

## Minutes 1<sup>st</sup> ENTSO-E Stakeholders Workshop on Operational Security Network Code (OS NC)

20 April 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

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|----------------------|--|--|
| <b>12:00 – 13:00</b> | <b>Registration/Lunch</b>  |  |
| 13:00 – 13:30        | Welcome<br>OS NC roadmap   | <b>Konstantin Staschus</b><br><i>ENTSO-E Secretary-General</i>             |
| 13:30 – 14:00        | First draft Operational Security NC<br>- Scope<br>- Questions for the Workshop                 | <b>Tahir Kapetanovic</b><br><i>ENTSO-E Convenor of OS NC Drafting Team</i> |
| 14:00 – 15:00        | - Questions & remarks of the Stakeholders<br>- Discussion<br>- Detailed information by ENTSO-E | Workshop participants  |
| <b>15:00 – 15:20</b> | <b>Coffee break</b>  |  |
| 15:20 – 16:45        | Discussion cont'd  | Workshop participants  |
| 16:45 – 17:00        | Conclusions  | <b>Konstantin Staschus</b><br><i>ENTSO-E Secretary-General</i>             |
| <b>17:00</b>         | <b>End of Workshop</b>   |  |

Presentations are accessible at the ENTSO-E website.

### Welcome and OS NC Roadmap

Welcome and introduction by Konstantin Staschus, ENTSO-E Secretary-General.

Konstantin Staschus presented the roadmap and the process for stakeholder's involvement through March 2013 (presentation is available at the ENTSO-E website) emphasizing the key elements of the stakeholders' involvement which are aimed at achieving most effective and successful results: as early as possible involvement in all phases of the work, full transparency and explanation of all issues of interest at all phases of work, large number of public workshops, public consultation and full commitment to non-discriminatory treatment of all parties with, at the same time, integrating all "lessons learned" from the Pilot Project in the work on Operational Security and all other System Operation Network

Codes. Especially welcome and hoped for are early comments and guidance from the EU Commission and ACER in relation to the expected quality and scope of the finalized Operational Security Network Code.

In the introductory note by European Commission it was mentioned that while many different NC are under development in parallel, there are many common issues and interdependencies which need to be taken into account. It is therefore important for ENTSO-E to ensure coherence and consistency, what needs to be demonstrated during the development and later on in the implementation. Particular attention is needed on the issues which will have to change from the today practices and those shall be presented in an "Objectives Paper" (or an OS NC "Position Paper") with detailed explanations and background information.

ENTSO-E welcomes the suggestions by the Commission and commits to provide for the mentioned Objectives Paper for the next Workshop planned for July 2012, in order to raise transparency and common understanding on the Operational Security matters. Within the organization, ENTSO-E has several level of coordination, including weekly conferences of the System Operation Drafting Teams convenors (NC on Operational Security, Operational Planning and Scheduling and Load Frequency Control and Reserves – the latter not yet officially started), monthly coordination meetings / conferences of all Drafting Team convenors of the Network Codes currently under developments and a strategic coordination and ensuring of coherence between the three Committees (System Operation, System Development and Market).

Cross references are checked, references in the Operational Security Network Code to generator types and other issues from the Requirements for Generators Network Code and the list of data from the CACM code are examples of such cooperative work. If there is any change of relevance for different codes, it is followed through and taken into account.

Furthermore, ENTSO-E is aiming at achieving already prior to the public consultation of the OS NC, a high common understanding and commitment of all stakeholders, on the scope, contents and key objectives of the OS NC, so as to ensure most effective and efficient work during and after the consultation. For this to happen, the initially mentioned key elements and objectives of work are essential.

ENTSO-E would also like ACER and EC to react as soon as they feel that any adjustment or missing elements need to be addressed in the OS NC.

### **First draft Operational Security NC**

Tahir Kapetanovic presented the first draft OS NC (presentation is available in the ENTSO-E website). It has been emphasized that – as a difference to all other codes - System Operation and especially Operational Security Network Codes and rules have been existing in Europe for many decades and that TSOs from TSOs associations before ENTSO-E have been cooperating in their daily business, running the interconnected Transmission Systems based on developed System Operation rules (e.g. UCTE Operation Handbook, Nordic Grid Code, etc.). Therefore, the work on System Operation Network Codes now is not starting "from the scratch" but it is important to develop the existing framework so as to face volatile and fast changing operating conditions now and in the coming years, accounting for the issues like unbundling of TSOs, market development and completion of the European IEM, RES development, etc. OS NC covers the requirement for Operational Security in general and it does not address emergency control. While the mission of the TSOs has not changed – to keep lights on, ensure security of operation, supply and functioning of the market – the framework conditions and the development of market over the past decade have changed the System Operation drastically – this is where the main challenge of System Operation and Operational Security Codes lies.

