

Implementation Network Codes

WG Belgian Grid
01 December 2017

Overview

- 1. Implementation Network Codes: status**
- 2. The further process on implementation NC**
- 3. Adaptation Federal Grid Code**
 - Preparation 3rd Workshop on 18/12 – Aspects of connection, DSO and HVDC

Implementation Network Codes: status

Status NC adoption – Summary

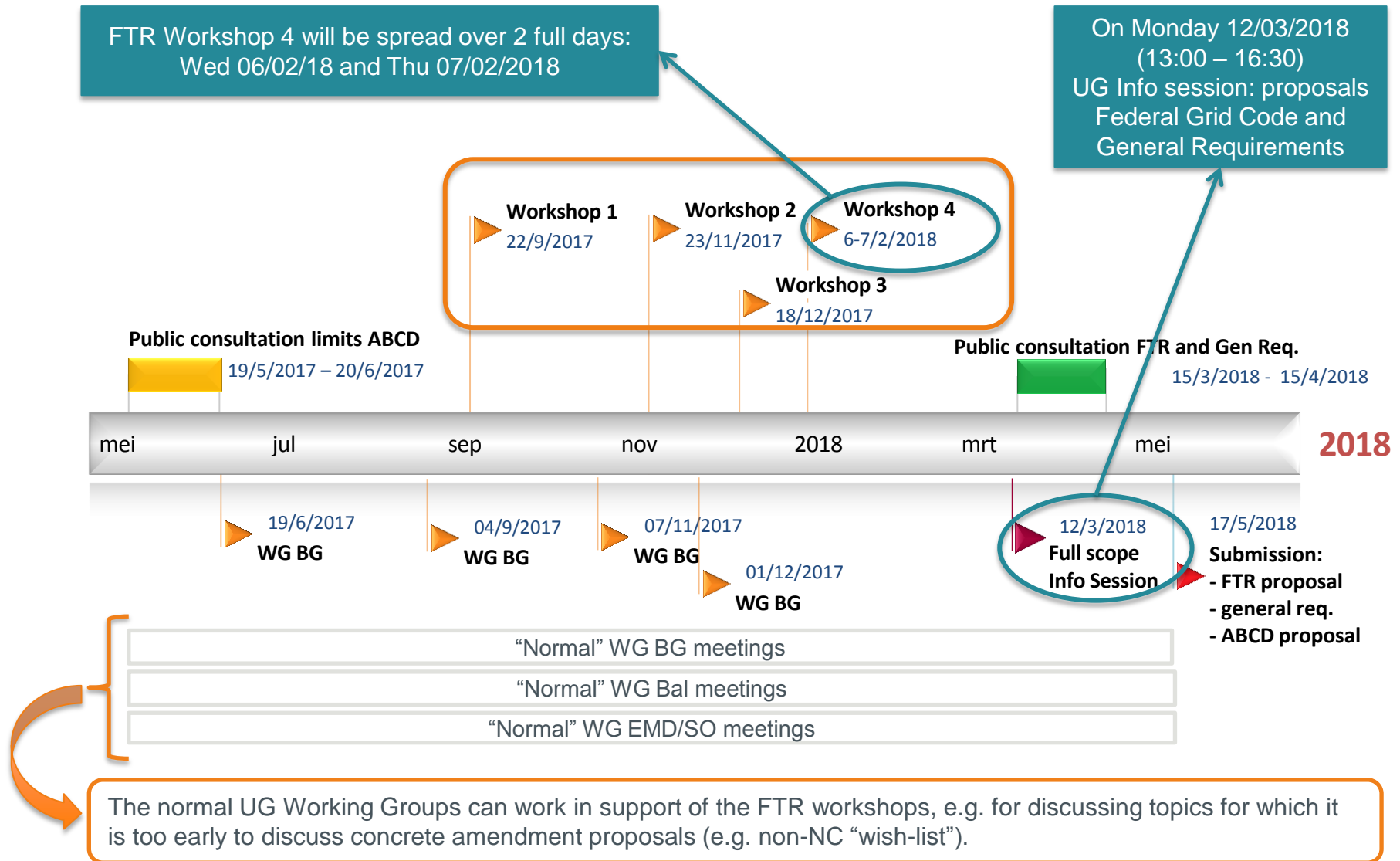
= changes since last WG Belgian Grid

| Network Code | Status | Best guess(!) for “entry into force” |
|--|--|--------------------------------------|
| Market codes: | | |
| Capacity Allocation and Congestion Management (CACM) | Entered into force | 14/08/2015 |
| Forward Capacity Allocation (FCA) | Entered into force | 16/10/2016 |
| Electricity balancing (EB) | Will enter into force (publication in Official Journal of the EU on 28/11/17) | 18/12/2017 |
| Connection codes: | | |
| Requirements for generators (RfG) | Entered into force | 17/05/2016 |
| Demand Connection Code (DCC) | Entered into force | 07/09/2016 |
| HVDC (HVDC) | Entered into force | 28/09/2016 |
| Operational codes: | | |
| Operational Security (OS) | Entered into force | 14/09/2017 |
| Operational Planning & Scheduling (OPS) | | |
| Load Frequency Control & Reserve (LFCR) | | |
| Emergency & Restoration (E&R) | Will enter into force (publication in Official Journal of the EU on 28/11/17) | 18/12/2017 |

Merged
in one
guideline

The further process on implementation NC

Planning and agenda workshops with focus on Federal Grid Code and general requirements



UG involvement: FTR workshops

| Workshop | Topics to be presented |
|---|--|
| <p>Workshop 3 18 Dec 2017</p> <p>09:00 – 17:00</p> <p>Royal Library</p> | <ol style="list-style-type: none"> 1. Feedback from previous workshops 2. Federal Grid Code, mainly on connection, DSO <ul style="list-style-type: none"> • Connection-related aspects (continued from workshop 1) • CDS (connection-related aspects) • Storage requirements • HVDC • DSO aspects • Ad hoc points 3. Technical discussion ‘general requirements’ <ul style="list-style-type: none"> • Presentation general requirements RfG, DCC and HVDC |
