### 80th System Development Committee Meeting

**Date:** 20 April 2021  
**Time:** 09.00 – 13.40h  
**Place:** Web-conference

### Participants

**Chairman**
- RTE  
  France

**Vice Chairman**
- Amprion  
  Germany

**Members**
1. 50Hertz Transmission  
   Germany
2. Amprion  
   Germany
3. Creos Luxembourg  
   Luxembourg
4. Elering  
   Estonia
5. Eles  
   Slovenia
6. Elia System Operator  
   Belgium
7. Energinet  
   Denmark
8. Seps  
   Slovakia
9. HOPS  
   Croatia
10. Mavir  
    Hungary
11. RTE  
    France
12. Statnett  
    Norway
13. Svenska Kraftnät  
    Sweden
14. Swissgrid  
    Switzerland
15. TenneT TSO BV  
    The Netherlands
16. Transelectrica  
    Romania
17. TransnetBW  
    Germany

**Substitutes**
18. APG  
    Austria
19. AS Augstsprieguma tikls  
    Latvia
20. Ceps  
    Czech Republic
21. Eirgrid  
    Ireland
22. EMS  
    Serbia
23. Litgrid  
    Lithuania
24. Transmission System Operator-Cyprus  
    Cyprus
25. IPTO  
    Greece
26. MEPSO  
    Republic of North Macedonia
## Substitutes

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<thead>
<tr>
<th>Number</th>
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<tbody>
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<td>27.</td>
<td>PSE</td>
<td>Poland</td>
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<td>28.</td>
<td>REE</td>
<td>Spain</td>
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<td>29.</td>
<td>REN</td>
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<td>31.</td>
<td>SONI</td>
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<td>Terna</td>
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## Conveners RGs

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<tr>
<th>Number</th>
<th>RG Name</th>
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<tr>
<td>1.</td>
<td>RG North Sea</td>
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<td>3.</td>
<td>RG Continental South East</td>
<td>Serbia</td>
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<td>4.</td>
<td>RG Continental South West</td>
<td>France</td>
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<td>6.</td>
<td>RG Continental Central East</td>
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## Conveners WGs and SGs

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<thead>
<tr>
<th>Number</th>
<th>WG Name</th>
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<tr>
<td>1.</td>
<td>WG System Design Strategy</td>
<td>Germany</td>
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<td>2.</td>
<td>StG Connection Network Codes</td>
<td>Germany</td>
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<td>3.</td>
<td>Offshore Development Core Group (ODCG)</td>
<td>Denmark</td>
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<td>4.</td>
<td>TF CBA</td>
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<td>1.</td>
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<td>Bosnia&amp;Herzegovina</td>
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<td>OST-Operatori i Sistemit te Transmetimit</td>
<td>Albania</td>
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<td>8.</td>
<td>Scottish Hydro Electric Transmission</td>
<td>United Kingdom</td>
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## Secretariat

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<td>1.</td>
<td>ENTSO-E</td>
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1. Attendance, quorum and approval of draft Agenda

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.

The SDC Chair informs the Committee that Robert Schroeder and Timothy Duffy (ENTSO-E secretariat), and Tomasz Okraszewski (TransnetBW) have completed their work for ENTSO-E – the SDC Chair expresses the gratitude of the Committee for their contribution over the last years.

The SDC Chair thanks as well Lubos Samsely (SEPS) for his accomplishments as Convenor of the RG CEE and welcomes Andrew Kasembe (CEPS) as his successor.

The SDC Chair introduces Rodrigo Barbosa (ENTSO-E Secretariat) who will replace Timothy Duffy in his role of interim-convenor of WG Data & Models.

Finally, the Chair informs the Committee that the Assembly approved the election of Gerald Kaendler (Amprion) as the new SDC Chair taking effect by 30 June 2021.

The new Head of Section of the ENTSO-E System Development will be announced soon.

