

Minutes of Meeting
ENTSO-E Drafting Team on DCC
DCC User Group

Date: 13 November 2012

Time: 13h00 – 17h00

Place: Lisbon

Participants

| Association | Representative | Organization |
|---|-----------------------|---------------------|
| ANEC/BEUC | - | - |
| CECED | Candice Richaud | CECED |
| CENELEC | - | - |
| EDSO-SG | Florian Chapalain | EDSO-SG |
| | Riccardo Lama | ENEL |
| EHPA | - | - |
| CEDEC Eurelectric DSO Geode EDSO4SG ¹ | Juan Gonzalez | Endesa |
| | Johan Lundqvist | Svensk Energi |
| | Marc Malbrancke | Inter-Regies |
| | Javier Meco | Endesa |
| | Herman Poelman | Alliander |
| | Pavla Mandatova | Eurelectric DSO |
| | Jacques Merley | ErDF |
| | Siegfried Wanzek | EON AG |
| Eurelectric WG Thermal / VGB Powertech | Philippe Lebreton | EdF |
| ESMIG | - | - |
| IFIEC | - | - |
| Orgalime | Sebastien Mathiou | Schneider Electric |
| SEDC | Ali Haider | SEDC |
| | | |
| ENTSO-E | Edwin Haesen | ENTSO-E |
| | Stephanie Bieth | RTE |
| | Mikko Koskinen | Fingrid |
| | Mark Norton | Eirgrid |
| | Adam Szekely | ENTSO-E |
| | Anders Danell | SvK |
| | Roberto Gnudi | Terna |
| | Kees Jansen | TenneT |
| | Joao Moreira | REN |
| | Juergen Schmitt | swissgrid |
| | Dwayne Shann | National Grid |
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¹ The four DSO associations are referred as throughout the document as DSO TEG (Technical Expert Group)

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|------|--------------|------|
| NRAs | Sergio Faias | ERSE |
| | Jose Capelo | ERSE |
| EC | - | - |

1. Attendance and agenda

All participants are thanked for their interest and availability to participate in this last scheduled DCC User Group meeting.

Some members excused themselves for not being able to attend:

- IFIEC could not attend but appreciated the improvements in the draft code.
- CENELEC could not attend. ENTSO-E sent an invite for a bilateral meeting in the context of the Mandate 490 status
- BEUC could not attend and indicated they will not take a formal position on the DCC. Nevertheless, they wish to remain informed of the ongoing process.
- EHPA could not attend, but noted the link with their own ongoing work on demand response functionalities for heat pumps

ACER/NRAs are represented by Sergio Faias and Jose Copelo of the Portuguese NRA (ERSE). The EC was invited but could not attend in this meeting. ENTSO-E notes that there have been several constructive meetings with ACER/NRAs and EC in the last weeks on the topic of the DCC and DSR in specific.

Material sent in advance of the meeting by ENTSO-E (all dated 6 November 2012):

- Draft Demand Connection Code – based on assessment of all consultation feedback
- Frequently Asked Questions
- Evaluation of Comments
- DCC Justification Outlines

The objective of this meeting is to capture the view of the User Group on the present status of the DCC and its supporting documents.

2. Walk-through of the draft DCC and changes post-consultation

The draft code is discussed page by page. The following observations are made:

On Article 2 (Definitions):

- The DSO TEG prefers to not refer to definitions in other codes, but to maintain all definitions in the code or in a separate document.
- The DSO TEG asks why Compliance Testing refers to distribution networks and distribution network connections, while for other demand only the entire demand facility is referred to. ENTSO-E indicates that this is consistent with the formulation of DCC requirements where some focus on the entire distribution network (e.g. frequency ranges), while some focus on the connection only (e.g. reactive power exchange); for demand always the entire facility is indicated.
- The DSO TEG comments on the application of storage, and asks why pumped storage is not included in the DCC. Eurelectric/VGB states it fully agrees with the present wording that excludes pumped hydro from DCC and lets only NC RfG apply. Battery storage is not excluded from DCC to which the DSO TEG agrees. ENTSO-E concludes there is no need for change in wording.
- The DSO TEG notes that it agrees with the deletion of the term 'Distribution Asset Owner', and that the DCC refers to the Distribution Network Operator only.

