

65th SYSTEM OPERATION COMMITTEE MEETING: MINUTES

Date: 21 April 2021 Time: 08:30 – 17:30 Place: webinar

Participants

APG	Chair
RTE	Vice-Chair
TenneT TSO B.V.	Member
TenneT DE	Represented by TenneT B.V.
Elering	Member
Creos Luxembourg	Member
REE	Member
HOPS	Member
Terna	Member
Elia	Member
Transelectrica	Member
50Hertz	Member
APG	Member
Fingrid	Member
ELES	Member
AST	Member
TransnetBW	Member

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REN	Member
SEPS	Member
NOS BiH	Member
National Grid ESO	Member
Litgrid	Member
Swissgrid	Member
Amprion	Member
ČEPS	Member
Svenska Kraftnät	Member
Statnett	Member
MAVIR	Member
PSE	Member
EMS	Member
OST	Member
Energinet	Member
ΙΡΤΟ	Member
TSO Cyprus	Excused
EirGrid	Member
ESO EAD	Member
MEPSO	Member
Landsnet	Excused
ČEPS	StG Strategy Convenor
AST	StG IT&Tools Convenor
Amprion	RSC Project Manager



National Grid ESO	StG Operations Convenor
50Hertz	StG Operational Framework Convenor
Amprion	StG System Resilience Convenor
ENTSO-E Secretariat	CGM Programme Director
Amprion	Task Force CE System Separation Convenor
Statnett	Task Force Offshore Strategy Leader
VUEN	Invited
Nordic RSC	Invited
Baltic RSC	Invited
SCC	Invited
TSCNET	Invited
Coreso	Invited
SEIeNe CC	Invited
ENTSO-E Secretariat	Organizer

Minutes

1. Attendance, Quorum & Approval of the Agenda

The SOC Chair welcomes participants to the 65th System Operations Committee meeting which takes place via teleconference.

The SOC Chair introduces the new SOC Members and Substitutes for TenneT, Litgrid, MEPSO, CGES, National Grid ESO and PSE.

SOC Chair informs that the Steering Group Operations convenor will step down from this role and an official call for nominations will be soon launched.

Decision:

- The SOC Chair notes that the meeting is quorate.
- The SOC Chair notes that the Agenda is approved.



2. Updates from Board and General Assembly

The SOC Chair and Vice Chair update the Committee on latest news from the General Assembly, the Board and the Steering Group Transmission and Distribution Interface.

The SOC Chair gives the floor to the ENTSO-E Secretariat Annual Work Programme Manager to present the conclusions on ENTSO-E participation into regional consultations. According to Article 5(6) of the Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (recast ACER Regulation), national regulatory authorities (NRAs) and ACER can directly change the terms and conditions or methodologies (TCM) proposed by the TSOs. However, before approving the amended proposals, the NRAs (of the relevant region) or ACER (concerning All TSO proposals) have to consult ENTSO-E. The consultations by ACER concerning All TSO proposals are already dealt with by the relevant ENTSO-E Committees. Since 2020, ENTSO-E has been invited to respond to multiple regional consultations.

Decision:

 SOC acknowledges the proposal and the way forward regarding the participation of ENTSO-E into regional consultations.

3. SOC Organisation and Budget

The Secretariat provides updates on the already approved 2021 budget and the results of the first quarter forecast process. Also, the 2022 budget timeline is presented for information.

Decision:

- SOC acknowledges the budget updates provided as a result of the Q1 2021 forecast process

4. Steering Group System Resilience

The Steering Group System Resilience Convenor informs about need for addressing the progressing energy transition and digitalisation of the energy systems, including the European grid, which poses new opportunities for efficiency gains but also creates new threats for the TSOs community. Recognising new threats carried by ongoing energy transitions and progressive digitalisation of our systems and its largely unstudied effect on a physical security, the Steering Group System Resilience proposes to create a new "Working Group Resilience of the Cyber-Physical System" within its structure.

Further, the Steering Group System Resilience Convenor presents updates on the upcoming Directives on Resilience as presented by EC in December 2020: (1) Revised Network and Information Systems Directive (NIS 2 Directive) and (2) a new Directive on the resilience of critical entities (CER Directive). Both Directives address and impact the same sectors and entities indicated by the Member States. The TSOs will not be affected by the implementation of these two Directives immediately but will be subject to this regulation as soon as their respective Member States will appoint them as key entities in the energy sector.



Decision:

- SOC approves the creation of the new "Working Group Resilience of the Cyber-Physical System" under Steering Group System Resilience
- SOC approves the Terms of References for the new WG Resilience of the Cyber-Physical System.

5. Steering Group Operations

The Continental Europe System Separation Task Force Convenor reminds the outcomes provided so far and that the Task Force was launched with the clear mission to deliver the system separation facts to national and European authorities, ENTSO-E members as well as to any interested audience in a transparent and complete way. The first milestone of publishing the Interim Factual Report was successfully completed on 26 February 2021. Since then the ENTSO-E Task Force has been working on completing the investigation with additional facts within the ICS Expert Panel with ACER and interested NRAs. The ICS Expert Panel will produce a Final Report by mid of July 2021.