2. SDC Project Dashboard 2021

As already highlighted in previous meetings the following issues remain flagged in red and are becoming very critical. All aspects will be addressed in dedicated agenda items of today’s meeting:

- TSO contribution to TYNDP2022:
  - potential cascading effects from scenario building: Risk of updating National Trend scenarios could impact IoSN planning.
  - Only 2 nomination for Editors team available
- Scenarios time plan: 6 weeks delay even though no re-run based on public consultation and no modelling of 2050.
- CBA: Missing TSO resources for next steps

3. SDC Work Programme 2022 and SDC Budget 2022

Because of the upcoming TEN-E regulation, there are some uncertainties about the SDC Work Programme and therefore some flexibility is required to adapt. It is assumed that ENTSO-E’s position on e.g. offshore as well as system integration go in the right direction and will not be disrupted by TEN-E.

Based on these assumptions, the draft SDC budget 2022 is presented.

The draft budget includes an 8% cash-out increase due to higher IT/software costs for Plexos and CIMDESK and four additional FTEs, reflecting the increased complexity of adequacy and planning studies and the necessary data collection and analysis services required to support these studies. The SDC approves the submission of the SDC Budget 2022 to the overall ENTSO-E budget process.

In light of increasing costs of PLEXOS and the need to hire external PLEXOS consultants, the dependency of the association on PLEXOS was discussed. The Secretariat will take this up and propose a way forward, as well considering the number of experienced people in the TSOs for different tools.
Final minutes

Decisions

<table>
<thead>
<tr>
<th>Approval</th>
<th>Purpose/notes</th>
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</thead>
<tbody>
<tr>
<td>➢ The SDC approves the SDC Work Programme 2022.</td>
<td>➢ The SDC approves to forward the SDC Budget 2022 to the Board.</td>
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4. **SDC Strategy Seminar 2021**
   4.1. Outcomes and review of the roadmap

The SDC Strategy Seminar 2021 took place on 16 and 17 March 2021 and during the sessions organized three roadmaps have been developed on the topics of CBA, Sector Interlinkages and Offshore Development.

These roadmaps outlined in the Strategy Seminar shall be reviewed and further defined by each Project/Working Group responsible for the subjects. The following Projects/Groups were asked to outline the Roadmaps:

- Offshore Development Core Group (ODCG): Offshore grid development
- Task Force Sector Coupling (TF SC): multi sectorial planning support
- Drafting Team Cost Benefit Analysis (DTCBA): CBA

In order to cope with the uncertainties related to the TEN-E revision, the roadmaps will take into account a 2-steps approach composed by:

- **Phase 1**, aimed to accomplish the milestones needed to start the work and gain experience (e.g. for the finalization of TYNDP 2022). If conditions are uncertain, own assumptions will be made and will be made transparent in order to be able to start the work.
- **Phase 2**, whose focus will be the further implementation of the respective subjects (though the lesson learned from phase 1). It is understood that changes will take place in regard to phase 1, taking into account the lessons learned, updated information and the framework of new regulation.

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<tbody>
<tr>
<td>➢ The SDC approves the proposed 2 step approach with regard to the implementation strategy of the roadmap resulting from the SDC Strategy Seminar 2021.</td>
<td>➢ n/a</td>
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</table>

5. **Resources planning for TYNDP Teams**
   5.1. Outcome of meeting 31 March 2021

The Chair informs about the current status of resource planning of TYNDP and Scenario Building. Reasons for lack of commitment of TSO experts have been analysed. A new framework of a contractual agreement between ENTSO-E and TSOs related to TSO contribution to TYNDP is under consideration, including financial compensation, fair opportunity of each TSO, optimised use of resources, accountability and reduction of overall costs. This new concept should be applied to the budgeting of 2022.
Discussion suggested to also consider recognition of experts, professional project management and interactions with national tariffs. The skills provided by the secretariat should be reconsidered: rather project management and/or high-level experts. The proposal should focus on TYNDP and Scenario Building first, maybe include ERAA later but not be applied to all ENTSO-E activities.

