

18th System Operation European Stakeholder Committee (SO ESC)

23 September 2021, 13:30-15:00

Online meeting

Draft Minutes

Participants		
Uros	Gabrijel	ACER (Chair)
Anneli	Teelahk	EASE
Eric	Dekinderen	VGB Powertech
Freddy	Alcazar	EUGINE
Knud	Johansen	ENTSO-E/Energinet
Mathieu	Fransen	ACER
Louise	Norring	ENTSO-E Secretariat
Luca	Ortolano	ENTSO-E/Terna
Antje	Gesa Orths	ENTSO-E/Energinet
Luca	Guenzi	Solar Turbines
Pavla	Erhartova	Europex
Assiet	Aren	EUGINE
Susan	Taylor	EASE
Thierry	Vinas	Eurelectric
Thomas	Hölzer	BNetzA
Victoria	Cummings	Europex
Michele	Dion-Demael	ENTSO-E/RTE
Eleni	Diamantopoulou	Client Earh
Mike	Kay	GEODE
Andreas	Luxa	Orgalime
Marco	Pasquadibisceglie	Arera
Yannick	Phulpin	Eurelectric
Marc	Malbrancke	CEDEC
Gunnar	Kaestle	COGEN
Lukas	Wachter	E-Control
Markus	Watscher	EURELECTRIC
Srinivasa	Raju Addala	EUGINE
Stein	Øvstebø	IFIEC
Michael	Wilch	E.DSO
Ton	Geraerds	VGB Powertech
Vasiliki	Klonari	WindEurope
Walter	Sattinger	ENTSO-E/Swissgrid
Bernard	Malfliet	ENTSO-E/Elia
Markus	Besser	ENTSO-E Secretariat
Alina	Neagu	ENTSO-E Secretariat
Jens	Moller Birkebaek	ENTSO-E/Energinet
Kacper	Kepka	ENTSO-E Secretariat

Participants		
Victor	Charbonnier	ENTSO-E Secretariat
Sarah	Soliman	ENTSO-E Secretariat

1. Opening

1.1. Review of the agenda

The Chair (Uros Gabrijel) opens the meeting. He informs the SO ESC that the next SO and GC ESC meetings will be conducted via Microsoft Teams.

The agenda is confirmed with the suggestion of switching agenda items 4 and 9. Solar Turbines (Luca Guenzi) is interested in details of the 24 July system event.

- Action: ENTSO-E will provide an update on 24 July system event at the next SO ESC in December.

1.2. Review and approval of minutes of previous meeting

The minutes of the previous meeting are approved.

1.3. Actions

ENTSO-E (Victor Charbonnier) updates on the open actions from the last meetings.

- Offshore bidding zone: ENTSO-E to present at September ESC its views on offshore developments incl. market and system operation aspects.
- Wind eclipse: ENTSO-E to provide a high-level proposal for how to define and tackle the topic at the September ESC.
- DFD: ENTSO-E to provide views during the wind eclipse presentation at September ESC. Information was also shared with members of the System Operation Coordination Group.

2. Update on implementation actions at pan EU level

ENTSO-E (Victor Charbonnier) presents the updates on the implementation actions.

CSAm amendments (Art. 21 & 27 SO GL):

ACER Board of Regulators approved the final document in June 2021 after the hearings. The next step is to discuss with Capacity Calculation Region for the regional implementation.

Regional coordination assessment (Art. 17 SO GL):

The report ENTSO-E published on 26 July its annual report on "Regional Coordination Assessment". It contains key-performance indicators (KPIs) for the services provided by the Regional Security Coordinators (RSCs). This report describes the current status of the implementation of the legally compliant services and the good practices applied so far.

In the reporting for the year 2020, the pan-European Outage Planning Coordination (OPC) and Short-Term Adequacy (STA) services operated according to the methodology approved by the regulatory authorities whereas the Coordinated Security Analysis (CSA) and Common Grid Model (CGM) services are still at different stages of implementation.

In summary, the regional coordination assessment shows well established RSCs with high-quality performance and good cooperation in cross-regional issues. The next big step is expected in 2021 with the implementation of the pan-European CGM service.

Eurelectric (Yannick Phulpin) asks if the CCR workshop involves stakeholders. ENTSO-E Secretariat will clarify this point.

