

## Minutes 2<sup>nd</sup> ENTSO-E Stakeholders Workshop on Operational Security Network Code (OS NC)

2 July 2012  
13:00 h – 17:00 h  
Avenue de Cortenbergh 100 - 1000 Brussels

The workshop attracted about 40 attendees. List of participants is attached to the minutes

### Programme

|                      |   |  |
|----------------------|---|--|
| <b>12:00 – 13:00</b> | <b>Registration/Lunch</b>                                 |  |
| 13:00 – 13:30        | Welcome   | <b>Tahir Kapetanovic</b><br><i>ENTSO-E Convenor of OS NC Drafting Team</i> |
| 13:30 – 14:00        | Integration of Results After the 1 <sup>st</sup> Workshop | <b>Tahir Kapetanovic</b><br><i>ENTSO-E Convenor of OS NC Drafting Team</i> |
| 14:00 – 14:30        | OS NC Supporting Document                                 | <b>Ana Cigaran Romero</b><br><i>ENTSO-E Member of OS NC Drafting Team</i>  |
| <b>14:30 – 14:45</b> | <b>Coffee break</b>                                       |  |
| 14:45 – 16:45        | Stakeholders' view, Discussions                           | Workshop participants  |
| 16:45 – 17:00        | Conclusions   | <b>Tahir Kapetanovic</b><br><i>ENTSO-E Convenor of OS NC Drafting Team</i> |
| <b>17:00</b>         | <b>End of Workshop</b>                                    |  |

Presentations are accessible at the ENTSO-E website <https://www.entsoe.eu/resources/network-codes/operational-security/>.

### Welcome

Welcome and introduction by Tahir Kapetanovic, ENTSO-E Convenor of OS NC Drafting Team.

### Integration of results after the 1st Workshop

Tahir Kapetanovic presented the changes in the code after the 1<sup>st</sup> Workshops. Presentation is accessible on ENTSO-E website <https://www.entsoe.eu/resources/network-codes/operational-security/>. He stressed that the change management issue is not a matter of this code and will be elaborated later for all network codes. The FAQ document will be published after the public consultation.

He presented the main recommendations from DSOs TEG after the workshop with the DSOs TEG on OS NC in the morning of 2 July 2012:

- **Definitions** should be **clear and consistent** among the codes. EU legislation should be taken into account.
- **DSOs** are key agents as **market facilitators and system operators, not system users.**
- **Relevant DSO's** are also in charge of security of supply so **that OS issues should be included in the code.**
- **DSO as information facilitator** collecting information on grid users connected to their networks – to pass information on **Significant Grid users** to TSOs, for other only in **aggregated way**
- Voltage control is a local phenomenon, under normal operation. **Relevant DSO might receive DER voltage control contribution.** Voltage control requires a system approach
- **More interaction** between the DT & DSO TEG is needed

Full presentation of the DSOs TEG on OS NC at the workshop on 2 July 2012 is accessible at the ENTSO-E website <https://www.entsoe.eu/resources/network-codes/operational-security/> .

### OS NC Supporting Document

Ana Cigarán Romero presented the OS code supporting document. Presentation is accessible on ENTSO-E website <https://www.entsoe.eu/resources/network-codes/operational-security/> .

### Stakeholders' view, discussions

Belgium, SPF Economie

Proposal: ENTSO-E should mention the European market in the code.

Question: The TSOs decision making process should be clearer. Only coordination is described, but it is not clear how decisions by TSOs are made. It is expected that the decision making rules will change.

Answer (ENTSO-E): Responsibilities of TSOs include the decision making process of TSOs in all situations. Usually the worst case is taken after the exchange of information, possible actions and consequences in the operational planning phase. TSOs already have the rules for decision making for all cases in the operational agreements (e.g. OH, Nordic Agreement), but the events in past showed that these rules are not enough binding to the grid users, and in that changing market environment even more binding rules for TSOs, DSOs and grid users are needed.

France, EDF

Question: More justification of requirements RfG (Art. 9) is expected in the OS code.

Answer (ENTSO-E): ENTSO-E is not intending to replicate and duplicate the requirements from the connection codes. This code doesn't go with the details if the other codes covers the issue and is enough detailed. In some cases the other codes on the separate topics could include some numbers.

The Netherlands, Essent Energie

Question: HVDC links is not covered by the connection codes. Are there any operational requirements for HVDC?

Answer (ENTSO-E): Requirements in OS NC are open to all technologies. The special code for DC links is planned, so the OS code treats the HVDC links as "source" and "sink".

Belgium, GDF SUEZ

Comment: What does it mean "sufficient" (Art 7, 8, 14). It should be specified.

