

34rd System Operation European Stakeholder Committee (SO ESC)

17 September 2025, 13:00 - 16:00

Location: Ljubljana, ACER

Minutes

Name	Affiliation	Role
Uros Gabrijel	ACER	Chairperson
Domen Kodric	ACER	Observer
Georgios Antonopoulos	ACER	Observer
Maria Barroso Gomes	ACER	Observer
Evangelia VASILAKI	ACER	Observer
Jan KOSTEVC	ACER	Guest
Marco Pasquadibisceglie	ARERA	Observer
Thomas Hoelzer	BNetzA	Observer
Lisa Dallinger	BNetzA	Observer
Florentien Benedict	CEDEC/DSO Entity	Member
Serdar Bolat	DSO Entity	Member
Tony Hearne	DSO Entity	Member
Andrea Hamzova	DSO Entity	Member
Gunnar Kaestle	COGEN	Member
Abel Santamaria	EDSO	Member
Santiago Gallego Amores	EDSO	Member Substitute
Gamze Dogan	ENTSO-E	Member
Alina Neagu	ENTSO-E	Member
Lazaros Exizidis	ENTSO-E	Member
James Hellinckx	ENTSO-E	Member
Cherry Yuen	ENTSO-E	Member
Luca Ortolano	ENTSO-E	Member
Vesela Stefanova	ENTSO-E	Member
Nora Filipczak	ENTSO-E	Member
Habir Paré Nsangou	ENTSO-E	Member
Klaus Kaschnitz	ENTSO-E	Guest
Richárd Balog	ENTSO-E	Guest
Donatas Matelionis	ENTSO-E	Guest
Ana Cigaran Romero	ENTSO-E	Guest
Joao Moreira	ENTSO-E	Guest
Luca Ortolano	ENTSO-E	Guest
Martin Pistora	ENTSO-E	Guest
Luca Guenzi	EU Turbines	Member
Steffen Eckstein	EU Turbines	Member Substitute
Herve Biellmann	EU Turbines	Member Substitute
Freddy Alcazar	EUGINE	Member
Srinivasa Raju Addala	EUGINE	Member Substitute
Thierry Vinas	EURELECTRIC	Member
Arthur Hubert	EURELECTRIC	Member

Jakub Fijalkowski	European Commission	Observer
Ellen Beckstedde	European University Institute	Observer
Pavla Erhartova	Europex	Member
Mike Kay	GEODE	Member
Michaël Van Bossuyt	IFIEC	Member Substitute
Martin Stoessl	Orgalime	Member
Rainer Fronius	VGB Powertech	Member
Klaus Oberhauser	VGB Powertech	Member
Vidushi Dembi	WindEurope	Member
Marc Malbrancke	CEDEC	Member
Jannis Burger	EASE	Member

1. Opening

1.1. Review of the agenda, approval of last meeting minutes

The Chair (Uros Gabrijel) opens the meeting and asks for comments on the agenda.

Florentien Benedict (DSO Entity) clarifies that they will follow-up with the action for the DSO Entity to share the report on Grid Forming with the track changes.

The minutes of the last meeting are approved.

Action: DSO Entity to share the report on Grid Forming reflecting the track changes.

1.2. Review of Actions

Cherry Yuen (ENTSO-E) presents the pending actions from the previous meeting.

- An update on Deterministic Frequency Deviation (DFD) will be provided in the next SO ESC meeting.
- On the action related to inertia, the Chair (Uros Gabrijel) clarifies that what is needed now is an update on the methodology development steps from ENTSO-E.
- Donatas Matelionis (ENTSO-E) clarifies the action point on the voltage limit in the Baltic states. Since Baltic region has been synchronised with Continental Europe, it became one region. However, the limits in voltage for the CE region refers to 400kV; whereas in the Baltic, the reference is to 330kV. Baltic states cannot apply this voltage limit as it would require a change in the equipment and technology. They are currently working on a specific amendment proposal to ensure Baltic state can refer to the voltage limits consistent with 330kV. Klaus Oberhauser (VGB Powertech) clarifies that the question was to know to which limit the equipment has to comply. Donatas confirms that no change in the limit is foreseen. The voltage limit will stay the same for the Baltic countries.

2. Update on the implementation actions at pan EU level

Cherry Yuen (ENTSO-E) presents the upcoming reports that will soon be published on ENTSO-E's website.

