete. Overall, the goal at this stage is not to already look for concrete track changes, but rather to make an inventory which could later – after FOD has addressed the inventory – lead to a work plan.