Belgium, EDF Luminus

Question: Why OS NC do not justify and is not linked to the ranges of RfG.

Answer (ENTSO-E): ENTSO-E is not intending to replicate and duplicate the requirements from the connection codes. Some references will be done to RfG. Some ranges from RfG will be explained in the supporting paper.

Belgium, SPF Economie

Comment: More explanation is requested on the meaning of coordination.

Switzerland, Axpo AG

Question: Article 9 is dealing with the curtailment of the consumers at the DSO level and blocking the tap changer steps, which lead to the costs for the DSOs, who have the contractual arrangements with the consumers. The issue of costs recovery for DSOs after curtailment by TSOs is missing.

Answer (ENTSO-E): The cost recovery issue is not a matter of the code. More explanation will be given for the reasons to keep the priority of the transmission system and on the curtailment of the consumers only preserving the system integrity in the emergency situation.

The Netherlands, Essent Energie

Question: Requirements to be capable to provide all necessary ancillary services will kill the economy.

Answer (ENTSO-E): There are no requirements to provide the ancillary services in the code. There will be an ancillary services market dealing with it. The requirements to provide the capability according to the connection requirements means the collection of information from the DSOs and grid users in order to assess the system state during operational planning and real time operation.

Belgium, GDF SUEZ

Question: There is missing cost recognition for generators concerning requirement for minimum % of synchronous generation in the grid (Art 14.4). This capacity should be contracted by the TSOs. This is hidden costs of RES.

The Netherlands, Essent Energie

Comment: In the text where static var compensators are mentioned the word "static" should be removed being more general towards other technologies.

France, EDF

Question: Capabilities of the grid users required by the RfG should be justified because they are related to costs.

Answer (ENTSO-E): More reference will be made to the connection code, but not repeating the ranges.

Scotland, SSE

Comment: There is not consistent timing of applicability period for RfG and OS codes. For RfG three years applicability period is given and for OS code only 20 day after comitology and publishing in OJ. Practical period is needed for stakeholders to understand and prepare themselves.

Switzerland, Axpo AG

Comment: Information from DSO to TSO in Art 12.11 should be in aggregated form.

Spain, ENDESA

Comment: Significance of the grid users in Art 12.18, 12.19 is not known by the grid users preparing or performing the tests. More information from the TSOs and DSOs should be sent to generators or other grid users about state of the system, changes of topology, isolation, etc.

Belgium, SPF Economie

Comment: ACE parameter is not a case in Nordic area, so the other equivalent parameters should be considered in Art. 8.4.b common for all synchronous area.

Answer (ENTSO-E): This parameter should be the same defined in the LFC code.

Scotland, SSE

Comment: The NRAs and ACER involvement is missing in the code when TSO is obliged in the code to develop any methodology or decision. The stakeholders want more transparent decisions from the TSOs. Stakeholders are more comfortable when the TSOs decisions are supervised and regulated.

Belgium, GDF SUEZ

Comment: Many issues are more global and need ACER engagement but not only NRAs.

Answer (ENTSO-E): Could GDF SUEZ give some places where this could be done.

Scotland, SSE

Comment: Concerning testing of small grid users in Art 15, the small users do not know the system state because TSOs are not communicating the system state to all grid users. How grid user knows that his tests are influencing neighbouring TSOs. Suggestion is that testing of grid users is performed only by the operator to which grid the user is connected.

Answer (ENTSO-E): The close loop of information exchange during testing will be added in the code. It will be checked if testing is related only to significant grid users and solar panels are included in Art. 30.2.

Scotland, SSE

Question: Is power plant demand included in Art. 28.1.

Answer (ENTSO-E): Definition of "demand facility" will be checked and auxiliary demand will be taken into account.

Comment: Reference is not correct in Art. 12.4

Comment: Reference is not correct in Art. 9.5

Comment: Reference is not correct in Art. 9.2

Belgium, GDF SUEZ

Question: After coordination of voltage and reactive power control neighbouring TSOs shall define how and who is making approval of the decision(s).

Answer (ENTSO-E): Concerning decisions on voltage control and reactive power only TSOs make decisions, no market is involved. TSOs will set limits and provide the compliance. NRAs are involved in case TSOs are not able to install var compensators or contract reactive power control.

Scotland, SSE

Question: Why data list on interconnectors in Art 21.4 is very short comparing to data lists in art 21.1 for generators.

Answer (ENTSO-E): There are technical differences so the lists of data are correct.

Question: The grid users should understand if they are significant or not and not different significance determined in each code. Art. 7.9. Different codes have different definitions on significance, but the users want to have one status. Stakeholders want a table on the significance of the users in each country and for what purposes in order to apply the law.