No comments received.

3. Report on CGM Implementation

Habir Paré Nsangou (ENTSO-E) presents the update on the CGM implementation, focusing on the achievements and the on-going actions, as well as, the timeline for the CGM-based services go-live.

No comments received.

4. Czech Republic Incident Investigation

(The agenda had to be rearranged due to availability of speakers)

Donatas Matelionis (ENTSO-E) presents the incident that happened in Czech Republic. The investigation is ongoing as well as the data collection.

Thierry Vinas (Eurelectric) asks clarification about the incident classification; if the reason for the generation disconnected is already known; and if clarification about the restoration process can be provided and whether it involved black start unit.

Donatas M (ENTSO-E) clarifies that:

- The incident is classified as scale 2, L2 on the ICS methodology, meaning that 10-50% of the load was lost;
- The investigation is ongoing, the collection of data from the Czech DSOs is also ongoing to be able to analyse what happened;
- So far, no information about black start capability. The restoration was highly supported by European balancing platforms, Picasso and MARI.

Gunnar Kaestle (COGEN) asks additional information on the repair of the first line tripping. Donatas Matelionis (ENTSO-E) clarifies that the conductor of the overhead line fell which required manual intervention to repair. The line was put back into operation the same day at 23:15. Reasons for the conductor falling are still being investigated.

Gunnar Kaestle (COGEN) asks about the over-supply situation as 1,5GW of generation and 2.7GW of demand were lost. Donatas Matelionis (ENTSO-E) confirms that the area was in surplus. Therefore, the Czech Republic was supported by neighboring countries via the balancing platforms to export the surplus of electricity.

The DSOs are expected to provide the data for the investigation but are not part of the Expert panel.

Rainer Fronius (VGB Powertech) asks clarification about the link between the first line falling, which is an N-1 event, and the loss of the generation.

Martin Pistora (ENTSO-E) clarifies that indeed the first line tripping is a N-1 event, and auto reclosure was unsuccessful. Then, generation was lost, and the investigation will clarify the link between the events as the system was N-1 secure.

Martin Pistora (ENTSO-E) clarifies that DSOs are involved in the national investigation, but not in the Expert Panel.

Florentien Benedict (DSO Entity) comments on the DSOs' involvement into the investigation of the Expert Panel as it is the DSOs which are connected to the customers. She also asks for additional information about the system state before the first event.

Martin Pistora (ENTSO-E) clarifies that the system was N-1 secure, so after the first line tripping, the system was secure. However, the loss of the generation created further issue.

Luca Guenzi (EU Turbines) asks about the island and the impact of it to the rest of the system.

Martin Pistora (ENTSO-E) specifies that the substation Krasikov was the last one to disconnect the island. The rest of the system was nearly unaffected aside from balancing issue due to a larger generation than consumption; whereas in the island, there was a deficit in generation. Neighboring TSOs were not affected.

Michaël Van Bossuyt (IFIEC) comments that there have been several incidents on the power system recently with a high impact on customers and related costs to third parties. The chair points out the importance of reviewing the SO Regulation to adapt it to current situation and evolution of the power system. Thierry Vinas (Eurelectric) complements that respecting the current legislation is also important. The Chair clarifies that past incidents have led to assessing the appropriateness of the current legislation to ensure there was no room for different interpretation and to already identify improvements in the system operation rules.

5. Updates from DSO Entity

Florentien Benedict (DSO Entity) presents the update from the DSO Entity.

Thierry Vinas (EURELECTRIC) supports the identified issues with the timeline for the CNCs. The topic is very important with economic and environmental implications (no visibility on the timeline means no electrification and higher dependence on fossil fuels). He raised a question about the cost of grid forming technologies.

In response to a question on the Entity's grid forming support document Tony Hearne (DSO Entity) clarifies that the document presents some information on costs, but is only very indicative.

Gunnar Kaestle (COGEN) kindly asks to pay attention to the terminology and not refer to low voltage ride through but rather to under-voltage ride through. Additionally, the purpose of harmonisation is to develop standards which will most likely impact the DSOs mostly as most new equipment will be DSOs-connected. Therefore, time is needed to assess and test those new standards.

