76th System Development Committee Meeting

Date: 10 December 2020
Time: 09.00 – 13.00h
Place: Web-conference:

Participants

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<th>Chairman</th>
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<th>Vice Chairman</th>
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**Final minutes**

### Substitutes

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### Special Invitee

1. Project Leader of ENTSO-E Vision 2030 - France

### Conveners RGs

1. RG North Sea - Denmark
2. RG Baltic Sea - Germany
3. RG Continental South East - Serbia
4. RG Continental Central East - Slovakia
5. RG Continental Central South - Italy

### Conveners WGs and SGs

1. WG System Design Strategy - Germany
2. WG Scenario Building - France
3. TF TEN-E - Germany
4. TF CBA - Germany

### Excused

1. CGES - Montenegro
2. Eirgrid - Ireland
3. ESO-EAD - Bulgaria
4. JSC EMS - Serbia
5. Landsnet - Iceland
6. NOS BiH - Bosnia & Herzegovina
7. OST-Operatori i Sistemit te Transmetimit - Albania
8. Scottish Hydro Electric Transmission - United Kingdom
9. SONI - Ireland
10. Transmission System Operator-Cyprus - Cyprus

### Secretariat

1. ENTSO-E
1. Attendance, quorum and approval of draft Agenda

The SDC Chair welcomes all participants to the 76th SDC meeting via teleconference. The SDC Chair confirms that participants can formally cast their vote via teleconference on decisions proposed during this last SDC meeting of the year.

Take note
➢ Since 33/41 of the TSOs represented in the System Development Committee are attending, the Chairman states that the Committee meeting reaches the necessary quorum of half its members.

TEN-E: First elements of the TEN-E revision start becoming available; a first overview will be presented in the next SDC meeting.

2. SDC Project Dashboard pilot

The following topics have been highlighted:

• **TYNDP 2022 Study Team** interim application: Only 26 participants are reconfirmed as compared to 59 in previous cycle of the TYNDP which represents a resourcing risk to be addressed as soon as the TYNDP 2022 PID is approved.

• **Scenarios**: resource situation on track, but risk of delays once stakeholder consultation shows need for additional iterations.

• **Data**:
  o Resource constraints both at TSOs and secretariat lead to risks of delays to the delivery of data packages to the ERAA and Scenario Building study teams. At least 1 FTE (2 preferable) for a period of four-to-six weeks is needed with Python scripting experience and knowledge of the PEMMDB templates to assist in quality control checks and data processing.
  o A specific issue was also raised pertaining to the availability of National Grid data for generating units proposed and under-development. National Grid has been contacted accordingly.
  o Lack of communication and collaboration between the MST’s (MAF+TYNDP) and WG D&M (TF PEMMDB) teams have been highlighted. The reasons were the improvement of the modelling of hydro and the resulting necessary adjustment of the PEMMDB missing deadlines.

• **Models**: ENTSO-E has received the publish-ready network models for the 2020TYNDP from all TSOs. The SDC will take a formal decision to release the models at its 20 January 2021 meeting.
### Final minutes

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<tr>
<th>Project</th>
<th>Timeline/project plan</th>
<th>Content/ quality</th>
<th>TSO contributions</th>
<th>Potential future risks</th>
<th>Summary report</th>
<th>TSO contribution warning</th>
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- High-level Stakeholder Document of MAF 2020 is submitted for approval to the SDC. It is drafted and then shared to SDC members with a view to approve all structures and governing documents.
- EC has announced to deliver their opinion on CBA 3 by the end of December. The final approval is then planned for early January.
- TYNDP (ENTSO-E) data model: APG and RTE: Awaiting final models from certain TSOs to finalize 2020 documents on 25/11/2021 for Scenario Building and 2030 VPNR.
- ENTSO-E Vision 2050: data model: HW and RPM.

#### Scenario building

- Data collection and quality checks for TMDD
  - Failure to fill in the teams with appropriate profiles
  - Data collection initiated on 25/11/2021 for Scenario Building

#### Adequacy

- TYNDP 2020 under consultation until early January.
- TYNDP 2020
  - EC has announced to deliver their opinion on CBA 3 by the end of December. The final approval is then planned for early January.
  - ENTSO-E Vision 2050: data model: HW and RPM.

#### Network codes

- Data collection and quality checks for TMDD
  - Failure to fill in the teams with appropriate profiles
  - Data collection initiated on 25/11/2021 for Scenario Building

#### CBA 3

- ENTSO-E Vision 2050: data model: HW and RPM.

#### Data

- Data collection initiated on 25/11/2021 for Scenario Building and 2030 VPNR.

#### Models

- ENTSO-E Vision 2050: data model: HW and RPM.

#### Sector coupling

- ENTSO-E Vision 2050: data model: HW and RPM.

### From Vision 2030 to Active2020+ Vision 2050

The Project Leader of ENTSO-E Vision 2030 presents at the meeting the following:

- A wrap-up on the Vision 2030 stakeholder engagement and particularly the successful „ENTSO-E Vision Week“ of 12-14 October 2020. Based on strong cross committee efforts, high level of interest with more than 3960 individual registrations could be achieved, leading to better common understanding.

