**Final Minutes
(incl. Decisions)**

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68th Research, Development & Innovation Committee Meeting

Date: 20 September 2023
Time: 09.00 – 15.15h
Place: ENTOS-E Headquarters, Brussels + web conference - *(Microsoft Teams)*

Participants *(physical)*

Chairman

	Eles	Slovenia

Vice Chairman

	Terna	Italy

Members

1.	50Hertz	Germany
2.	Amprion	Germany
3.	FinGrid	Finland
4.	IPTO	Greece
5.	Litgrid	Lithuania
6.	PSE	Poland
7.	REE	Spain
8.	RTE	France
9.	Svenska Kraftnät	Sweden
10.	Swissgrid	Switerland
11.	TenneT TSO GmbH	Germany
12.	TransnetBW	Germany

Substitutes

13.	AS Augstsprieguma tïkls	Latvia
14.	Energinet	Denmark
15.	*Terna*	*Italy*

Conveners WGs

1.	WG 2 Security and Operations of tomorrow	Germany
2.	WG 4 Future of energy systems	Italy
3.	TF DIC	France

Secretariat

	ENTSO-E	

Excused

1.	CGES	Montenegro
2.	Eles	Slovenia
3.	Elering	Estonia
4.	HOPS	Croatia
5.	Seps	Slovakia
6.	SONI	Northern Ireland

Conveners WGs

7.	WG1 Assets and Technologies – Vice-Convenor	Spain

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Participants *(remote)*

Members

16.	APG	Austria
17.	Ceps	Czech Republic
18.	Elia Group	Belgium
19.	EMS	Serbia
20.	Mavir	Hungary
21.	REE	Spain
22.	REN	Portugal
23.	Statnett	Norway
24.	TenneT TSO BV	The Netherlands
25.	Transelectrica	Romania

Substitutes

26.	MEPSO	Republic of North Macedonia
27.	SONI	Northern Ireland
28.	EirGrid	Ireland
29.	OST	Albania

Conveners WGs

1.	WG 3 Flexibility and Markets	Ireland
2.	WG Research Development and Innovation Planning (WG RDIP)	Portugal
3.	WG1 Assets and Technologies – Convenor	Norway

	Special invitees	
1.	AI sector experts	Italy - Portugal
2.	Terna	Italy
3.	ENTSO-E	Belgium

BLOCK 1: RDIC ADMINISTRATION

TOP 1. Welcome and Attendance quorum

The Chair welcomes all participants to this 68th RDIC meeting organised as a hybrid meeting, taking place at ENTSO-E office in Brussels and as web conference. The Chair welcomes the speakers from AI sector and TERNA.

Topic point:
- Confirmation and welcome of participants

Decisions:
- 28 of 33 TSOs represented in the Research, Development and Innovation Committee attend the meeting. The RDIC is quorate.

TOP 2. Approval of draft agenda and RDIC Dashboard 2023

RDIC Members receive updates on key priorities, organisational aspects, and budget status for 2023.

Topic point:
- RDIC Dashboard and Budget 2023

Decisions:
- The RDIC approves the agenda.
- The RDIC takes note of the RDIC Dashboard and the good advancement of the activities.
- The RDIC takes note of the RDIC 2023 budget status.

TOP 3. Governance RDIC: Election Convenor WG RDIP and Early Resignation Convenor RDIC WG 5 Digital & Communication

As decided in the RDIC meeting of 15 June 2023, as a follow of the expiration of the first mandate of the **WG RDIP Convenor** on 14 September 2023, the Secretariat launched a call for candidates on 11 July 2023 that closed on 18 August. During this time, one application was received by the Innovation Head of Section, RDIC Chair, Vice-Chair, and RDI Secretariat.

Further to the early resignation of the Convenor for **WG 5 Digital & Communication**, a call for convenorship position is to be launched in September for nominations and election during the 16 November RDIC meeting with deadline for applications 16 October 2023 .

