

## Minutes 4<sup>th</sup> ENTSO-E Stakeholders Workshop on Operational Security Network Code (OS NC)

20 December 2012  
11:00 h – 16:30 h  
Avenue de Cortenbergh 100 - 1000 Brussels

The workshop attracted about 33 attendees. List of participants is attached to the minutes.

### Programme

<b>10:00-11:00</b>	<b>Registration/Welcome coffee</b>	
11:00 – 11:15	Welcome Introduction	<b>Olivier Bronckart</b> <i>ENTSO-E Manager System Operations</i>
11:15 – 11:45	Summary of the Public Consultation Overview of key issues	<b>Tahir Kapetanovic</b> <i>ENTSO-E Convenor of OS NC Drafting Team</i>
11:45 – 12:30	Presentations of all topics and amendments in the OS NC	<b>ENTSO-E OS NC Drafting Team members</b>
<b>12:30-13:30</b>	<b>Lunch</b>	
13:30 – 14:30	Presentations of all topics and amendments in the OS NC	<b>ENTSO-E OS NC Drafting Team members</b>
14:30 – 15:00	OS NC Supporting Paper	<b>Ana Cigaran Romero</b> <i>ENTSO-E Member of OS NC Drafting Team</i>
15:00 – 16:00	(Frequently Asked) Questions, explanations, next steps	<b>Stakeholders</b> <b>OS NC Drafting Team</b>
16:00 – 16:15	Concluding remarks	<b>Tahir Kapetanovic</b> <i>ENTSO-E Convenor of OS NC Drafting Team</i>
<b>16:15</b>	<b>End of Workshop</b>	
<b>16:15 – 17:00</b>	<b>Short “getting together” at ENTSO-E</b>	

## Welcome

Olivier Bronckart, ENTSO-E Manager System Operations, welcomed the participants and shortly introduced what has been done lately on SO network codes

## Integration of Results after the 3<sup>rd</sup> Workshop

Tahir Kapetanovic welcomed the participants and introduced the changes made in the draft OS network code after the 3<sup>rd</sup> public stakeholders' Workshops on OS code. DT members had a detailed presentation on all major changes that were done in the last draft of OS NC

## Stakeholders' view, Discussions

*OFGEM, UK*

Comment: Article 27 is not clear, because it is not well known who is SGU and who does it comply.

Q: Not clear definition of SGU. Will demand response capability be enabled or not? It is also impossible to have real time communication for all grid users.

A: SGU are those user above the thresholds defined in Article 3(1).

*SSE, Scotland*

Q: What definition of significant grid user is correct, the one in Article 1 or in Article 2?

A: The definition of the SGU in Article 2 and in Article 1 are stated the thresholds of significance.

Q: What is a small demand facility? Are domestic consumers bound with this OS NC?

A: Small demand facilities which make influence on system security should be aggregated on DSO level. Aggregated data will be specified in the code.

Q: Is there any Cost Benefit Analysis made regarding the Article1(3)(b)?

A: There are no new obligations that are not covered in RfG, so no CBA was made. For compliance there is exclusion for small generation and demand. The Article1(3)(b) doesn't mean that type A generators are included.

*DSO, Belgium*

Q: How to treat all SGU (70) that are in Belgium connected to the grid?

A: We will have an involvement of NRAs/ACER to clarify this issue.

*SSE, Scotland*

Comment: General comment on Article 3(3), There should be NRA approval of everything, if it is not defined there should be NRA approval. TSOs/DSOs should not decide without NRA approval.

A: We will take this comment into account and check the code where reference to NRA approval is needed.

Comment: There should be cost recovery included in Article 4(4).

Comment: NRA should be involved in Article 6.

Comment: Regarding the system states there should be methodology defined to set operational security limits. NRAs should have and oversight over the methodology.

A: Operational security limits are changing also during the year depending on weather, time of year, temperature, etc. NRA will define what they wish to have reported.

*Electrabel, Belgium*

Comment: In article 6 system state is based on common philosophy that is not known, it should be written. As it is now written system states can be different from TSO to TSO.

A: Operational security limits are in Article 7, 8, common principles for contingency analysis in Article 11. We will make this clearer in the code that each TSO will define the system state according to operational security limits and principles defined in this network code.

*SSE, Scotland*

Comment: When moving to system state alert there are no consequences on SGU as it is described in Article 31(3).

Q: In Article 6(11) it seems there is an obligation on DSOs to communicate on remedial actions, can they actually do that? It is too complex to do that in real time.

A: There will be some oversight of NRAs on the provision.

Comment: There is no NRA mentioned in Article 6(5). There should be methodology and standards defined and NRAs should have an oversight.

Comment: There is no frequency applying on existing generation in Article 7(4).

A: It is just data regarding capability.

Comment: In Article 7(7) it seems that DSOs should be informed before reenergization of SGU type A. Why just not automatically reenergize and not inform before.

Comment: There should be also some obligations in Article 11(8) for TSOs.