On Article 3 – 8:

- These Articles have been restructured for improved understanding. ENTSO-E notes that in earlier stakeholder interactions often the request was made to have a clear overview of which Article/Paragraph applies to whom. To clarify this, Art 4 lists all grid users addressed throughout the document. A full table of users versus articles is provided in the FAQ document.
- The DSO TEG notes that Article 1 and 3 need to be read together for a proper understanding.
- The User Group indicates that Article 8 needs to be elaborated.
- ENTSO-E notes that the order of Articles 3 to 8 may also still be changed, as well as the wording in the list of grid users addressed in Article 4 with the aim to improve clarity further.

On Article 10 (Recovery of Costs)

- The DSO TEG notes that a similar clause was proposed to be removed in the NC RfG in ACER's Opinion of 13 October 2012. The DSO TEG stresses its support to keep this clause in connection network codes to enable network operators to fully implement the codes.

On Article 13 (General Frequency Requirements)

- ENTSO-E notes that the application of the requirements has been shifted from all grid users to Transmission Connected Demand Facilities, Distribution Networks and all grid users (Demand Facilities and Distribution Networks) providing DSR.
- The DSO TEG questions the consistency of the ranges with present practices. ENTSO-E summarizes the arguments which are also extensively described in the supporting DCC documents:
 - Distribution Networks need to ensure that embedded generation for which NC RfG prescribes withstand capabilities, are designed for the same ranges.
 - Comparisons with existing standards on frequency ranges for demand and present practices across Europe are given in the FAQs
 - The DCC Call for Stakeholder Input (April 2012) asked for cost implications of these ranges on demand.
- The DSO TEG asks how these ranges relate to the system defence plan and the LFDD capabilities of Article 20. ENTSO-E notes that the implementation of defence plan measures may change over time. As such Article 13 is not redundant. In addition, it is again stressed that in DCC, the frequency range requirement is a design requirement (allowing a safe disconnection by the user), not a withstand capability (as for generators in NC RfG). Only for users providing DSR, the DCC asks for a withstand capability.

On Article 13 (General Voltage Requirements)

- The DSO TEG questions the consistency of the ranges with present practices. ENTSO-E again refers to the supporting documents, the link with NC RfG and the request for cost implications in the DCC Call for Stakeholder Input.

On Article 19 (Development, Modernization, Replacement of Equipment)

- The DSO TEG asks that a CBA and a full procedure (equivalent to that of retrospective application) is included in this Article. ENTSO-E considers that the process is clear; it also puts the responsibility to initially assess the impact of development, modernization, replacement on the grid user. Also in earlier meetings with the DSO TEG it was acknowledged that by continuous modernization of existing network connections, gradually existing connections may have to comply with relevant requirements of the code. This does not undermine the basic fact that the code is forward looking and focuses on new grid users and new distribution network connections. It is also noted that Article 19 did hardly change since the consultation phase.

On Article 21 – 24 (covering Demand Side Response requirements)

- Orgalime proposes to delete the word 'mandatorily' in Article 21(5). ENTSO-E will consider this, but notes that it does not alter the implication of the clause.

- The DSO TEG asks for the processes of Article 21(4) and (5) to refer to new devices only. ENTSO-E agrees on the principle, as this was always the spirit of the article, and will see how to clarify this as much as possible.
- The DSO TEG asks for the code to specify a list of significant devices which would be fitted with DSR capabilities. ENTSO-E notes that this was intentionally not done, but rather to set the process how this can be done. If no proposal is made, no device would be fitted at all. ENTSO-E notes that it intends to link the process of Article 21(4) and (5) stronger to the legislative foundation of the European Ecodesign directive. Legal analysis on this is still ongoing.
- Eurelectric/VGB states that the procedure of Article 21(4) and (5) may result in a lot of 'maybe' cases and asks for clearer criteria, e.g. expected sales, usage factor, etc... ENTSO-E proposes to leave this open, but rather focuses on the consultation phase in the process where all these aspects can be considered.
- Orgalime asks for clarification in Article 21(4) and (5) on the term 'relevant stakeholders' and proposes that it includes manufacturers and end users. ENTSO-E agrees on the principle and notes that the list is not exhaustive.
- On Article 24 (DSR Very Fast Active Power Control), the question is raised what 'very fast' means. ENTSO-E states that it is to be TSO defined while respecting the provisions of Article 9(3), but less than 2 seconds. This was earlier on mentioned in the definition, but will be included in Article 24 itself.
- On Article 23 (DSR System Frequency Control), Eurelectric/VGB asks why this type of DSR is restricted to temperature controlled devices. ENTSO-E clarifies that this is because temperature controlled devices can cope with minor shifts in the hysteresis control of heating devices without noticeable consumer impact, without changing the overall energy consumption and because technologies are mature. Other applications such as Electric Vehicles are less mature; also changed charging/discharging would have a noticeable impact. ENTSO-E notes that other DSR services in the code (Active Power Control and Very Fast Active Power Control) are still open to other types of users.