- Proposal for launch of new ENTSO-E 2050 Vision project under the framework of the Active2020+ measures initiated by the ENTSO-E Board based on the coordination of focused engagements on the 2030 Vision, and particularly addressing those topics most relevant to SDC (TYNDP, sector integration and offshore development), keeping strong cross-committee focus and using as much as possible existing workstreams of the committees. Proposed first step would be to draft storylines of the European system in 2050. The project will be aligned with 2022 TYNDP scenario building blocks (to be published in Q4/2021).

- Put into focus the organisation of a new “ENTSO-E Vision 2050 workstream”, as proposed in the Active2020+ agenda.

A call for nominations will follow soon.

### Resource Adequacy

The Convenor of the MAF Steering Committee thanks all who contributed to successful publication of MAF2020.
4.1. Approval of the ERAA roadmap and the ERAA 2021 PID

Following the European Resource Adequacy Assessment (ERAA) Methodology approval by ACER on 2 October 2020, ENTSO-E has started its stepwise implementation. ENTSO-E prepared a 5-year implementation road map that will be published its website by end 2020. The ERAA 2021 will be the first edition and its scope and organisation are defined in the project identification document (PID). ERAA 2021 aims to study the target years 2025 and 2030, with strong focus on the Economic Viability Assessment (EVA).

EVA is considered as crucial. SDC asks to be strongly involved in this development.

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<td>➢ The SDC approves:</td>
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<tr>
<td>o the ERAA 5-year road map for publication on the ENTSO-E website by end 2020;</td>
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<td>o the ERAA 2021 project identification document (PID) for implementation by the ERAA project team;</td>
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Take note

➢ The SDC thanks the members of the Task Force Adequacy Methodology for the preparation of Resource Adequacy Methodologies and confirms the closure of this Task Force as the Methodologies are finalized.

➢ The SDC thanks the members of MAF 2020 Steering Group and project Teams for the successful delivery of the study under constrained circumstances.

5. Seasonal Outlook

5.1. Possible delegation of Seasonal Outlooks to RCC from 2022 (incl. feedback from mini-retreat)

The Article 37(1)(n) of the electricity Regulation 2019/943 provides that RCCs shall carry out “tasks related to the seasonal adequacy assessments if and to the extent they are delegated to the regional coordination centres pursuant to Art. 9(2) of the Regulation (EU) 2019/941”.

Currently the Seasonal Outlooks are performed under the SDC framework, with strong interaction with SOC. The actual involvement of RCCs in the process is under consideration.

Participants of the mini-retreat showed recognition that current process works well and that there is no urgency to delegate seasonal outlook from ENTSO-E to RCCs. Delegation of the seasonal outlook to RCC is not considered as reasonable and needs further analysis of legal impacts and liabilities. Recommendation is rather to keep current Seasonal Outlook data structure and tools. The creation of additional databases within RCCs seems not to add value and might increase complexity. Partial delegation of data preparation and support of input data as well as some level of modelling support and analysis of output data could be further examined. Suggested next steps include a legal analysis as well as a TSO’s survey about possible delegation input data and output analysis.
6. **WG System Design Strategy - TF Sector Coupling (dealt with after topic 9)**

   6.1. Way forward on Hydrogen related topics to be developed in 2021

   During its meeting on 27 October 2020, the SDC asked the TF Sector Coupling and WG SDS to propose a way forward on the topics on Hydrogen to be developed in 2021. The first proposal, containing not only hydrogen topics but also others related to energy system integration, was presented in the meeting. The following key areas have been identified:

   - Supply of hydrogen
   - Flexibility of electrolysers
   - Guarantees of Origin
   - Demand of hydrogen

   The TF Sector Coupling is asked to provide a short position for each of these 4 areas. The positions should consider the review of regulation that the EC has scheduled for 2021 (Ten E) to address those topics with higher priority. Some topics affect different groups and committees within ENTSO-E. Thus, a cross committee work is necessary.

   6.2. WG SDS call for additional members

   During its last meeting on 27 October 2020, the SDC decided to launch a call for additional members for the Working Group System Design & Strategy (WG SDS) under the new scope defined in the updated Terms of Reference. The call was launched by the Secretariat from 18 to 27 November 2020 but no application was received. The SDC members are asked to reconsider their participation in WG SDS.

7. **TYNDP 2020 – DT CBA**

   7.1. CBA 3 methodology (updates)

   Until the 10 December 2020, DT CBA has not received the official comments from the EC in spite of the Commission having announced to deliver their final opinion with beginning of December.

   Next steps are strongly dependent on the arrival of the EC opinion, going for a written SDC approval as soon as possible after as SDC workshop early next year.

8. **TYNDP 2022**

   8.1. Approval of High-Level Guidance 2022 and TYNDP KPIP 2022 (*incl. feedback from mini-retreat of 23/11/20*)

   Following an extensive consultations and discussion process lasting over a month, the SDC is asked to approve the High-Level Guidance document as well as the TYNDP KPIP. Program initiation documents and Products initiation documents for the TYNDP and other planning products will be submitted at the next SDC based on the guidance in the 2 documents for approval.