FCR LER (Art. 156.11 SO GL):

The public consultation is closed and the proposal will be submitted on 7 October.

Eurelectric (Yannick Phulpin) asks if ENTSO-E intends to publish a report on the consultation and if stakeholders will be invited to the workshop. BNetzA (Thomas Hölzer) asks if TSOs will change their proposal according to the stakeholders' feedback. ENTSO-E (Luca Ortolano) later explains that the workshop will involve stakeholders and the proposal will be further explained on this occasion.

Risk preparedness:

ENTSO-E will reply to the comments received on the report "Identification of Regional Electricity Crisis Scenarios" in the fall. On 7th of September, ENTSO-E submitted the "Report assessing the need for development of computational methods and tools for assessment of regional electricity crisis scenarios" to the European Commission and ACER. The report was presented at the last Electricity Coordination Group meeting (15 September).

Transparency Platform:

There was no comment on the SO GL Detailed Data Description during the public consultation on the Manual of Procedures. The final document will be submitted for approval to the relevant ENTSO-E decision-making body and then to ACER for an opinion.

Active Library:

ENTSO-E published a website page with all publicly available information regarding specific System Operation Guidelines (SO GL) Articles that are to be implemented at national level. This mainly affects the field of data exchange (SO GL Article 40.6) and of load frequency control (related agreements and information on frequency quality). Links to national implementation website and relevant contact persons are also provided for each country.

3. Cybersecurity Network Code

ENTSO-E (Andrea Foschini) provides an update on the drafting of the new Network Code on Cybersecurity. He describes the existing legislative framework and to what extent the new network code will contribute to it. He explains the main objectives:

- Impact assessment methodology to evaluate the relevance of electricity undertakings
- Cyber risk assessment methodology to assess risks on cross-border electricity flows
- Common Electricity Cybersecurity Framework to establish minimum cybersecurity requirements
- Supply chain security framework that aims to verification of products and services that are relevant for cross-border electricity flows
- Common scheme for sharing of cybersecurity-related information, incident and crisis management

A cybersecurity working group will be created to monitor and report on the implementation of the provisions in cooperation with the relevant national authorities.

The first draft of the proposal will be ready by mid-November and consequently be made available to stakeholders for public consultation from 12 November to 11 December 2021. Comments will be consolidated and addressed in a second draft to be delivered by 14 January 2022. Public workshops will be organised on 19 November and 18 December 2021.

The Drafting Committee includes representatives from ACER, CEER, EC, ENISA, ENTSO-E, EU DSO Entity, NEMO Committee, NIS Cooperation Group Workstream 8 and RCCs. But contacts are in progress with other relevant associations of energy, industrial and cybersecurity sectors. The Committee is chaired by ENTSO-E and vice-chaired by EU DSO Entity.

Eurelectric (Yannick Phulpin) asks if the drafting Committee will include stakeholders and what are the contacts with other associations which are being contacted.

ENTSO-E (Andrea Foschini) explains that the Committee itself has mostly a support and advisory role but it does not develop the proposal as such. This is done by a core drafting team. Interested parties should reach out to ENTSO-E and EU DSO Entity if they want to join the Drafting Committee. However, not all stakeholders can be involved otherwise the meetings will be unmanageable. But all will have the chance to express their views during the public consultation.

VGB Powertech (Eric Dekinderen) asks:

- If the network code will address cyberattack without cross-border effect? (e.g. cyberattack with impact on reactive power which is a local issue)?
- How are inputs from other industries with experience in cyberattacks considered? (e.g. banking sector)?
- How interested parties can get involved in the process?

ENTSO-E (Andrea Foschini) replies that:

- Cybersecurity risks require a holistic approach regardless of the cross-border dimension of the cyber event.
- The set of standards that is taken into account for developing the proposal is the same than the standards in use in other sectors.
- Contact should be taken with the Chair and Vice-Chair of the Committee. Contacts are ongoing with relevant associations already.

CEDEC (Marc Malbrancke) highlights the importance of aligning the working arrangements with the philosophy behind the upcoming Memorandum of Understanding between ENTSO-E and EU DSO Entity and asks the reason for the short timeline. ENTSO-E (Alina Neagu) explains that the ToR of the Drafting Committee will consider this and that the best efforts were implemented to work in cooperation with DSOs already from the informal drafting process. The short timeline was requested by the European Commission taking into consideration the existing recommendations of the TSO-DSO development team.

