

93rd System Development Committee Meeting

Date & Time: 24 October 2022 from 13.00-18.00h

Date & Time: 25 October 2022 from 09.00-12.40h

Place: NH Madrid Ribera del Manzanares, Paseo Virgen del Puerto 57 – ES – 28005 Madrid

Participants (*physical*)

Chairman

	Amprion	Germany
--	---------	---------

Vice Chairman

	RTE	France
--	-----	--------

Special invitee

1.	ENTSO-E Board member (REE)	Spain
----	----------------------------	-------

Members

1.	Creos Luxembourg	Luxembourg
2.	Elering	Estonia
3.	Elia System Operator	Belgium
4.	EMS	Serbia
5.	Fingrid	Finland
6.	HOPS d.d.	Croatia
7.	REE	Spain
8.	RTE	France
9.	Statnett	Norway
10.	Svenska Kraftnät	Sweden
11.	TenneT TSO BV	Netherlands
12.	Transmission System Operator-Cyprus	Cyprus
13.	Transelectrica	Romania

Substitutes

14.	50Hertz Transmission (<i>1st day</i>)	Germany
15.	Amprion	Germany
16.	APG	Austria
17.	Ceps	Czech Republic
18.	Energinet	Denmark
19.	IPTO	Greece
20.	TenneT TSO GmbH	Germany
21.	Terna	Italy
22.	TransnetBW	Germany
23.	VUEN	Austria

Conveners RGs

1.	RG Baltic Sea	Germany
2.	RG North Sea	Netherlands
3.	RG Continental South-East	Serbia
4.	RG Continental South-West	France
5.	RG Continental Central East	Czech Republic
6.	RG Continental Central South	Italy

Conveners WGs and SGs

7.	SG TYNDP 2022	Spain
8.	WG System Design Strategy and SG Scenario Building	Netherlands
9.	ONDP Central Group	Denmark

Secretariat

1.	ENTSO-E	
----	---------	--

Participants (remote)**Members**

24.	50Hertz Transmission (2nd day)	Germany
25.	AS Augstsprieguma tikls	Latvia
26.	Crnogorski elektroprenosni sistem AD	Montenegro
27.	Eirgrid	Ireland
28.	Eles	Slovenia
29.	Litgrid	Lithuania
30.	Mavir	Hungary
31.	MEPSO	Republic of North Macedonia
32.	OST-Operatori i Sistemit te Transmetimit	Albania
33.	PSE	Poland
34.	REN	Portugal
35.	Seps	Slovakia
36.	Swissgrid	Switzerland

Substitutes

37.	Crnogorski elektroprenosni sistem AD	Montenegro
38.	SONI	United Kingdom
39.	Transelectrica	Romania

Conveners WGs and SGs

1.	StG Connection Network Codes	Germany
----	------------------------------	---------

Excused

1.	ESO-EAD	Bulgaria
2.	Landsnet	Iceland
3.	NOSBiH	Bosnia&Herzegovina

Monday, 24 October 2022

1. Attendance, quorum and approval of draft Agenda

The SDC meeting starts with a warm welcome from the ENTSO-E Board member from REE, Eduardo Prieto. The SDC Chair welcomes all participants to this SDC meeting. A new format of two half-day meetings is applied. He warmly thanks REE for hosting this Committee meeting in Madrid and for organising meetings around the SDC meeting, including a RG Convenor workshop and a TYNDP2022 Steering Group meeting.

The SDC Chair expresses his sincere thanks, on behalf of the whole organisation, to the Convenor of the RG Baltic Sea after his two mandates, and with a replacement being announced soon. He also thanks the Convenor of RG CSW for his commitment over the last two years and who has passed the lead of the Regional Group to a new Convenor nominated by REE. He congratulates the Convenor of RG CSE for his re-election on 18 October 2022 by the Regional Group for a second mandate.

The SDC Chair and Head of Section take the opportunity also to inform the Committee of staff rotations in the Secretariat for the Long-Term Planning manager and the expert on European policy. Both were very active in the Committee directly for many years.

The agenda is approved without further changes. The meeting is quorate.

DECISION

36 out of 39 of the TSOs represented in the System Development Committee are attending the meeting, the SDC Chair states that the Committee meeting reaches the necessary quorum of half its members.

2. SDC Planning Programme

2.1. SDC Dashboard 2022

The SDC Programme Manager summarises main progress of SDC's planning products, in particular on the TYNDP2022 finalisation and initiation of TYNDP2024.