   Some future important benefits, in particular RES investment avoidance and flexibility benefits have been discussed specifically for the long-term 2040 and 2050 scenarios in which fuel consumption is very low or inexistent in countries without nuclear generation or carbon capture and storage technologies. In context of deep or complete decarbonization with political goals in place regarding RES % of energy generated interconnections avoid additional investments in new RES generation that are not taken into account currently in the price of CO2 or in any of the currently monetized benefits.
8.2. Call for Planning Study Team Members – update

The initial return was much less than needed and significantly less than for the previous TYNDP. 26 Members submitted their candidatures, while the initial target was 59. A new call will be announced during the Committee Meeting.

8.3. Consideration of the Multi-Sectorial Planning Support (MSPS)

Within the SDC meeting of 27 October 2020 the SDC approved the “High-level guidance paper on the implementation of the MSPS” and with it the proposed long-term action to be undertaken for its implementation towards 2030. Four fields of improvements have been identified and described within this guidance from which the Cost-Benefit Analysis falls under the responsibility of the DT CBA.

Proposal of DT CBA is to include hybrid projects (here: projects across sectors) into dual CBA assessment. Interested SDC members are asked to send projects of potential interest for dual CBA to the DT CBA Convenor. This should be organized as subproject within TYNDP2022 with TYNDP2022 PMO ensuring the coordination with other workstreams and TYNDP Study Team performing some investigations. This should be inserted into the PID of the TYNDP 2022 program.

Current ideas and open questions have been addressed and will be treated in a dedicated workshop.

8.4. Approval of the scope of the innovation track study on offshore hybrid projects

As a result of the SDC mini retreat of 15 September 2020, the need for an ENTSO-E study on offshore development was identified. In the recent IoSN study published in August, offshore hybrid projects (offshore wind connected to several markets) could not be identified. Additionally, the assessment of “offshore hybrid projects” needs to be explored. These could even be “offshore hybrid hybrid” projects – a clear naming should be found.

The following options have been discussed which lead to different up to significant computational complexity

- Minimum solution (promoters find hybrid solutions)
- Roland Berger approach
- Promotion approach
- NSCOGI 2011 approach

The feasibility of these approaches will have to be investigated further. This needs to be integrated into the TYNDP2022 PID.
As soon as TEN-E review is available, a roadmap will be needed to depict the steps to be taken over time.

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<td>➢ The SDC approves the presented scope of the TYNDP 2022 innovation track study.</td>
<td>➢ Necessity to be able to identify and assess offshore hybrid projects in upcoming TYNDPs.</td>
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9. Scenario Building

9.1 TYNDP 2022 Scenario building – Progress report

The Scenario Building WG is currently in the process of developing the scenario 2022 methodologies with Entsog and in close interaction/with the collaboration of the DSO associations. The current discussions are based on DSO modelling and modelling of the sector coupling aspects of the scenarios. The second edition of the Ambition Tool (in-house total energy tool) has almost reached the end of its development stage and will soon be ready for inputs. The consultation for the storylines end on 15 December, the storyline document will be updated in the new year based on the comments received. The storyline workshop took place on 2 December, which hosted around 120 stakeholders in the - hour session. The Scenario Building WG continues to work with various stakeholders the most recent being a meeting with District Heating and Geothermal associations on 9 December as well as with Hydrogen Europe, WindEurope and SolarPowerEurope. Data collection ends at 8 January aiming at consistency between electricity and gas TSOs. Stakeholder interaction has significantly improved supported by 1 additional FTE at the secretariat and focussed regular interactions of working groups as shown above.

10. TSO-DSO cooperation (updates)

The TSO-DSO cooperation has the following workstreams with direct relevant to SDC:

- **Scenario Building**: close interactions with the 4 DSO organisations started in June 2020 in the storyline building process. On 29 October, ENTSO-E and DSOs associations presented the final roadmap and communication plan at the Infrastructure Forum. The main areas of this cooperation are consumer behaviour modelling and exchange of key input data on the development of distributed energy resources. Gas DSOs will be further associated to this cooperation in 2021.

- **Task Force on Demand-Side Flexibility**: this work has potential impact on RfG and DC. DG ENER procured a study which calls for amendments ([link](#)). Therefore, the Steering Group CNC nominated Robert Kielak, PSE as contributor to this workstream in order to ensure consistency with connection network codes. The PID and the list of experts will be validated by the Steering Group T&D Interface on 11 December. The Task Force will kick-off its work in January with DSOs experts.

- **Assessment of flexibility solutions in system planning**: this work aims to develop recommendations for optimising grid development costs with non-wire alternatives. It is part of the Steering Group T&D Interface work programme for next year and RDIC and SDC are co-leading it. The PID was shared with SDC and the main feedback was to focus the scope on distributed flexibility solutions (excluding PtG). The call for nomination triggered not enough interest to set up a dedicated project team. RDIC therefore invited its WG3 to support this activity in cooperation with available SDC experts.

12. Topics for next mini-retreats in January 2021

SDC members and convenors are asked to send proposals to the Chair of SDC
13. Any Other Business

none