Next, the Steering Group Operations Convenor provides a status report on the latest developments over a series of ongoing projects. Also, the Convenor asks for SOC approval on the following publications:

- Long-Lasting Frequency Deviations Report

From 09 January to 11 January 2019, the Continental European Power System experienced a Long-Lasting Frequency Deviation (LLFD) which was a contributing factor to a significant frequency deviation occurred at 21:02 hours on 10 January 2019. The final report summarises the measures put in place by Continental Europe TSOs and by the Coordination Centres to address long-lasting frequency deviations.

- Use of Travelling Waves Principle in Protection Systems and related Automations report

The report presents the operational experiences and knowledge of new protection equipment using Travelling Wave based devices and their applications. The report also concludes that systems using Travelling Wave devices have extremely high-performance and reliability, but their diffusion is still strongly limited by the scarce supply on the market, especially by the large European manufacturers.

Decision:

- SOC approves the Long-Lasting Frequency Deviations Report and the publication on the ENTSO-E website.
- SOC approves the Use of Travelling Waves Principle in Protection Systems and related Automations report and the publication on the ENTSO-E website.



6. Steering Group Operational Framework

Steering Group Operational Framework Convenor informs about the need to create a permanent structure to fulfil the obligations related to Probabilistic Risk Assessment as set by the Coordinated Security Analysis Methodology (CSAM) Art. 44. The Terms of Reference for the WG Probabilistic Risk Assessment (PRA) are presented to the SOC for approval. The Convenor presents for approval the Terms of Reference for the Expert Teams on Network Code Emergency and Restoration (NC ER) and Load Frequency Control (LFC).

Steering Group Operational Framework Convenor presents the actions related to the Project Implementation of Data collection for Probabilistic Risk Assessment. The data collection process establishes a path for all TSOs to jointly develop a PRA methodology by 2027 as defined by Article 44(4) of CSAM. This implies at the same time setting out the requirements for all TSOs to implement operational processes and infrastructure to collect Probabilistic Risk Assessment (PRA) related data in line with Article 44(5) of CSAM. The project team for the implementation of Data Collection for Probabilistic Risk Assessment prepared two documents to commence and support the data collection process: i) one sets out the minimum data required to be collected and ii) the other sets out the common disturbances' definitions to ensure a consistent set of data, to increase and level the quality of the data and to make it easier to exchange and derive data for new use in the future.

Steering Group Operational Framework Convenor proposes for approval the creation of a new project to develop i) a reporting framework focused on governance and process, ii) a common understanding of the roles and responsibilities for stakeholder involvement and iii) Terms of Reference for a permanent RCC reporting group. The project scope is in line with several articles in the Regulation (EU) 2019/943 including requirements for ENTSO-E reporting on RCC establishment and performance (Art.30(2)).

Steering Group Operational Framework Convenor presents the High-Level Principles on "Regional Coordination Centres Training and certification" (Article 37(1)(g) of Regulation (EU) 2019/943). ACER has requested early interaction and the High-Level Principles provide a basis for discussions on the RCC Training and certification proposal before it is submitted for public consultation.

Decision:

- SOC approves the Terms of Reference (ToR) for the establishment of the Working Group on Probabilistic Risk Assessment (WG PRA).
- SOC approves the Terms of Reference of the existing Expert Teams on Network Code Emergency and Restoration (ET NC ER) and on Load Frequency Control (ET LFC).
- SOC approves the Probabilistic Risk Assessment Methodology version 1 and the ENTSO-E Grid Disturbance Definitions for the Power System above 100 kV.
- SOC approves the Project Initiation Documentation for creating the Project "RCC Reporting and Stakeholder Involvement" under the Steering Group Operational Framework.
- SOC approves the High-Level Principles on "Regional Coordination Centres Training and certification" (Article 37(1)(g) of Regulation (EU) 943/2019).



7. Steering Group Strategy

The Convenor of Steering Group Strategy updates SOC members on the TSO-DSO cooperation, including the status of Task Force on Demand Side Flexibility and the immediate next steps.

The Convenor of Steering Group Strategy gives an update on Clean Energy Package projects developed at cross-Committee level.

The Convenor of Steering Group Strategy informs about the analysis and conclusions regarding the organisation of the regional coordination work at SOC level. The proposal is to create a new Steering Group under SOC to facilitate and support regional coordination after the closure of the RSC Project in October 2021.

The Convenor of Steering Group Strategy reminds about the SOC initiatives to align on a list of priority topics for common workshops on best practices with the EU DSO Entity in order to fulfil the legal requirements.

Lastly, the Steering Group Strategy Convenor gives the floor to the Offshore Strategy leader under SOC to provide updates on the status of work and initial views on EC's Offshore Strategy from system operation perspective and the development of a 4th ENTSO-E Offshore Paper focusing on "System Operation and Governance" issues, planned to be finalized in June 2021.

Decision:

 SOC decides the regional coordination work to be facilitated in a new Steering Group after RSC Project closure in October 2021.