3. Report from Board Strategy Workshop and Board meetings 5-6 October 2022

The Committee Chair summarises **the main points discussed by the Board that are relevant to SDC**. The Seasonal Outlook work approach, the progress and transparent fact-based communications were welcomed. The Board welcomed the **SDC's initiative** on the minimum resource contributions of members to deliver legally mandated work. The Board also reviewed the responses to the ENTSO-E's member satisfaction survey, which confirmed the good appreciation of SDC's work. The Head of Section provides further context on the final budget proposal which was endorsed by the Board for approval by the Assembly. The revised budget proposal was intensely discussed and prepared during the summer to have a fair approach across all Committees and work areas.

4. SDC Meetings 2023

4.1. Proposal for SDC meeting schedule

The SDC Chair proposes six meetings in 2023. These are hybrid meetings, which means that physical events are organised with the possibility of a remote connection for those who are unable to travel. These meetings will follow the new format of two half days if they are held in Brussels or in another location well connected to other European destinations. It was suggested that two additional dates be blocked, either for a short SDC meeting or for an informative web-conference, to be confirmed at an earlier date. Some members note that some of the proposed dates coincide with one of their national holidays. Different views are expressed regarding physical/virtual meetings; some prefer physical meetings, while others ask that some meetings be considered more virtual due to company policies, the benefits seen in recent years and the overall reduction in CO₂ footprint.

The Chair and Secretariat take note of all comments and will propose a meeting schedule for 2023 for approval at the December meeting.

5. European policy update

The Secretariat provides an overview of recent legislative proposals and the adoption of emergency measures to cope with high electricity and gas prices and security of supply. ENTSO-E also closely follows other legislative dossiers such as the Fit-for-55 package, REPowerEU and the F-gas Regulation.

6. Advocacy topics

6.1 SDC projects and WG communication plans – next steps

The Secretariat recalls an earlier decision by SDC in the context of the 2023 Committee Work Programme. SDC decided to stop asking SDC groups to develop deliverable descriptions, as quality management has already improved considerably in recent years. Instead, the Committee asked each SDC group to develop an external stakeholder communication plan for each relevant area of the 2023 Work Programme. Guidance is being developed to enable SDC groups to prepare this plan in an online tool that can be updated and monitored.

The Committee Chair welcomes the proposal and acknowledges the efforts made by all groups in recent years to improve quality management. As a next step, the Committee asks to continue working on guidance towards TSOs on their own national communications when they are related to the work of ENTSO-E.

7. RGs activities (beyond TYNDP 2022)

7.1. Main progress

All six Regional Group Convenors give a brief update on ongoing work in their region.

7.2. Outcome of the SDC internal cross-RGs workshop

The SDC Programme Manager summarises discussions in a team coordinated by the Programme on key directions for the next TYNDP 2024, in particular on how to frame the IoSN study ('gap analysis' in the new TEN-E) including internal bottlenecks. These directions were tabled in a cross-RGs workshop that took place just before the SDC meeting. Regional Groups are the bridge to see how ENTSO-E products add value in national discussions. The workshop participants will rediscuss in a few weeks' time about how to approach

the next TYNDP and have synergies with regional studies. The workshop also noted that RG work should go beyond TYNDP, also covering ERAA and the new ONDPs.

8. National updates

8.1. New approaches in NDP (REE)

REE presents several methodological approaches included in the most recent National Development Plan such as a new methodology for the location of new RES considering information of resource maps for renewable energy, environmentally cleared zones and a pipeline of connection requests. The system needs for grid development were assessed with a Combined Market and Network Model in Plexos and then addressed via many solutions as complement or alternative to new lines, such as an Automatic Power Reduction System (operational measure), and several new devices such as DLR or batteries and Synchronous condensers as full integrated network elements.

8.2. National stress test Winter 2022/23 (German TSOs)

Amprion presents, on behalf of the four German TSOs, their national stress test study for next winter. The approach is compared to that of the ENTSO-E's Winter Outlook which takes a different methodology and perspective.