| <p>Workshop 4 6 & 7 Feb 2018</p> <p>09:00 – 17:00</p> <p>Royal Library (*)</p> | <ol style="list-style-type: none"> 1. Feedback from previous workshops 2. Track change proposals <ul style="list-style-type: none"> • Definitions (& generalities) • Metering • Market aspects: CIPU, Gflex, E&R • Ad hoc points 3. Technical discussion ‘general requirements’ <ul style="list-style-type: none"> • Presentation General Requirements RfG, DCC and HVDC |

(*) Location of the 1st day of the 4th Workshop (Royal Library) to be confirmed

Status General Requirements RfG, DCC and HVDC

| | NC RfG | NC DCC | NC HVDC |
|---|--|---|--|
| 1st Workshop 22/09/2017 | Presentation draft GR document | N/A | N/A |
| 2nd Workshop 23/11/2017 | Presentation update draft GR document | Presentation draft GR document | N/A |
| 3rd Workshop 18/12/2017 | Presentation update draft GR document | <i>Presentation update draft GR document (**)</i> | Presentation draft GR document |
| 4th Workshop 07/02/2018 | Presentation final (draft) GR document | Presentation final (draft) GR document | Presentation final (draft) GR document |

Detailed presentation
WG SO-EMD on 12/12

- Due to technical content, the **general requirements HVDC** will only high-level be presented in the 3rd Stakeholder workshop. The General Requirements HVDC will extensively be presented in the WG System Operations and European Market Design (WG SO-EMD) on 12th December.
- Other Network Code item on the agenda of the WG SO-EMD on 12th December is the proposed approach on **Emergency & Restoration**
- (**) due to the short time span between 2nd Workshop (23/11) and 3rd Workshop (18/12) no update on the proposal for General Requirements NC DCC will be presented in this 3rd Workshop

3. Non-NC driven changes to the Federal Grid Code

Status update work plan

Context:

- During 2016 a list priority topics was determined.
- Also, for each topic a timing and approach was determined

Which topics?:

- Next 2 slides repeat the topic list and indicate where further stakeholder input was asked.