Tahir Kapetanovic summarized the morning Workshop with the DSOs Technical Expert Group:

- 1) Describing responsibilities of DSOs as system operators with respective references to this adjusted definition throughout the OS NC; the new definition will be checked together with DSOs TEG;
- 2) Provisions for TSOs' providing DSO with necessary information will be considered in the OS NC;
- 3) Voltage control and reactive power management focus on transmission will be emphasized accordingly;
- 4) Provisions for must-run synchronous generators will be considered in the OS NC, in order to ensure minimum conditions to maintain transmission system stability and security of operation;

- 5) Not only technical but also organisational issues will be considered in provisions on data exchange;
- 6) Link between system development and system operation should be introduced;
- 7) Compliance monitoring and enforcement (in line with the overarching ENTSO-E and ACER strategies) will be referred to;
- 8) Include more precise provisions on coordination of re-dispatch between TSO and DSO;
- 9) References to other network codes will continue to be checked and adjusted accordingly as the work progresses;
- 10) Protection and Dynamic Stability in the OS NC are addressing transmission system;
- 11) Article 12.1 will emphasize that external contingencies are dealt with too;
- 12) Training of TSO and DSO together on relevant issues is important.

## Questions & remarks of the Stakeholders

*UK, RenewableUK*

Question: Interface and responsibilities related to RfG were mentioned; how do you see the balance between TSO responsibility for system security and the investment from generation for security, what ancillary services could be available, what is cost allocation?

Answer (ENTSO-E): Ancillary services are provided by Grid Users and contain elements like: fault ride through, frequency sensitivity, voltage control and reactive power management. Responsibilities of the Grid Users are also dependent on grid connection requirements. Different TSO may have to impose more strict requirements. Blackstart and islanded operation provisions will be a subject of the future Emergency Network Code.

*European Commission*

The presentation of the OS NC is very welcome as it clarified issues and priorities. The proposal for an "Objectives Paper" (Justification Paper) is raised again.

Answer (ENTSO-E): ENTSO-E confirms commitment to present a Justification Paper at the next workshop and also to consider the suggestions and discussions from all stakeholders during the workshop in the further work on the code. A new draft OS NC will be sent to the Commission and to ACER even before providing it to the public for the next workshop, in order to ensure meeting the key expectations and that suggestions by Commission and ACER have been understood properly. Moreover, as already discussed in general, there will be (for the final version of the OS NC) also a Q&A paper.

*Spain, Iberdrola*

Question: TSO and DSO are regulated industries; new rules will possibly require new investment, which means the TSO and DSO will require new revenue / remuneration.

Answer (E-Control): From the regulators point of view, if the legislation changes remuneration has to consider this, however no significant changes are expected in remuneration at present.

*Spain, Iberdrola*

Question: In different countries new customers have to pay different percentage of the connection cost; if the transmission system pays better than the distribution system there will be more investment in the transmission system.

Answer (E-Control): Comparing grid connection in various countries, this may not be harmonised in the time it will take for this code to become legally binding; national regulators will still decide on remuneration.

*Germany, TBC*

Question/Comment: Cost sharing rules were not mentioned, to solve this issue now would be better than later (cost of remedial actions).

Answer (ENTSO-E): Objective is to put all technical specifications and requirements in the first line, but the issues like cost sharing will then (after this discussion and understanding its importance) will be treated as far as possible in the next steps of the work on OS NC.

*France, EDF*

Question: Concerning cost sharing between TSO/TSO, grid users and TSO and DSO/TSO. It was expected from the system operation network codes to provide figures that would help to understand RfG connection code requirements, but there are no figures for voltage and frequency.

Answer (ENTSO-E): It would be helpful to get figures and graphs into the code, and while requirements from the RfG or the other codes will not be repeated, more clarification and understanding of the interdependencies will be considered in the next version of the OS NC. The OS NC is an "umbrella code" for the other System Operation codes and must consider all issues but not at the full level of detail. More details will be provided in other System Operation codes.

*Belgium, EWEA*

Question: Provisions for updating / change management of the OS NC are missing. A greater clarity in the provisions and link between RfG and Operational Security is needed; we need to understand why the generator requirements are needed. Elements of cost benefit analysis would be helpful where possible. Sharing of information calls for transparency and confidentiality at the same time and further clarity is needed on this. All comments on other codes as an input to operational security should be taken on board.

