

Minutes of Meeting
Drafting Team on Demand Connection Code
DSO Technical Expert Group

Date: 3 February 2012

Time: 09h00 – 16h00

Place: Brussels

Participants

Name	Affiliation	present	excused
<i>DT DCC</i>			
Gianluca Albanese	Terna		X
Stephanie Bieth	RTE		X
Anders Danell	SVK	X	
Roberto Gnudi	Terna		X
Edwin Haesen	ENTSO-E	X	
Bastian Homburg	Amprion		X
Kees Jansen	Tennet	X	
Klančnik Jurij	ELES		X
Mikko Koskinen	Fingrid	X	
João Moreira	REN	X	
Mark Norton	EirGrid	X	
Sergio Pasero Ruiz	REE		X
Dwayne Shann	National Grid		X
Guillemette Smadja	Elia / LRG		X
Helge Urdal	National Grid		X
<i>DSO TEG</i>			
Alberto Ceretti	Eurelectric DSO/Enel Distribuzione	X	
Falk Engelmann	CEDEC/VKU		X
Bruno Gouverneur	Eurelectric DSO/Synergrid	X	
Mike Kay	Geode/ENWL	X	
Tony Hearne	Eurelectric DSO/ESB Networks		X
Riccardo Lama	Eurelectric DSO/Enel Distribuzione	X	
Johan Lundqvist	Geode/Svenskenergi		X
Marc Malbrancke	CEDEC/Inter-Regies	X	
Pavla Mandatova	Eurelectric DSO	X	
Jacques Merley	Eurelectric DSO/ERDF	X	
Sylvia Michel	Geode/Svenskenergi		X
Herman Poelman	CEDEC/Alliander	X	
Graeme Vincent	Eurelectric DSO/Scottish Power	X	
Walter Schaffer	Geode/Salzburgnetz		X
Pierre Schlosser	Eurelectric DSO		X
Siegfried Wanzek	Eurelectric DSO/E.ON-Energie	X	

1. Agenda

- 09:00-09:05hrs Approve Agenda
- 09:05-09:20hrs Impact of Entsoe& three DSO organisations agreement, and recording past work
- 09:20-10:30hrs Overview of changes arising from comments both TSO/DSO
- 10:30-11:00hrs Coffee break
- 11:00-12:30hrs Discussion on DSO comments (Pre-Christmas)
- 12:30-13:00hrs Lunch break
- 13:00-14:30hrs Discussion on TSO received comments from internal meeting
- 14:30-14:45hrs Coffee break
- 14:45-15:45hrs Discussion on TSO received comments from internal meeting
- 15:45-16:00hrs Review and Set Actions, next meeting[s]

2. ENTSO-E DSO agreement

CEDEC, Geode and Eurelectric DSO recently confirmed the principles for the set-up of DSO Technical Expert Groups in the context of all network codes already under development or to be started still. Experts have been appointed by all associations. All appointees will be invited for future work sessions. As stated in the agreed principles a steady attendance is expected to guarantee efficiency in the work program.

From behalf of ENTSO-E, a few corresponding members are added to the drafting team (EnBW, Tennet GmbH, swissgrid).

On 2 February Eurelectric and other European associations published an open letter on transparency in the development in the development of network code. The DT asks Eurelectric to clarify its position on the work in progress in DCC. A view on meeting dates well in advance is the main concern for DCC.

Public minutes will be proposed by the DT for review by the DSO TEG based on earlier agreed internal minutes.

3. Work program

(see presentation ...)

The DT brings the status of the DCC drafting and an overview of the work in the last weeks.
The next steps in preparation of the public consultation are explained

Even with a public consultation approaching, work with the DSO TEG will continue in parallel to improve the draft code.

The DSO TEG highlights the following:

- The German regulator imposed a new policy on 1 second response time for industrial loads in emergency cases. What is the ENTSO-E position on this and what will be the link with the DCC? At the present moment, there is not ENTSO-E position on this topic.

- DSR services can be delivered by markets or imposed as mandatory requirements. Are mandatory requirements seen as short-term solutions only? If so, what is the long term roadmap for DSR?
- The code will come into force in approx. five years. There is a high uncertainty on the future system situation. The target will become clearer as the entry into force approaches.
- What is the relation of network codes and the Energy Efficiency directive?

4. Overview of changes arising from comments both TSO/DSO

The DSO TEG notes a different formulation in the process of derogations in the RfG code under public consultation and the latest DCC draft with a preference for the latter.

The DT prepares a list of Frequently Asked Questions to be published. Some of these are closely linked to the FAQs on RfG. One of the topics is "Why is the Network Code not specifying the standards for Power Quality?". The DSO TEG notes that legal obligations exist on PQ requirements (in terms of waveform characteristics) in some countries. A question is added to the list on "How does the Network Code ensure the existing quality of supply?" which is to consider security of supply, PQ in terms of flicker, THD, etc ..., and the regulatory obligations on these.

On the topic of voltage ranges, the DSO TEG notes that with more distributed generation it could be that there is a low active power exchange between TSO and DSO, while high reactive power is absorbed causing a low power factor. → The present draft prescribes a power factor at Maximum Importing Capacity, which can be translated as a range in absolute reactive power for each connection point.

The DSO TEG notes that in some cases the customer's potential to comply or not might depend on grid investments done by the DSO and/or TSO. What is the commitment of system operators in these cases? Will requirements be imposed, can mass derogations be justified, will the system operator commit to e.g. increase short circuit power? No example can be given in the present DCC draft where this might become an issue.