Eurelectric (Yannick Phulpin) asks how the overlap with risk preparedness requirements will be addressed in the assessment of the cyber risk on cross-border exchanges.

WindEurope (Vasiliki Klonari) asks if the current SO ESC will play a role in the development and monitoring of the network code. ENTSO-E (Alina Neagu and Andrea Foschini) explains that the SO ESC will be kept informed about relevant developments during the drafting phase. For the monitoring and reporting after the network code is approved, a dedicated group will be created.

4. AOB

The Chair (Uros Gabrijel) mentions that information was provided by ENTSO-E in the meeting material about NC E&R and that stakeholders are welcome to raise questions or observations. ACER is undertaking a monitoring of the obligations under this code and intends to publish a report.

The next meeting will take place on 6 December to 13.30 and 16.00. The Chair (Uros Gabrijel) invites ENTSO-E to propose the meeting dates for ESCs next year preferably back-to-back and physical if the sanitary conditions allow it.

5. Wind eclipse

ENTSO-E (Bernard Malfliet & Walter Sattinger) recalls the background for this discussion stemming from the observation of large shut down of wind generation driven by market dynamics at time of negative prices or environmental regulation. This phenomenon is not only applicable to wind turbines commissioned since 2016 but also to larger solar PV generators with system sizes ≥ 500 kW. Specific measurements from suspected infeed connection points need to be done and correlated with system frequency deviations from relevant control blocks. Data need to be collected more accurately than what is available from TSOs SCADA and PMU systems to better understand the size and localisation of the problem. Additional information from wind parks would help to identify the main electrical drivers of this phenomenon. Then simulations would need to be performed to test solutions that can mitigate the increase of the rate of change of frequency. On this basis a discussion will take place with relevant stakeholders.

Eurelectric (Yannick Phulpin) is interested to have a comparison of the root causes between countries (environmental regulations or specific market dynamics). Eurelectric agrees that market rules should be designed to ensure that there's less generation during negative prices while avoiding inconsistency or overlap with the role of balancing market. Solutions could involve a rethinking of reserves dimensioning and the way balancing is done.

VGB Powertech (Eric Dekinderen) asks if the balancing market provides sufficient incentives to cover the lack of generation. ENTSO-E (Bernard Malfliet) clarifies that the problem is not the lack of injection but the fast ramping of some generators that reduce power while others must ramp up with the same speed.

COGEN (Gunnar Kaestle) explains that this phenomenon is driven by poorly designed regulation on how RES generation is supported and raises concerns that the proposed plan is too late to address this issue within the window of opportunity during the EEAG revision. The phenomenon is likely to worsen over the coming years if legislators do not consider this risk. ENTSO-E (Walter Sattinger) replies that the problem is taken seriously by TSOs and that an in-depth study is necessary to identify its root cause.

WindEurope (Vasiliki Klonari) asks

- if ENTSO-E has information about the localisation of this phenomenon because there are countries where compensation rules might prevent this phenomenon to happen, and
- if the EG about system stability under GC ESC could explore new rapid ramping capabilities for addressing this issue.

ENTSO-E (Bernard Malfliet) has not yet obtained a detailed geographical representation of where this issue occurs.

The Chair (Uros Gabrijel) asks if ENTSO-E will investigate ramping restrictions as mitigating measures for deterministic frequency deviations (DFD). ENTSO-E (Bernard Malfliet) explains that TSOs agreed these restrictions are indeed considered in the scope of solutions.

6. Offshore

ENTSO-E (Antje Gesa orths) recalls the ambitious EU objectives in terms of offshore developments which led ENTSO-E to draft several position papers. Offshore is only one out of multiple aspects that are necessary to the planning of future energy system but specific challenges need to be addressed in terms of spatial planning, equipment interoperability (multivendor multiterminal HVDC systems), costs reduction, system balancing and security etc. The position papers advocate for regulatory evolution regarding unbundling rules, investment framework and hybrid offshore projects. For the latter offshore bidding zones may be a promising solution for market integration because it reflects better physical congestion and flows. However, it provides less market revenues to offshore wind farms compared to the home market concept. This means it could require stronger support mechanisms to realise investments in socioeconomic efficient hybrid projects. The last position paper was published back in July and touches upon system operation issues for which it proposes guiding principles:

- Market parties remain responsible for their imbalances
- TSO remain responsible for system operation and for balancing the system real-time
- Regional coordinating of system operation in RCCs
- Existing EU regulation and roles are fit for purpose to a large extent

Eurelectric (Yannick Phulpin) asks

- How ENTSO-E consider the 70% rule for offshore infrastructure development especially with the involvement of non-EU countries (e.g. UK)
- How the sizing of balancing reserves will be done in a scenario with significantly large hybrid offshore assets (e.g. cost sharing between the TSO for reserves procurement)

ENTSO-E (Antje Gesa orths) replies that the offshore bidding zone is compatible with the 70% rule as it would allow large availability of cross-border capacity. No comment is made on the issue of non-EU countries involvement. The sizing of bidding zones will need to be adjusted according to structural congestions and this will depend on the evolution of the generation portfolio. Imbalances could be handled not only by the adjacent bidding zones but further away provided that the system allows the required flows. The next ENTSO-E position paper will discuss cost-sharing aspects related to congestion income and is expected in October.

7. FCR LER

ENTSO-E (Luca Ortolano) explains that the public consultation was extended by one week until 12 September. There was a high participation with 40 respondents. Answers to stakeholders' contributions will be submitted together with the proposal to the NRAs. This will be done on 7 October. In addition, TSOs will organise a workshop to explain the rationale behind the proposal.

COGEN (Gunnar Kaestle) asks what the main feedback from the respondents is (acceptance or not for the proposal). ENTSO-E (Luca Ortolano) explains that there are three type of answers: 30 min, 15 min, 15 min for existing FCR reserve providing units and 30 min for new ones.

8. System split 8 January – market implications

ENTSO-E (Jens Moller Birkeak) presents the market chapter of the report on 8 January system split. He presents the scheduled flows between bidding zones and explains that all market schedules respected NTC values. The expert panel investigated market prices and did not find extraordinary price levels. The incident created an interruption in the power flow based on the day-ahead and intraday market schedules across the split line. There was a deficit in Center Western Europe and a surplus of power in the South Eastern Europe with consequential frequency deviation. This shortage and the deviation influenced the activation of the market-based FCR and FRR capacity in all areas but additionally in some areas extraordinary measures were activated to bring the system conditions back to normal in the entire Central Western Europe and South Eastern Europe regions. France, Italy, Great-Britain, Romania and the Nordic area were impacted by extraordinary measures. The behaviour of the close-to real-time platform for these areas were investigated (intraday and balancing platforms). The assessment shows that they performed fully as normal during the event.

The recommendations of the report pertain mainly on coordinated capacity calculation:

- The Net Transfer Capacities calculation shall be performed in a coordinated manner across regions
- The coordinated Net Transfer Capacities calculation shall take stability limitations into account

Eurelectric (Yannick Phulpin) asks

- If all operational rules and requirements were respected by TSOs? Was the problem stemming from an erroneous measurement and if so, is this a violation of the rules? If not what is the proposed solution to make sure that CGM are not erroneous?
- What are the rules for imbalance settlement when emergency measures are activated?

On the latter question ACER (Mathieu Fransen) asks back who should be responsible for solving the problem and how to settle accordingly. Eurelectric argues that this discussion should occur as part of the methodology under NC E&R which has not been the case until now. On this latter point ENTSO-E (Jens Moller Birkeak) comments that measures were not out-of-the-market but defined according to market-based procedures and approved by NRAs. On the former question ENTSO-E (Jens Moller Birkeak) replies that the problem was due to the tripping of a busbar coupler and that the investigation did not reveal any infringements.

9. CGM programme implementation

ENTSO-E (Markus Besser) provides an overview of the CGM Programme implementation. The overall programme should go live by the end of this year. There will be a phased approach to ensure that services are put into operation as quickly as possible while allowing flexible adaptation and enabling a profound integration of all streams. Three phases are envisaged:

1. Delivery of the CGM building process and dependent services. The Common Grid Model Exchange Standard (CGMES) and ENTSO-E Operational Planning Data Environment (OPDE) will be used wherever possible. Some services may be based on different data formats and/or different communication means;
2. Migration or implementation of services to the CGMES and/or ENTSO-E OPDE;
3. Integrated operation of the CGM building process and dependent services based on the CGMES and ENTSO-E OPDE.