

## 76<sup>th</sup> System Development Committee Meeting

Date: 10 December 2020

Time: 09.00 – 13.00h

Place: Web-conference:

### Participants

#### *Chairman*

	RTE	France
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#### *Vice Chairman*

	Amprion	Germany
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#### *Members*

1.	50Hertz Transmission	Germany
2.	Amprion	Germany
3.	Ceps	Czech Republic
4.	Creos Luxembourg	Luxembourg
5.	Eirgrid	Ireland
6.	Elering	Estonia
7.	Eles	Slovenia
8.	Elia System Operator	Belgium
9.	Energinet.dk	Denmark
10.	Fingrid	Finland
11.	JSC EMS	Serbia
12.	Mavir	Hungary
13.	MEPSO	Republic of North Macedonia
14.	REN	Portugal
15.	RTE	France
16.	Statnett	Norway
17.	Svenska Kraftnät	Sweden
18.	Swissgrid	Switzerland
19.	TenneT TSO BV	The Netherlands
20.	TransnetBW	Germany
21.	Transelectrica	Romania

**Subsistutes**

22.	APG	Austria
23.	AS Augstsprieguma tīkls	Latvia
24.	HOPS	Croatia
25.	IPTO	Greece
26.	Litgrid	Lithuania
27.	Mavir	Hungary
28.	National Grid ESO	United Kingdom
29.	PSE	Poland
30.	REE	Spain
31.	Seps	Slovakia
32.	TenneT TSO GmbH	Germany
33.	Terna	Italy
34.	Transelectrica	Romania
35.	VUEN	Austria

**Special Invitee**

1.	Project Leader of ENTSO-E Vision 2030	France
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**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	
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## 1. Attendance, quorum and approval of draft Agenda

The SDC Chair welcomes all participants to the 76<sup>th</sup> 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

- |   |
|---|
| <p>➤ 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</p> |
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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:**
  - 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.
  - 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.
  - 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.

Project	Status			Potential future risks Color cell in light red to highlight high risks	Summary report For further details, see cover note	TSO contribution warning Details in cover notes are mandatory when TSOs are named in this column
	Timeline/ project plan	Content/ quality	TSO contributions			
TYNDP 2020	●	●	●		TYNDP 2020 under consultation until early January.	
TYNDP 2022	●	●	●	Failure to fill in the teams with appropriate profiles or headcount	High Level Guidance Document 2022 and KPIP 2022 are submitted for approval to the SDC. A draft Program Initiation document will be shown and later shared to SDC Members, with a view to approve all structures and governing docs in January.	Interim call for Planning Study Team failed to recruit the anticipated TSO resources.
Scenario building	●	●	●			
Adequacy	●	●	●	Data collection and quality checks for ERAA 2021: risk of lack of resource that could delay/ reduced level of quality checks for ERAA 2021	MAF 2020 and Winter Outlook published. Focus now on ERAA 2021 implementation (PID and Roadmap).	
Network codes	●	●	●	- delay of CNC amendments: no immediate risks, because CNCs are not highest priority for EC and ACER - slow progress of inertia project: no impact on other projects	- CNC amendments: drafting delayed by approx. 1/2 year, because of volume and complexity of amendments, which require further cross-committee coordination and also LRG advice in case of legal and regulatory issues, modest TSO contribution; - CNC implementation monitoring: preparation of publication - new IM tool: preparation of project with approved PID - IGD revisions: preparation of publication/consultation - Inertia Project: progress slower than planned, - gap analysis: preparation of project with approved PID	
CBA 3	●	●	●	EC's official opinion includes lots of unforeseen change proposals - this will delay the process even further	EC has announced to deliver their opinion on CBA 3 beginning of December. The final approval is then planned by EC for Q1 2021	
Data	●	●	●	Risk of delays for 2021 ERAA in data deliveries and in quality-control checks due to limited Secretariat and TSO resource constraints	Data collection initiated on 25/11/2021 for Scenario Building and 2021 ERAA.	Awaiting final models from certain TSOs to finalize 2020 TYNDP (ENTSO-E) data model: APG and RTE.
Models	●	●	●	PEMMDb project - project deliverables and schedule at risk due to challenges in vendor management (staff turnover, communication, responsiveness). Considering options to optimize the value of project work completed in 2020 and for alternative project structure in 2021.		
Sector coupling	●	●	●			
IF - Implementation	●	●	●			
WP 2021	●	●	●			

Dashboard's users guide:  
 - Color code:  
 - Green = progress as planned - (2)  
 - Yellow = deviation from last communicated plan but actions are to be engaged on project level - (1)  
 - Red = deviation from last communicated plan, but actions are to be engaged at SDC level - (0)  
 - The table above is to be copy pasted directly in the SDC SF once it is ready  
 - More detailed report to the SDC on projects should be placed in the relevant cover notes of the Session File. This Dashboard includes summary only.  
 - This Dashboard is for central reporting on projects only. Updates on activities of WGs, RIGs or any other body should be placed in the relevant cover notes of the Session File.  
 - History logs of previous summary are available in the relevant tabs of this document. The tabs also contain extract from the SDC Work Programme for reference. No additional information can be input in the tabs.

### 3. 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.

### 4. 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.

<b>Decision</b>	
<b>Approval</b>	<b>Purpose/notes</b>
<ul style="list-style-type: none"> <li>➤ The SDC approves:                             <ul style="list-style-type: none"> <li>○ the ERAA 5-year road map for publication on the ENTSO-E website by end 2020;</li> <li>○ the ERAA 2021 project identification document (PID) for implementation by the ERAA project team;</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>➤ n/a</li> </ul>
<b>Take note</b>	
<ul style="list-style-type: none"> <li>➤ 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.</li> <li>➤ The SDC thanks the members of MAF 2020 Steering Group and project Teams for the successful delivery of the study under constrained circumstances.</li> </ul>	

## 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 CO<sub>2</sub> or in any of the currently monetized benefits.

## Decision

Approval	Purpose/notes
<ul style="list-style-type: none"> <li>➤ The SDC approves the High-Level Guidance Planning 2022.</li> <li>➤ The SDC approves the TYNDP KPIP 2022 for consultation with the Board and submission to the Assembly.</li> </ul>	

### 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.

Decision	
Approval	Purpose/notes
➤ The SDC approves the presented scope of the TYNDP 2022 innovation track study.	➤ Necessity to be able to identify and assess offshore hybrid projects in upcoming TYNDPs.

## 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 Entsoe 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 ends 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 2-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 relevance 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