Michaël Van Bossuyt (IFIEC) mentions that due to the lack of visibility on the timeline for CNCs, investments are costly and performing modernisation based on standards that do not yet exist is difficult in terms of investments decisions. This, even more so knowing that RfG2.0 will cover all types of storage. We should avoid a situation where a wide range of capabilities are asked but only a fraction is used. A fit-for-purpose approach should be developed to capture the problem in its whole and find appropriate solutions and alternatives.

Florentien Benedict (DSO Entity) concludes that on grid forming the stakeholders are invited to submit their views when the roadmap per member states is developed. On the harmonisation, the work can be done without it, but harmonisation would reduce the workload and ease the process.

Luca Guenzi (EU Turbines) asks if an alternative could be envisioned regarding the criticality of the process and the current timeline which does not capture it: and if there are legal means to foster harmonisation without delay.

Florentien Benedict (DSO Entity) clarifies that indeed they wrote a letter to the EC and now, they are open to discuss what can be done and to think of how to prevent this from happening in the future.

The Chair (Uros Gabrijel) refers to the minutes of the last meeting (June 2025) where the topic had already been discussed and where the EC clarifies that the way of working is first to have the network codes and then, developing the standards.

Florentien Benedict asks ACER for another ESC meeting on the Iberian Blackout once the report from the Expert Panel is published.

The chair (Uros Gabrijel) confirms to organise GC ESC / SO ESC joint Workshop on 2025 Expert Panel investigations.

6. Update on probabilistic FCR dimensioning and LLFD analysis

Luca Ortolano (ENTSO-E) presents the status of the task force working on the Tmin for FCR LER.

Jannis Burger (EASE) mentions that even though immediate retroactivity was avoided in recent ENTSO-E proposals, still after at the latest 10 years, all assets will need to comply to the 30min which will be difficult for existing storage installations and will make it more expensive for them to provide FCR. Luca Ortolano (ENTSO-E) clarifies that in 10 years, we are dealing with a fast-changing scenario, and the scenario might need to be re-assessed in 10 years. The study shows that there is a need for FCR to run for 30min specifically when FRR is not sufficient. This technical issue is at the basis of the proposal.

Jannis Burger (EASE) mentions that the cost benefit analysis was not performed on retroactivity for existing assets, so the need for a retro-active application has not been demonstrated. Luca Ortolano (ENTSO-E) clarifies that every connection requirement acts this way, when a revision is performed, it has to comply with the new requirements.

7. Iberian Incident

Richard Balog (ENTSO-E) presents the findings of the factual report on the Iberian Peninsula incident. The report will be published early October.

The Chair (Uros Gabrijel), following-up on the proposal by Florentien Benedict (DSO Entity), proposes to chair a second cross-committee workshop to discuss the report after its publication.

Abel Santamaria (EDSO) asks if the cause of the increase of the demand at the distribution level, which is presented to be the disconnection of hundreds of generation units, has been clearly proven or if it is still a theory to be further investigated; and if additional information on the generators at low and medium voltage have been analysed. Additionally, he points out the impact an increased voltage has on the demand, which in this situation seemed reasonable. The voltage increased from 5 to 10% which led to an increase of the demand by 2%. Finally, he asks if the information on inertia could be provided not on a national level, but by dividing Spain into smaller areas and assess the inertia in those areas.

Richard Balog (ENTSO-E) clarifies that the information presented are based on the data that the Expert Panel has been able to gather. It represents the best estimation and calculation based on those data. On the inertia point, he clarifies that this cannot be calculated for smaller areas.

Action: ENTSO-E will follow-up with the proposal to have a second joint GC/SO ESCs workshop dedicated to the Iberian incident.

8. *North Macedonia incident*

Ana Cigaran Romero (ENTSO-E) presents the slide on the North Macedonia incident.

No comments are raised due to lack of time.

9. *Methodology on minimum inertia levels for CE*

Joao Moreira (ENSTO-E) presents the status of the methodology on minimum inertia.

The Chair welcomes the positive and efficient collaboration with stakeholders on the project inertia related topics and encourages to continue involving the stakeholders in the early stages of the methodology's development.

Thierry Vinas (EURELECTRIC) points out that inertia is provided by rotating machines, nuclear, hydro, thermal; either existing or commissioned. The relevant stakeholders for those technologies should be involved in the process for determining inertia needs. Additionally, he points out that the stability of the European power system is ensured by various technologies in different countries, some countries benefiting from inertia provided by others. It is a good example of European solidarity, but it should be kept in mind.

10. *AOB*

The Chair closes the meeting.