8. RSC Project

The RSC Project Manager informs about deliverables of the Project Group (PG) Inter-RSC Coordination, which are submitted for approval: regional design and development of i) the Coordination Module and ii) the CSA Input Data Consistency Module. RSC Project Manager informs about the need to extend the scope and timeline of the Inter-RSC Coordination project.

The RSC Project Manager presents the Go-live criteria and governance proposal for the Regional Short-Term Adequacy (STA), which have been prepared to ensure a smooth go-live process. Regarding the STA pan-European Tool, the RSC Project Manager presents for approval the Business Requirements Specification (BRS) which have been developed to implement the STA methodology "Coordinated Week Ahead Adequacy Assessment STA Methodology v.1.7.4" incorporating hydro modelling improvements.

The RSC Project Manager requests approval of the Terms of Reference of the dedicated Task Force that will guide on RSC IT Tool development strategy. The Task Force will assess the strategy of the European Merging Function as first topic.



Decision:

- SOC approves the regional design and development of the Coordination Module and Coordinated Security Analysis Input Data Consistency Module.
- SOC approves the updated Project Initiation Document for Project Group Inter-RSC Coordination to cover phase III of the project.
- SOC approves the Go-Live criteria for Regional STA Step 1A.
- SOC approves the Business Requirements Specification for the STA pan-European Tool Release 4 – Hydro energy modelling improvement.
- SOC approves the Terms of Reference for the RSC IT Tools Strategy Task Force under the RSC Project

9. CGM Programme

The Head of CGM Programme presents the latest updates and developments in the CGM Programme.

The Head of CGM Programme outlines the cooperation with ACER and the fact that the CGM Programme started to provide regular status reports within its governance. These reports are mainly based on data derived from OPDE and associated business applications and is intended to share them with the System Operation Coordination Group (SO CG). After the previous CGM External Regulatory Report has been shared with the System Operation Coordination Group (SO CG) in September 2020, the timeline for submitting the next System Operation Coordination Group (SO CG) is April 2021.

The Head of CGM Programme provides further updates on the internal governance of CGM, as well as on the Go-Live operational phase of the OPDE. For the later, clarity shall be provided with the help of some guiding principles in the context of OPDE Services.

Decision:

- SOC approves the regular submission of the External Regulatory Report for the System Operations Coordination Group based on the metrics derived from different workstream activities like operational planning, Interoperability testing etc.
- In line with the Market Committee decision from 27 January 2021, SOC agrees to anonymise the data provided in External Regulatory Report for the System Operations Coordination Group.
- SOC approves the proposed OPDE Operational Governance Principles and requests the CGM Programme to proceed with the associated actions.

10. Steering Group IT&Tools

The Convenor of Steering Group IT&Tools informs that the Electronic Highway (EH) traffic migration onto PCN will be TSOs' first priority after the completion of PCN rollout. The EH Migration Prerequisite document explains how TSOs can anticipate the fulfilment of some prerequisites for



EH traffic migration onto PCN in 2021. It gives a view of the target architecture and the principles of the migration strategy.

The Convenor of Steering Group IT&Tools presents the Coordinated Security Analysis (CSA) data exchange specification that gives the basis for interoperability and harmonization of the CSA data exchanges. The CSA specification can be used for different timeframes: Day Ahead and Intraday.

The next topic presented is the CGMES Profiling User Guide document describing the way to develop and maintain CIM profiles. Also, the "Header and metadata for CGM BP and CSA data exchanges" document submitted for approval, focuses on the Common Grid Model Building Process (CGM BP) and the Coordinated Security Analysis (CSA) data exchange.

The Convenor of Steering Group IT&Tools requests approval for the updated Implementation Guides and Schemas for STA business needs, as part of the requirements for OPC and STA Pan-European Tool Release 3 and 4.

Decision:

- SOC approves the Coordinated Security Analysis data exchange specifications, as well as the publication on ENTSO-E website of the following documents:
 - o CSA Data Exchange Specification v1.0
 - o CSA Related Canonical Extensions v1.0
 - O Assessed Element Profile Specification v1.0
 - o Available Remedial Action Profile Specification v1.0
 - Contingency Profile Specification v1.0
 - Voltage Angle Limit Profile Specification v1.0
 - Security Analysis Results Profile Specification v1.0
 - O Remedial Action Schedule Profile Specification v1.0
 - O Impact Assessment Matrix Profile Specification v1.0
- SOC approves the CGMES Profiling User guide v1.0 to be published on ENTSO-E website
- SOC approves the Metadata and Document Header Data Exchange Specification to be published on ENTSO-E website.
- SOC approves the updated implementation guides and schemas, as well as their publication on ENTSO-E website for the following documents:
 Short Term Adequacy Forecasts (STA) IG v2.2
 Short- and medium-term adequacy prognosis document UML model and schema v1.0
 Short- and medium-term adequacy results document UML model and schema v1.0

11. Approval of the Minutes



Decision:

[–] SOC approves the Minutes of the 65th SOC Meeting for publication.