8.3. Gridbooster as battery solution to solve the grid congestions (TransnetBW/TenneT TSO GmbH)

TransnetBW GmbH, in collaboration with TenneT TSO GmbH, presents the concept and set-up of the planned Grid booster pilot systems in Germany

9. ERAA 2022

9.1 Main outcomes and key messages

The Convenor of the Steering Group thanks the ERAA team for the work performed. He reminds the Committee of the ongoing review process of the report by SDC members, open until 7 November 2022. The Convenor then presents the ERAA 2022 outcomes and the proposed key take aways. The Committee agrees on the main takeaways and recommends to the Steering Group to include as well in the report the following messages:

- Explain that the EVA is a risk assessment of what could happen, not a prediction of what will happen,
- Put ERAA in context of the Winter Outlook, reflecting on both products' different purpose and assumptions,
- Future ERAAs need to have a model and assessment fit for purpose. Models should be kept as simple as appropriate, allowing for better understanding of inputs and outputs,
- Include qualitative consideration of grid aspects and reserves.

10. ERAA 2023

10.1. Project scope and review of long-term roadmap

The Convenor of the Steering Group ERAA presents a proposed ERAA 2023 project scope as well as the challenges beyond 2023. He points out the risk on flow-based implementation, due to a lack of expert commitment. The Committee discusses possible mitigations and measures. A modelling simplification is a

short-term mitigation for ERAA 2023. The Committee urges for a need to strengthen TSO resources now for preparing and testing a sustainable approach before ERAA 2024 starts.

11. Drafting Team Planning Standards

11.1. Update on the kick-off of Project Inertia II

The DT PS Convenor and Project Manager of Project Inertia phase II presents the state of play of the project after its kick-off, recapping its milestones and showing the timeline, interactions with SOC and major tasks related to their development.

Tuesday, 25 October 2022

1. Review attendance, quorum

The Chair opens the second half day of the meeting.

DECISION

36 out of 39 of the TSOs represented in the System Development Committee are attending the meeting, the SDC Chair states that the Committee meeting reaches the necessary quorum of half its members.

2. WG Data & Models

2.1. Network Modelling Roadmap

The Committee Chair states that the first topic of today is a crucial one for the SDC. Higher efficiency is needed in attaining large scale grid models as they are essential for many activities at ENTSO-E, regional and national level. The Secretariat presents, on behalf of WG D&M Subgroup III, a new proposed approach for verifying/improving reference merged model and developing variants. Further analysis is needed and discussion with System Study Correspondents at TSOs and the SDC study teams using the models. The proposed approach could result in faster development because of less efforts from SSCs, while an additional 4-5 people in the WG D&M Subgroup III are needed.

The members give several suggestions on the present and proposed approach. It is key that every TSO is fully involved in and committed to a delivery of consistent grid models for various ENTSO-E and TSO studies. Priority is needed to improve CGMES 2.4.15 initially before considering in the longer run a move to CGMES v3. One option is to also look into the present operational model as the reference for future SDC difference models. Further analysis is needed if a single reference model is sufficient (e.g. 2027 and then make a 2035 difference), or whether two reference models are needed for years far apart. A clear process is needed on how a central team (in WG D&M) updates the network model if there is no full IGM upload; the WG is working on such template-based approach to implement and track updates. A clear process and reporting is also needed to compare the grid models with PEMMDB data; it is the PEMMDB mapping which is most time consuming.

The Committee welcomes any approach that allows to move faster in this area. Further review with experts is needed before the Committee could decide on changing the current approach of model collection, merging

and validation. In any case, the initial step of SSC collection of IGMs would be the same in either the present or proposed approach.

DECISION

The SDC:

- takes note of the proposal for a Network Modelling Roadmap.

2.2. PEMMDB App Roadmap

The Secretariat presents the benefits and main working principles of the new PEMMDB App. Development is well on track. The Study teams and TSO data correspondents are asked to be actively involved in testing and start preparing for the new application in terms of interfacing and templates for national data sets.

Members welcome an early discussion about interfaces, well in advance so that study teams could adapt/adjust/amend their approach. TSO data correspondents would also welcome an early advice on any new templates.

DECISION

The SDC:

- takes note of the proposal for the PEMMDB App Roadmap.

2.3. Grid Model request from Duke and Stanford university (USA)

A request from a US based organisation to have access to the TYNDP 2020 grid model is addressed by the Committee. The same process is followed as for other requests. No further question or issue is raised.

DECISION

The SDC:

- approves the disclosure of the requested grid model dataset (STUM) to the requesting party.

3. WG Scenarios Building 2024

3.1. Progress Report (*incl. appointment of SG members*)

The Secretariat and the Scenario Building Steering Group Convenor inform the Committee on the progress of the Scenario Building work for the next TYNDP. Nominations for the new Steering Group are approved. Options are presented for the 2030 and 2050 timeframes, which are supported by the Committee, and which will be integrated into the joint work with ENTSOE and the new TEN-E process.