Topic point:
- Presentation of candidates for Convenor WG RDIP
- Election of Convenor WG RDIP
- Resignation of current WG5 convenor: proposal to launch a call for nominations and election at the 16 November RDIC meeting (deadline for nominations 16 October)

Decisions:
- The RDIC acknowledges the end of first mandate of incumbent WG RDIP Convenor
- The RDIC acknowledges the application for the position of the WG RDIP, from REN, for a second mandate of two-year mandate, starting from 20 September 2023
- The RDIC acknowledges the early resignation of incumbent WG5 Convenor
- RDIC approves the proposed calendar for launching the call of candidates for Convenorship of WG 5 (deadline for nominations 16 October) in view of approval during the next RDIC meeting.

BLOCK 2: STRATEGY TOPICS

TOP 4. Report from Key meetings and events (Assembly meeting 28 June 2023 + Report from Extraordinary Board meeting 4 July 2023 + Strategy Discussion with Chairs of the Board + Grid Forum/Conference)

RDIC Members receive updates from RDIC Chair, Vice-Chair and Head of Innovation Section on the Assembly meeting of 28 June 2023, on the Extraordinary Board meeting of 4 July 2023; but also, on the Strategy Discussion within Committee Chairs meeting and Board, and finally on the EU Grid Forum of 7 September 2023 held in Brussels and organised by ENTSO-E upon request of the EU Commission.

Topic point:
- Report from Key meetings and events (Assembly meeting 28 June 2023 + Report from Extraordinary Board meeting 4 July 2023 + Strategy Discussion with Committee Chair meeting and Board + Grid Forum/Conference)

Decisions:
n/a

TOP 5. Generative AI in the power system

RDIC receives an overview of the use of AI in the energy sector and power system by special invitees.

Topic point:
- Generative AI in the power system

Decisions:
n\a

TOP 6. Digitalising the Energy System - EU action plan

RDIC Chair, Head of Innovation Section and ENTSO-E Secretariat briefs RDIC members on Joint ENTSO-E and EU DSO Joint Task Force (JTF) ongoing work on project proposal and cooperation agreement. Members were briefed that Task Force continues to advance on the content of Digital Twin through description of challenges, use cases and speeding up for a shared view across TSOs community. Furthermore, members are informed that JTF will aim to produce preparatory input in the form of principles for smart indicators ahead of Copenhagen Infrastructure Forum. Finally, TF DIC Convener provides members an overview of TWIN EU project.

Topic point:
- Update on developments – project proposal
- Content development
- Cooperation agreement

- TwinEU Project

Decisions:
- The RDIC acknowledges the progress of the Joint ENTSO-E EU DSO Entity Task Force, ongoing developments, and next steps.
- The RDIC supports the scoping of work of the Joint Task Force in the form of project proposal and establishing a legal framework in the form of cooperation agreement.

Top 7. Market Design reform – status update and implications for ENTSO-E and RDIC

The ENTSO-E Secretariat updates RDIC members on the ongoing legislative process of the Electricity Market Design Reform and expected timeline for adoption. Members are also briefed about the main elements of the reform and implications for ENTSO-E and TSOs, including a summary of how the text has evolved in the European Parliament and in the Council and a focus on the provisions on assessments of flexibility needs. Lastly, members are also informed on how ENTSO-E is coordinating its internal assessment work and external advocacy via the TF Electricity Market Design Reform.

Topic point:
- Update on legislative process
- Main content elements and implications for ENTSO-E & TSOs
- Next steps

Decisions:
- The RDIC takes note of the update on the Electricity Market Design Reform and asks the Secretariat to be regularly informed on most relevant topics for RDIC

TOP 8. Flexibility (methodology and needs assessment)

Flexibility needs assessment Project Manager updates RDIC members on ongoing project activities especially the work on assessment of current methodologies and indicators. Members are also briefed that the call for additional experts will remain open and relaunched if specific expertise is deemed necessary for the completion of the objectives of the project. Last, additional work stemming from EMDR obligations will be incorporated upon the guidance from the ENTSO-E Board. The Project Manager informs RDIC members about the status of the recently launched project on Flexibility Needs Assessment

Topic point:
- Update: project team and major principles

Decisions:
n/a (see topic 13)

TOP 9. Update on membership matters and approval of the "List of entities" in the Observer membership Agreement with Moldelectrica

The ENTSO-E System Operations Legal Advisor provides RDIC members with updates on the current status of Ukraine, Moldova, and Turkey; and explains the necessary approval by RDIC of the listed Working Groups for Moldelectrica.