<table>
<thead>
<tr>
<th>Decision</th>
<th>Actions requested</th>
<th>Responsible body/Date of expected report</th>
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<tbody>
<tr>
<td></td>
<td>The SDC asks the SDC Chair and Vice Chair to present a proposal in the next meeting</td>
<td>SDC Chair and Vice Chair</td>
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<td></td>
<td>Next SDC meeting in June 2021</td>
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| Take note |                                                                                  |
|-----------|                                                                                  |
|           | The SDC takes note of the TYNDP staffing considerations.                          |

6. **Decision Mode A (discussion at request only)**

6.1. Nomination of Scenario Building SG member

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<th>Decision</th>
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<tbody>
<tr>
<td></td>
<td>The SDC approves the nomination of Massimo Moser (TransnetBW) as member of the Scenario Building Steering Group.</td>
<td>n/a</td>
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<td></td>
<td>The SDC approves the composition of the Scenario Building Steering Group members.</td>
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7. **WG SDS**

7.1. Preparation of the Madrid Forum 29-30 April 2021

ENTSO-E is invited to the 35th Gas Infrastructure Forum to be held on the 29-30 April 2021. The delegation will be composed by Gerald Kaendler (Amprion) and Alan Croes (TenneT TSO BV). The topics in the agenda of ENTSO-E interests are “Topic 4 - Integrated Infrastructure planning” and “Topic 7 - Gas quality in the existing network”. In relation to this items, ENTSO-E will contribute to the discussion presenting the Association positions on Multi-Sectorial Planning Support (MSPS) and “green” gas.

7.2. **TENACT - TEN-E regulation revision**

The European Parliament’s (EP) Committee on Industry, Research and Energy (ITRE) and the Member States under the Portuguese Council Presidency are discussing in parallel the EC proposal on the TEN-E Regulation and analysing it in detail. The EP ITRE Committee exchanged views on the TEN-E with the EC on 25 March and on 13 April.

Other EP Committees are working on the TEN-E, and among these stands out notably the ENVI opinion of the Green Party MEP from France, Marie Toussaint, who is also the shadow rapporteur in the ITRE Committee. She proposes the creation of a new entity by the EC, an Energy Infrastructure Council (EIC), to be composed of independent experts to prepare together the CBA, infrastructure gaps, scenarios and TYNDPs etc.
The TEN-E Advocacy Coordination Team (TENACT) assessed the TEN-E Regulation and identified 11 key areas (approved by the Board on 18 March) for advocacy to improve the Regulation text and ensure it is fit for purpose.

ENTSO-E text amendments will be appropriately shared with policymakers by ENTSO-E and individual TSOs in order to advocate for their priorities in time for discussions in the EP and Council on potential amendments to the EC proposal.

7.3. Preparation meeting with EC on offshore – ENTSO-E delegation and questions.

After the EC participation to the SDC Strategy Seminar 2021, a follow-up call with the Commission will be held in early May 2021 with a focus on the clarification of the aspects related to Offshore Development in the revised TEN-E regulation.

The WG SDS prepared the following topics to be raised to the EC during the second call.
- Coordination between TYNDP, special corridors and offshore plans
- Requirements for the choice of Hybrid Projects.
- Offshore cost sharing.
- Joint Projects
- Principles provided by EC
- CBA and CBCA interlinkage

8. Interlinked Model
8.1. Report on the Interlinked Model for external publication

The Convenor of the Scenario Building Steering Group presents the main outcomes of the investigation on the interlinked model. The investigation on the Interlinked Model has shown that interactions between electricity and gas could have an impact on the project assessment phase. However, the impact is not always relevant.

Despite the objectives of the pilot project have been fulfilled, it is further recommended to publish this report as part of ENTSO-E/ENTSOG standard update reports.

A joint ENTSO-E/ENTSOG workshop will be organised to increase mutual understanding and plan the next steps.

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<th>Decision</th>
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<tr>
<td>The SDC approves the report on the Interlinked Model to be sent to the Board for approval.</td>
<td>n/a</td>
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Decision is approved with 2 abstentions.

9. TYNDP 2020
9.1. PCI progress

The 5th PCI process has reached the stage of development of the project’s assessment methodology, which has been circulated to Regional Groups for comments on 12 April 2021, while the needs assessment
methodology was finalised in March. As in previous PCI processes, ENTSO-E expects to be asked to compute and provide the NPV of each candidate PCI to the European Commission. The Secretariat will organise a review process of draft NPVs.