DECISION

The SDC:

- approves the nominations for the Steering Group Scenario Building 2024 received from APG, RTE, TenneT TSO BV and TransnetBW.

- approves the scenarios strategy for 2030 and 2050.

3.2 ACER consultation on framework guidelines

The Secretariat informs the Committee about the draft scenario framework guidelines that ACER has put out for consultation. Various constructive meetings took place with ACER. The Committee supports the points raised on how to give an ENTSO-E response in the consultation. Some clarifications will be sought in the process descriptions. The Committee supports the scenario strategy (storylines) for discussion with stakeholders and subsequent implementation and raises questions about the economic variant approach pushed by ACER which seems to go beyond the scope of the TEN-E guidelines and against the policy objectives themselves.

DECISION

The SDC:

- approves the process & high-level directions on the critical points and mandates the electricity WGSB SG members to finalise the ENTSO-E response.

4. TYNDP 2022

4.1 Progress report

The Convenor of the TYNDP 2022 Steering Group presents the state-of-play of TYNDP 2022 and of the preparation of the 6th PCI/PMI process in the Cooperation Platform. Informal submission to ACER of TYNDP package post-consultation is expected in December 2022, while the formal submission containing all CBA results will be computed will take place in January 2023.

It is pointed out that CBA results for some scenarios and indicators may require further review and/or explanation in the project sheets, to ensure acceptance by all promoters. This is being addressed in the TYNDP Steering Group.

5. Offshore Network Development Plans

5.1. Progress report and external engagements

The Convenor of the ONDP Central Group presents the state of play on the development of the ONDPs. The draft of the central methodology is being finalised. The group will launch an internal review process to gather feedback from the various SDC groups and the Committee itself. A dedicated workshop will be held in November to present the content of the methodology. The ONDP Central group is also active in engaging with Member States.

6. WG Seasonal Outlook

6.1. Progress report and initial publication

The SDC Chair congratulates the whole team for the successful release of the Initial Insights of the Winter Outlook on 20 October 2022. This is a major milestone ahead of the full report planned by 1 December 2022.

6.2. Updates ongoing and full report

The Convenor of the Steering Group Seasonal Outlook presents the plan for coming weeks until 1 December 2022. She highlights the tight timeline and explains the scenario and sensitivity priorities recommended by the Steering Group.

DECISION

The SDC:

- SDC takes note of the planned next steps.

7. ERAA 2022

7.1. Key messages

The Convenor of the Steering Group ERAA summarizes the SDC strategic discussions of the day before about ERAA 2022 key messages.

DECISION

The SDC:

- acknowledges the ERAA 2022 key messages.

8. ERAA 2023

8.1 Project Identification Document (PID)

The Convenor of the Steering Group ERAA gives a recap of the SDC strategic discussions the day before related to ERAA 2023 priorities and scope.

DECISION

The SDC:

- approves the PID for ERAA2023.

9. StG Connection Network Codes

9.1 Clarification on application of CNC 2.0 regarding existing connection code

The Steering Group Convenor for the Connection Network Codes recaps that a set of amendment proposals was validated by SDC over the past year. One change is proposed to clarify the applicability of requirements to existing/new units in context of a text amendment. The Committee supports the clarification so that the team can proceed with the submission of ENTSO-E proposals in ACER's consultation.

DECISION

The SDC:

- approves the additional amendment proposal of LRG that aims to clarify from legal point of view the applicability of RfG 2.0 and DCC 2.0 with regard to new and existing units.

9.2. Stakeholder engagement update on CNC amendments

The Steering Group Convenor informs the Committee that constructive discussions continue with stakeholders on the CNC amendments. The Steering Groups is mandated to lead these discussions based on approved SDC positions. In case of new developments, the Steering Group reverts back to the Committee.

DECISION

The SDC:

- mandates StG CNC to negotiate with the stakeholders and lead, on behalf of ENTSO-E, the relevant discussions around connection network code amendments.

10. Any Other Business

10.1. Endorsement member for the Steering Group Interlinked Model (SG ILM)

The Chair informs the Committee of the response to a recent call for members sent to SDC, regarding the Steering Group ILM. One nomination was received from Energinet. The Chair thanks Energinet for their continued support.

DECISION

The SDC:

- approves the nomination received from Energinet for a member of the Steering Group Interlinked Model.

10. Approval of the Decisions

All decisions as reflected in the session file or amended as shown during the meeting are valid.