Answer (ENTSO-E): Changes to the OS NC (and other codes) are possible through comitology. On RfG references and cross-issues will be emphasized and addressed in more detail and accuracy. Motivation paper will justify the requirements of the OS NC. All types of TSO are now with 3<sup>rd</sup> Package independent and there are confidentiality requirements in Regulation (EC) 714/2009. We are discussing the OS NC today, but are not in a position to interpret the comments addressed in other network codes, which is why comments to this code need to be raised in this (and following) workshop and discussions. European Commission confirms that to make something legally binding, comitology is the best founded way. There are however no limits to the level of detail, e.g. like it was done for the requirements in railway sector (train specification, rail specification, energy specification) which are very detailed. It is anticipated that the changes to the OS NC might be needed at the frequency of 4-5 years. To that matter, a single figure can be changed relatively easily, but it is a more complex issue if exhaustive discussions are needed. If any requirement is not in the code it is not legally binding, but it is possible to make something legally binding by national legislation of the Member States.

*Belgium, Wartsila*

Comment: what helps are the three documents – NC, FAQ and motivation papers. KEMA has conducted a study concerning rotating mass and inertia, which shows that as long as the synchronous generators are fast enough the stability will be kept. Common Grid Model is an excellent way forward; however more information is needed on how generators will contribute to this model – what are model packages, software, what is the platform that will be used, inputs/outputs, confidentiality of the generator models.

*European Commission*

Commission mentions that more emphasis is needed on areas where there are still options to choose for a solution and distinguish from the areas which are not possible to be changed any more. Commission also acknowledges that some issues are fixed and cannot be changed at all.

*Switzerland, AXPO*

Question: In which code will pumping mode of the pump storage plant be handled? Nuclear power plants are a priority centre with respect to blackout and power interruptions, what code will cover this?

Answer (ENTSO-E): ENTSO-E will check as to where pumping will be covered. The nuclear issue is not covered in ENTSO-E codes.

*ACER*

ACER has no remarks to this version of the OS NC, but is working on providing more detailed comments. ACER welcomes again the transparent and early involvement of stakeholders and the discussions during the DSOs and stakeholders' workshops.

*Austria, E-Control*

The regulators' drafting team for FG on System Operation also welcomes ENTSO-E approach with early involvement, transparency and explanations during the discussions, providing for the possibility of active contribution at the beginning of the process.

*UK, RenewableUK*

Question: will the code encourage TSO to include more renewables?

Answer (ENTSO-E): From the SO FG this is a general requirement of all codes. However ENTSO-E cannot discriminate in favour of any particular type of generation and supporting of RES will remain National prerogative. The focus remains System Operation and Operational Security.

*UK, RenewableUK*

Question: Look at RES penetration not only as a risk, but also as opportunity. Possibly the current system is designed for conventional generating units.

Answer (ENTSO-E): Some countries already have large percentages of renewable e.g. Norway, Austria, but the RES decisions remain the Member States area of decision. Only in case of re-dispatch or other measures, are treated by the OS NC.

## Conclusions

Tahir Kapetanovic summarized the issues discussed during the 1<sup>st</sup> Stakeholders' Workshop:

- 1) EU Commission invited ENTSO-E to provide Justification Paper and ENTSO-E will present it at the 2<sup>nd</sup> Workshop in July 2012;
- 2) Cost sharing and the issues of remuneration by regulator need to be addressed as far as it is possible in this code;

- 3) More detailed references and cross-issues in relation to the RfG need to be addressed in the Operational Security Network Code;
- 4) Change management of the code is only possible through comitology, which is why the OS NC shall be made as stable as possible;
- 5) A number of more detailed comments from stakeholders and from DSOs will be considered in further work on the OS NC;
- 6) Definitions related to pumped storage (pumping mode) will be discussed in ENTSO-E with responsible experts and Drafting Teams;
- 7) Nuclear generation is nuclear safety issue and as such out of the OS NC scope;
- 8) Readability of the OS NC document will be further enhanced for the 2<sup>nd</sup> Workshop in July 2012;

Tahir Kapetanovic announced the intended preliminary dates of the following stakeholders' workshops, emphasizing that the dates are not yet finally fixed confirmed and that changes are possible, which will be announced in due time in advance: 2nd July, 19th September, and 20th December 2012.

Konstantin Staschus and Tahir Kapetanovic thanked all the participants for active contributions, constructive discussion and many valuable suggestions closed the 1st Stakeholders' Workshop on the Operational Security Network Code.