Approach (taken):

- detailed scoping debates and/or exchange of positions (in WG Belgian Grid) before entering into re-drafting the grid code.
- Stakeholders and/or Elia are proposed to provide first inputs to the debate.
- Whenever a debate is already ongoing/foreseen, it is proposed to make the link with these debates

Status update work plan

| Topic | Forum | Approach | Starting ... |
|--|---|--|---|
| Definitions | WG Belgian Grid (unless specifically linked to other items dealt with in other WGs) | <ul style="list-style-type: none"> Start with definitions supporting the 'Significant Grid User'-debate and their links with existing definitions in the Federal Grid Code Discuss need and scope of items already proposed in the written contributions Call for more exhaustive inventory | Ongoing in FTR Workshops |
| CDS | WG Belgian Grid | Build on state-of-play/earlier reflections. Elia will provide a first proposal for discussion. | CLOSED |
| Capacity reservation | WG Belgian Grid | <ul style="list-style-type: none"> Present and check whether the proposal is still OK. Check whether it can already be introduced independent from NC-driven process changes | CLOSED |
| Grid Losses | WG Belgian Grid | Stakeholders are invited to present their vision and proposals | FEPEG presented on 21 April 2017 |
| Market roles & responsibilities & BRP | WG Belgian Grid | Scoping debate needed in WG BG to pinpoint which concrete aspects can be covered. All stakeholders are invited to further detail their ideas, focused on the Federal Grid Code. This topic should also cover BRP-aspects. | CLOSED in WG BG / Ongoing in FTR Workshops |
| Supplier | WG Belgian Grid | <ul style="list-style-type: none"> Stakeholders are asked to provide their more concrete ideas and suggestions. More generally, linked to market roles & definitions. | CLOSED |

Status update work plan

| Topic | Forum | Approach | Timing |
|-----------------------------------|------------------------------|---|---|
| Storage | WG Belgian Grid | <ul style="list-style-type: none"> Elia will facilitate a debate on the need to introduce storage connection requirements in the Federal Grid Code Stakeholders are invited to provide their input on the concrete needs for the Federal Grid Code related to storage | Presented today in WG Belgian Grid / FTR track changes will be discussed in WS 3 |
| Aspects linked to metering | WG Belgian Grid | Stakeholders are invited to further explain their views on how the FGC should evolve for this topic | Presentation WS 4 |
| Flexible Access & CIPU | WG Belgian Grid (/WG SO&EMD) | Regional evolutions to be taken into account and compatibility at federal level to be checked/discussed. To be discussed along/after the discussions already launched | Presented today in WG Belgian Grid / Discussed in TF iCAROS |
| AS (product design) | WG Balancing | Integration with overall Roadmap and NC requirements | To be linked to other debates |
| AS (market design) | WG Balancing | Integration with overall Roadmap and NC requirements | To be linked to other debates |

Preview 2nd Workshop Federal Grid Code and General Requirements

Planning communication of documents

3rd FTR Workshop

5

December

- Proposed **Federal Grid Code track changes (+ explanations)**
- Proposal **General Requirements NC HVDC and NC RfG**

11

December

- **Supporting presentations** Federal Grid Code track changes and General Requirements

18

December

- 3rd Stakeholder Workshop Federal Grid Code and General Requirements

| ◀ december 2017 ▶ | | | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

AOB

AOB

- Questions related to Network Codes implementation
- Comments on the Elia Federal Grid Code proposals (preferably also in track change format)
- Etc.

Can all be sent to:

networkcodes@elia.be