### Decision

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<tr>
<th>Take note</th>
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<tr>
<td>The SDC acknowledges the state-of-play of the 5th PCI process.</td>
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#### 10. Planning Programme


The SDC Chair presents the current status of the implementation of the planning program approved by the SDC at the previous meeting in February 2021. Focus is currently identifying interface issues between TYNDP, ERAA and scenario building. In particular the importance of updated climate change effects in ERAA as compared to TYNDP have led to different priorities. As well the timing of introduction of different innovations on the time scheduled of the different deliverables require stronger overview and planning from a program planning point of view. The planning level tries currently to identify the issues and propose solutions. Resource gaps in the different work streams require even stronger coordination. (see Top 2 as well: SDC Dashboard).

The new Head of Section of System Development will appoint a permanent Programme Manager, allocate appropriate support resources, and further explore value creation and synergies between projects in areas such as studies, PMO, communication or stakeholder engagement. The TYNDP 2022 PM IT environment, currently under construction and operating in Beta mode, will be expanded to cover the Programme level to track discussions and recommendations.

#### 11. TYNDP 2022

11.1. Progress report and approval of TYNDP 2022 Roadmap (call for Editors members)

The TYNDP 2022 roadmap is presented to SDC members. The current main risks for the materialization of the roadmap are presented as well. Additionally, there is an update given to SDC members on the current status of the TYNDP 2022 and the status of resources. Only 2 members have been nominated to join the Editors Team. As compared to previous cycle there are far less nominations to the TYNDP Study Team.

### Decision

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<tr>
<td>The SDC approves the current TYNDP 2022 roadmap knowing that an agile process will be applied given the current resource shortages.</td>
<td>n/a</td>
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<tr>
<th>Take note</th>
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<tbody>
<tr>
<td>The SDC takes note of the progress in TYNDP 2022</td>
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</table>

ENTSO-E | Rue de Spa, 8 | 1000 Brussels | info@entsoe.eu | www.entsoe.eu | @entso_e
11.2. 3rd CBA Implementation Guidelines: outcome of internal workshop on 15 April 2021

The DT CBA organized an Internal workshop to discuss the TYNDP 2022 CBA Implementation Guidelines that will be developed this year. The discussion focused on the main topics for improvement within the TYNDP 2022 CBA Implementation Guidelines which are the following:

- Inclusion of the Interlinked Model (ILM)
- Development of a methodology for the assessment of “Hybrid Projects”
- Assessment of the commissioning years delivered by project promoter
- Project Level Indicators (PLI) and other “minor” changes

The participants delivered their feedback on this topic, proposing integrations and improvements for upcoming and for the future versions of the Implementation Guidelines. The DT CBA gathered the feedback received and will evaluated what can be included in this year version and what will need to be developed more on the long term.

The DT CBA has organized the first contacts on the Implementation Guidelines with ACER (22 April 2021). On 12 May 2021, a public event will be held, aimed at presenting, and discussing with the Stakeholders the principles based on which the TYNDP 2022 CBA Implementation Guidelines will be developed.

As well the way forward for the inclusion of the Interlinked Model, the assessment of hybrid projects, project level indicators and other improvements was presented.

12. Scenario Building
   12.1. Progress report

Final Storyline report has been approved by written voting. The benchmark of energy demand against EC policy scenarios seems satisfactory. The cooperation with DSOs in 2022 edition is intensified during the consultation process. The transfer to TYNDP Study teams shows delays of about 5 weeks but is not considered on the critical path yet.

   12.2. Deadline for the final Scenario rerun

The WG Scenario Building convener informs the SDC about the current conflicting requirement between the Scenarios Building PID, where the TSOs still have the ability to update National Trend Scenario for the final report, and the TYNDP project planning that requires that National Trend Scenarios are not changed starting from mid-2021. Further the WG SB convener informs the SDC about no-go dates for updating dataset for top-down scenarios: these are needed in order avoid late definition of the final scenarios data set. The process requires a release of the Draft Scenario report by September 2021. The time schedule doesn’t allow updates of NT 2030/2040 scenarios beyond the draft scenarios.