On Article 25 (Power Quality):

- The DSO TEG asks for PQ provisions to be left to international standards and quality regulation. ENTSO-E refers for more explanation on this topic to the FAQs.

On Article 26 (Simulation Models)

- The DSO TEG expresses a concern on the level of detail of simulation models that can be requested and proposed for the details to be kept in national connection procedures. ENTSO-E stresses this has been discussed extensively in earlier DSO TEG meetings. Wording has been revised to allow for 'equivalent information' as well. The FAQs explain what kind of information may be asked for. In addition the request for simulation models is a right, it is not mandatory. Specification of the simulation model details is to be defined at national level as well in line with the provisions of Article 9(3).

On Chapter of Operational Notification and Compliance

- The DSO TEG stresses the burden on DSOs for the Installation Document, the DSR Unit Document, Equipment Certificate. ENTSO-E refers to the extensive discussion with the DSO TEG earlier that day for all arguments raised.
- The DSO TEG notes that Article 33 again gives the right to require simulation models. ENTSO-E agrees that the wording of Article 33 is to be clarified to avoid duplication of Article 26.
- The DSO TEG asks for clarification how the requirements would apply to distribution-connected distribution networks, e.g. on system defence capabilities. ENTSO-E stresses that in earlier meetings this question was raised as well. ENTSO-E proposes for the requirements to apply to transmission connected distribution networks, but is open to expand it to other distribution networks if a common DSO proposal is given for this. So far this idea does not carry the support of the DSO TEG.

3. Presentations of User Group participants

SEDC could not attend the meeting but sent a short structured set of remarks, presented via conference call participation. See slides. Summarized:

- Art 21(3): Concern that DSR LFDD obligation excludes other DSR potential to be provided. ENTSO-E clarifies that DSR LFDD refers to the disconnection of load in case of extreme system events to avoid widespread black-out, which occurs rarely or hopefully never. It does not require additional functional capabilities and does not impede DSR services in normal conditions.
- Art 21(5): Concerns that mandatory DSR SFC results in consumer backlash. ENTSO-E refers to earlier discussions on this topic, acknowledging the risk and that implementation would need careful attention. ENTSO-E stresses that the services aims at creating no noticeable impact to consumers.
- Art 22(g): Concern that exclusion of generation of DSR will lock out DSR potential. ENTSO-E notes that controllability of generation is included in the NC RfG. For the DCC an explicit decision was taken to focus on pure demand only (see Article 1). As such, in the context of this code, DSR refers to the connection capabilities of pure demand only. This netting of generation is also needed to do compliance tests. It is expected that in eventual demand response market products, both generation and demand flexibility will be pursued. ENTSO-E also asks for clarification on the other cases SEDC refers to in its comment.
- Art 28(2): Concern that the request for contact details of the demand owner and installer will impede participation in demand response programs. ENTSO-E considers this type of information to be normal information a Relevant Network Operator would have to request anyway from its customers.

4. DCC supporting documents

ENTSO-E asks if there are observations on the draft DCC supporting documents, sent earlier on to the User Group. The DSO TEG asks for more clarification on the content of simulation models (Article 26) that may be requested.

The User Group has no other observations on the document sent at this stage.

5. Next steps

ENTSO-E thanks all participants for their contributions in the meeting.

End of meeting.