Answer (ENTSO-E): There are different significance criteria for the different purposes. Definitions could be improved concerning applicability of the requirements. If different significance in system operation is set, it should be justified. Most provisions on significance are the subject of RfG.

Comment: The permission to resynchronize should be given only from one operator TSO or DSO, but not both in Art 12.19. Answer (ENTSO-E): For the small solar panels this could be done automatically. The word "permission" will be changed.

Belgium, SPF Economie

Question: Not clear what is CGM. It should be more clear when CGM and when individual TSO model is meant, e.g. Art. 16.3. It is not clear why different definitions of CGM in this code and CACM code, if it is the same model.

Comment: The reference to CGM is needed in Art.11 for overall consistency

Question: Which criteria have priority in performing calculation on CGM – capacity calculation or security analysis. It is not clear who is doing what.

Answer (ENTSO-E): CGM is a common data set used for different purposes, e.g. security analysis, capacity calculation. The code should oblige the TSOs to submit the balanced set of data from each TSO in order to have the accurate CGM. At first CGM is built on technical data and agreed scenarios of the system. After yearly, monthly, weekly security analysis on the CGM the capacity calculation is performed and again validated by security analysis on day ahead and intraday.

Belgium, GDF SUEZ

Comment: It is not clear what the commercial and physical schedules in Art.16.3 are.

Belgium, SPF Economie

Comment: TSOs may request full data in Art 21.3. It should be clearer what is meant – commercial and physical.

France, EDF Energy

Question: There is no any reference concerning compensation if TSO cut the power plan or supply.

Answer (ENTSO-E): Compensation issue is not foreseen in the FG and Regulations, so it is not in a scope of the code. The compensation issues are covered by the national legislation.

Scotland, SSE

Comment: It is not clear which definition of "social welfare" is in Art.7.8 and if it is linked with Art.3.1.

Question: Are definitions of "remedial actions" consistent in this code Art.11 and CACM "costly" and "not costly".

Answer (ENTSO-E): The remedial actions of CACM code are used for congestion management on the cross borders. In this code the remedial actions cover all not only active power control, but all operational actions including voltage and reactive control.

Question: Will the violations mentioned in Art. 11.11 when TSOs are out of limits be published?

Answer (ENTSO-E): If violations are not influencing the cross borders there is no need to publish.

Question: Is the training program in Art. 30.2 and 30.4 separate for each TSO, or harmonized on pan-European level. Records on training should be kept for all carrier, but not only for 3 years.

Answer (ENTSO-E): Several challenges are here – the training sites are already established by each TSO, number of operators and their work on shifts, language issue. More detailed operational training code will be developed after emergency code is developed on training of operators on normal operation, emergency and restoration issues.

Question: Is curtailment in Art 29.1 made on market based (load shedding). It could be done by the demand facility, but not demand.

Answer (ENTSO-E): Yes. The manual curtailment is a control action and a part of demand side management.

Spain, Iberdrola

Question: What kind of real time information is in mind in Art. 23.1. Is information for ancillary services market not enough? The stand-by reserve (not spinning) is not reliable.

Answer (ENTSO-E): All spinning reserve and other information related to the conditions also of the stand-by reserve is covered by this chapter. Beyond the information to the ancillary services market, TSOs should have information on capabilities which allow managing the emergency situations at any price or the next day situations when the demand is not covered after the market results.

Scotland, SSE

Question: Is it more information required than by REMIT.

Answer (ENTSO-E): Information is the same, but less. The purpose of data is different. TSOs shall know only the capabilities of generators.

Question: Stakeholders want to publish only one set of data.

Answer (ENTSO-E): TSOs need only data from significant grid users.

Belgium, SPF Economie

Question: Is it "welfare" meant in Art. 3.1. Doesn't Art. 3.2 contradict Art. 3.1. Is Art. 3.3. is needed.

Answer (ENTSO-E): The market should not get information that redispatch is needed. So not all information should be disclosed to the market participants. Art. 3.3. is important for transparency reasons.

Scotland, SSE

Comment: More information from TSOs to the grid users is needed in Art. 7. on system states.

Belgium, SPF Economie

Comment: In definition of "redispatch" also demand should be mentioned not only reference to generation.

Comment: There is no definition of "system operator". SO should be replaced by "TSO" and "DSO".

### Conclusions

Tahir Kapetanovic summarized the issues discussed, thanked all the participants for active contributions, constructive discussion and many valuable suggestions and closed the 2<sup>nd</sup> Stakeholders' Workshop on the Operational Security Network Code.