   12.3. Priorities identification

The scenarios building process for TYNDP 2022 is characterized by a high degree of innovation. The late and insufficient provision of resources has resulted in a current high risk of delay of every milestone and a drastic reduction of scope of the project. Such situation is in breach with the PID approved in June 2020 and it is therefore necessary to review resources, ambition and the scenario planning. The request of the WG SB is that the ambition review is done in line with a priority list now submitted to the SDC. The priority list is (from the highest to the lowest): P2G configurations, adequacy loop, 2050 horizon, improvement of the modelling of the EV node improved modelling, improvement of the modelling of the prosumer node. The unit-by-unit modelling is discarded.
Final minutes

Decision

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<tr>
<td> The SDC approves the proposed priority list if needed to comply with timely delivery.</td>
<td> Given tight schedules, the WG Scenario Building requests upfront approval from SDC to deviate from PID if no solutions can be found</td>
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</table>

Decision taken with 1 objection and 1 abstention.

13. Resource Adequacy
   13.1. ERAA 2021 status and next steps

The ERAA 2021 timeline is ambitious due to the increased challenges brought by the first implementation of the new methodology. Still, the ERAA project, thanks to early identification and mitigation of risks by Steering Group, is currently on track for a timely implementation.

ENTSO-E had iterations with ACER’s on their minimum expectations for ERAA2021. In general, ENTSO-E welcomed the initiative of ACER to provide clarity and transparency on ACER’s expectations regarding the delivery of the first ERAA report. Regarding the purpose and nature of this document, ENTSO-E stressed that these minimum requirements are not established neither under the Electricity Regulation nor in the ERAA methodology. Considering this, ENTSO-E views this document as an internal document without any legally binding effects.

13.2 ERAA implementation strategy – high level recommendations

The internal draft document ERAA Implementation Strategy addresses the study technical aspects (e.g. data preparation, modelling, calculations), the governance and the stakeholder interaction of the project. The document focuses on internal coordination and synergies with other ENTSO-E streams (WG D&M, SB, TYNDP). It aims to identify risks and propose recommendations.

SDC requested that this document is thoroughly reviewed by the other concerned Steering Groups and Working Groups before reaching again the Committee with a wider (Programme level) scope.

14. Topics for next mini-retreats in June 2021

The SDC Chair will check with the conveners for potential topics to present at the next mini-retreats in May.

15. Any Other Business
   14.1. ENTSO-E Annual Work Program 2022

The Annual Work Programme (AWP) for 2022, led by the Secretariat PMO team supporting the Network Code and Clean Energy Package Implementation Programme (NCCIP) to ensure appropriate involvement of all Committees/LRG, will focus on legally mandated tasks and activities which are undertaken in ENTSO-E.

The draft Annual Work Program 2022 is circulated to each Committee for review and confirm the key deliverables for the 2022 that have to be done by Friday 30 April 2021.

The draft AWP 2022 is developed according to the following tentative timeline:
Final minutes

- **April**: Secretariat to circulate to Committees for comments by 30 April
- **3-7 May**: Secretariat to integrate comments from Committees
- **10-18 May**: round of written comments from the Board
- **19-20 May**: Secretariat to integrate comments from the Board
- **21 May**: submission to the Board
- **9 June**: Board meeting in which the AWP 2022 is presented and recommendation to Assembly is proposed.
- **30 June**: Assembly meeting in which the AWP 2022 is presented and proposed decision.
- **1 July – 15 August**: ENTSO-E issues a public consultation
- **September**: Secretariat presents a final AWP 2022 for recommendation in the Board and for approval by the Assembly.
- **October**: Following approval by Assembly, ACER will be provided AWP 2022 and their Opinion will be sought.
- **December**: ACER provides to ENTSO-E its opinion following which ENTSO-E arranges the publication.

Comments or questions are to be addressed to christophe.cesson@entsoe.eu.