Comment: In table 8(1) it would be better to put kV values instead of p.u. Values should be valid also for existing equipment.

A: We will consider this option, but then there will be more tables for each nominal voltage level!

*Electrabel, Belgium*

Comment: Change wording in article 9(1).

*SSE, Scotland*

Comment: There should be NRA oversight in Article 11(3) so TSOs do not to apply costly remedial actions.

A: There is no non-costly redispatch measure, TSOs will decide regarding security.

Q: What are ordinary contingencies in Article 11(5)(b). Are there any thresholds?

A: It is only for significant demand facilities that are directly connected. We will tighten this up. N-1 definition should include only significant grid users

*Electrabel, Belgium*

Comment: In Article 12(4) TSO defines critical clearance time that it has to respect itself, it should be defined by NRA. This provision is useless, you should change the word TSO to NRA to make sense.

A: NRA cannot decide that, this is a pure technical issue.

Comment: Then you should define what are your technical values.

Comment: In article 12(7) consider all generation react in case of underfrequency.

Comment: There should be written ASAP instead of 1 day in Article 13(3)(c)

A: We will consider this properly

*ENDESA, Spain*

Q: Do SGU send information directly to DSO and TSO.

A: If approved by NRAs than yes.

Comment: In Chapter 3 there are a lot of data. It should be clear what is public and what confidential.

A: Provisions of confidentiality should be applied. We will take into consideration.

Q: In Article 17(5) it is mentioned that TSOs need voltage behaviour of DSO connected users. 7(4) and 7(5) already ask for that information.

A: We need just general behaviour not the real-time data.

*SSE, Scotland*

Comment: TSOs have already all the information that is written in Article 7(4), it is provided to DSOs already, this should be deleted in NC. There is no sense that type a generator provides information to both parties.

A: It is always in aggregate form

Comment: What is the agreed timescale in Article 14 (5)(c), is NRA considered?

*Electrabel, Belgium*

Comment: In Article 16(1)(g) there is a virtual tie line mentioned, but no definition in NC.

A: There will be definition provided

*SSE, Scotland*

Comment: Why is that level of detail in Article 25(1)? Power generation facilities should be limited to type B,C and D. Why not an aggregated value?

A: We will correct in the code. Proposal the word "described" to change to "provided".

Comment: NRA should have an oversight and audit over TSO trainings.

Comment: It is not clear in Article 30(7) to which list I comply, DSO or TSO? The same in Article 29 and 31. It should be or TSO or DSO

A: We will make this clear.

Comment: 14(2) should cover only technical side of contracts.

Comment: information about system state should be available.

### Issues on supporting paper presentation

- It has been clarified that TSO A will never ask for more information than TSO B about the grid of the country of TSO B
- Difference between control area and responsibility area. LFC area : examples are needed

### **Eurelectric, Belgium**

#### **DSO Technical Expert Group Preliminary Views on Operational Security Network Code:**

DSO TEG acknowledges the evolution of the draft Code. Including DSOs when their networks or Grid Users connected to their networks are concerned is key as their operation may affect the overall system security.

Nevertheless,

- Recovery of reasonable and proportionate costs in timely manner should be also considered for DSOs
- The concept of Responsibility Area is not used properly in the draft:

*'TSOs are responsible for the Operational Security of their Responsibility Areas'*

DSO is responsible for operational security in distribution network!

More precision on data exchange and reciprocity are needed

- ~ Significant Grid User Definition for Generation Units refers to NC RfG. For demand units it should be clarified how definitions fit with NC DCC and with the aggregation of small units.
- ~ Information exchange should be more precisely defined in order to prevent misinterpretation at national level.
- ~ The following TSO obligations are also important for system security & should be included in the code:
  - maintaining voltage at connection points
  - information from TSO to DSOs and Significant Grid Users...

### **Summary of the main issues discussed during the workshop**

1. Significant Grid User has to be defined more precisely, especially to exactly define margins for small generators and demand facilities.
2. System states to be defined according to common principles, defined in this network code, by all the TSOs.
3. Dynamic stability. We will consider involvement of NRAs and try to change time recovery to ASAP.
4. In Article 11 we will write clearer regarding Redundancy of data exchange for N-1 analysis.
5. Consistency of defined limits for voltage and frequency in tables. We will consider if the proper place to include table is the NC or a supporting paper. Difference in obligations of TSOs and SGUs in frequency and voltage management should be explained.
6. Training. We will consider more involvement of NRAs. This topic will stay in OS NC.
7. Compliance. ICS and performance indicators issues in Article 30 will be discussed with ACER and Regulators.
8. Data exchange. We are aware that aggregation is needed and we will make proper formulation.
9. Supporting paper will be made equally professional.

## Conclusions

Tahir Kapetanovic summarized the issues discussed, thanked all the participants for active contributions, constructive discussion and many valuable suggestions and closed the 4<sup>th</sup> Stakeholders' Workshop on the Operational Security Network Code.