5. Discussion on DSO comments (Pre-Christmas)

The DSO TEG sent a list of comments on the draft code before Christmas. In the meeting these comments are discussed and whether or not these were accepted in the latest draft. Note that in the meantime ENTSO-E members gave comments as well.

Some discussion points in this meeting are highlighted:

The definition of 'demand aggregation' is revised to clarify it is not operated as a single unit, but rather a bundle of units (i.e. a facility) to offer DSR services.

Does DSR Reactive Power Control already exist somewhere? For generation it does of course, for demand not yet. Technically it is feasible, but there is no market yet to enable this.

The definition of 'distribution asset owner' needs to be revised taking the situation in some countries into consideration where local municipalities or in general the people own the assets. An equivalent of 'maitre d'ouvrage' might be suitable which refers more to the one in charge of adaptation of the network. → The DSO TEG is requested to provide an alternative proposal by the next meeting.

The DSO TEG requests a map to illustrate the overlap on EU countries, synchronous zones and ENTSO-E members. → An FAQ exists for RfG on this situation. ENTSO-E will consider adding a map to illustrate this.

The DT revised the aspect of new distribution networks in this code by referring to new connection points. Requirements will need to be complied with at this new connection point. In terms of present code prescriptions (Q range, LFDD, ...) no impact is seen by the DSO TEG on changes in the network itself.

Reactive power range requirements apply only to transmission connected demand facilities and transmission connected distribution networks. The DSO TEG remarks that they are not able to pass on this requirement to their distribution connected customers by means of this code

- ➔ A corresponding requirement for distribution connected demand facilities can be added in national codes during the transition period before the European regulation becomes applicable
- ➔ The DT requests the DSO TEG to provide a clear opinion on this before 20 Feb.

It is noted that the term Relevant Network Operator will be consistently used throughout the code throughout the code (instead of Relevant Grid Operator or Relevant System Operator).

With regard to the requirement on synchronization devices in case of generation, the DSO TEG argues this is already dealt with in RfG by requiring synchronization at the connection point of the power generating facility. The DT considers it can be justifiable as well at the connection point of a distribution network, e.g. in the scenario where two systems operate at different frequency in case they are interfaced by power electronics (as a possible future scenario). Whether it is placed in RfG or DCC is not a key issue as long as both codes are aligned.

- ➔ The notion of 'where justified' is added in this requirement

It is clarified that simulation models can only be required from transmission connected demand facilities, DSR customers and distribution networks. It can be required. If so a TSO does not expect the complete model of distribution networks, only the relevant data referred to the connection point. It can be required only for the purpose of requirements in this code, not to verify grid reinforcements or in other discussions.

The notion of 'constituent demand types' in the requirement of simulation models is specified as 'electrotechnical characteristics of demand types'

6. Discussion on TSO received comments from internal meeting

During the month of January, an internal ENTSO-E consultation was held on DCC. On 12 January an internal workshop was organized. This resulted in over 200 comments. The latest draft which takes these comments into account is discussed.

- ➔ The DT will send the latest DCC draft to the DSO TEG which highlights the changes compared to the previous document sent.

As discussed in the 07 December meeting, the DT does not plan to set specific types of users as in RfG. To allow users for a quick check on which requirements apply to them a table is added in the code with a short list of requirements that only apply to specifically indicated users.

E.g. for voltage range requirements a threshold of 110kV is introduced. The DT clarifies this level is set as it generally the distinction between network interconnections and local HV grids.

The DSO TEG questions the relevance of short circuit requirements in the DCC from a cross-border perspective. The DT notes that it is specifically mentioned in the FWGL and it was agreed on to be covered in this code in an earlier meeting with the DSO TEG. The DSO TEG has no issue with the phrasing of the requirement as it is at this stage.

Reactive power ranges for transmission connected demand facilities are set at power factor 0.95 in the latest draft
➔ no comment from the DSO TEG on this.

A 5% deadband is introduced on the OMVar exchange capability at 25% of the Maximum Importing Capacity to make the requirement practically feasible (e.g. working with capacitor banks which are switched in/off in blocks)
→ no comments from the DSO TEG on this.

The latest draft includes an additional requirement on reactive power exchange:

"The TSO shall have the right where justified to require from the DSO the capability to maintain 0 Mvar exchange at nominal voltage averaged over no longer than one hour (within deadband of 5% of active power over the same period) at a connection point for the TSO specified range of active power exchange. The justification will include a roadmap in which the steps and the timeline for fulfilling the requirement are described."

It is clarified that the requirement is only applicable for new distribution network connection points. The application will have to be justified. No continuous real-time control at OMVar is considered. The DSO TEG has no comments on the principle of the requirement. The time dimension ('*maintain 0 Mvar exchange at nominal voltage averaged over no longer than one hour*') could be an issue. A clear opinion is requested for the next meeting.

7. Next interactions DSO TEG

Earlier preliminary set dates were 9 March and 10 April.

The DT proposes to abandon the 9 March proposal as it would be badly timed considering the internal ENTSO-E approval process for the draft code to enter public consultation.

The following next steps are agreed:

- The DSO TEG lists its **key issues** in the present draft by 20 February
- A conference call will be set up 24 February 10h00 – 11h30 to discuss these key issues.
- 10 April is maintained as meeting date (Brussels)
- Availabilities for dates after that will be requested in the meantime (e.g. by a doodle)

End of meeting