Topic point:
- Update the RDIC on the current status of Ukraine, Moldova, and Turkey

- Approval of the listed Working Groups for Moldelectrica

Decisions:
- The RDIC approves the proposals of the groups to be added to the Annex I of the Observer Membership Agreement between ENTSO-E and Moldelectrica (the OMA)
- The RDIC takes note of the status regarding the admission processes of Ukrenergo and Moldelectrica including the draft assessment reports.

TOP 10. ENTSO-E Technopedia

The WG RDIP Convener updates on ENTSO-E Technopedia defined priorities. The match between factsheets and RDI documents is explained together with the next steps. Convener announces an upcoming Technopedia Webinar on 3 October, briefs the RDIC members on the engagement of the consultant and on the next steps of updating the ENTSO-E Technopedia website.

Topic point:
- Updates and Progress
- Webinar
- Consultant engagement

Decisions:
- The RDIC acknowledges the progress made in addressing Technopedia's update content and strategic priorities and the necessity to pursue further updates while ensuring alignment with RDI documents

BLOCK 3: WORKING GROUPS

TOP 11. WG5 Digital & Communication

On behalf of WG5, the Secretariat invites new TSO experts to join efforts on AI and Digital Twin Use Cases, recognizing and thanking our current members and team, and presenting a preliminary use case list for the upcoming JFT proposal.

Topic point:
Flagship 6:
- Call for additional members to collaborate on the definition of automated decision support systems (i.e., AI) and Digital Twin Use Cases
- Preliminary list of use cases as an input to the JFT proposal

Decisions:
- The RDIC takes note of the WG5 workstreams developments

TOP 12. WG4 Future of Energy Systems

WG4 Convener provides RDIC members updates on the finalised paper on Electrification of Heavy-Duty Vehicles that is now for Board approval, but also plans for follow up work on electromobility aspects. Furthermore, the Convener reminds about the scheduled public webinar on power-to-heat (19 October 2023) and invites all members to register and share the link with interested experts within their network. Lastly, the Convener refers to the efforts made during summertime to reply to an EC consultation on heat pumps which is a topic that may be further investigated at ENTSO-E level too. Other proposed topics for future work are presented.

Topic point:

Flagships 1&2:
- Electrification of Heavy-Duty Vehicles – approval process – Communication Plan
- Smart charging: grid services vs battery degradation
- Power-to-Heat webinar
- Other activities / plans for 2024:
  - EC consultation on heat pumps
  - Water-energy nexus

Decisions:
- The RDIC takes note of the status of the Electrification of Heavy-Duty Vehicles position paper and the respective next steps with a view to Board and Assembly approval, publication and proactive dissemination.
- The RDIC approves the plans for future investigations with regard to smart charging
- The RDIC takes note of the planned dissemination activities of the Power-to-Heat study urging all TSOs to register and further disseminate the webinar within their own network.
- The RDIC takes note of the preliminary topics presented for the workplan of 2024

TOP 13. WG3 Flexibility and Markets

WG3 Convener and ENTSO-E Secretariat provides RDIC members updates on ongoing work beyond the flexibility needs assessment. Furthermore, members are updated on WG3 contributions on Roadmap 2024 – 2034, TF DIC collaborative effort on future horizon calls, DESAP – Digital Twin as well as follow-up programs for 2024.

Topic point:

Flagships 1&2:
- Current and planned activities / plans for 2024

Decisions:
- The RDIC takes note of the progress of the ENTSO-E's project on Flexibility Needs Assessment
- The RDIC takes note of the activities, contributions, and preliminary plans for 2024 from WG3 Flexibility and Markets

TOP 14. WG2 Security and Operations of Tomorrow

The WG2 Convener updates on Flagships 4 and 5, announces an upcoming online workshop on HVDC reliability, calls for nominations on 'Instability Detection Technologies,' provides an ENTSO-E framework update, discusses Project Modelling and Simulation tools, and reviews RDIP Milestones

Topic point:

Flagship 4 (HVDC reliability WS)
- Announcement: Online (MS Teams) inter-TSO workshop on HVDC reliability on 28 September

Flagship 5 (Stability Management WS)
- Announcement: call for nominations to develop PID on 'Instability Detection Technologies for System Operators of Power Electronic Dominated Systems'
- Update on the progress of ENTSO-E framework for the Horizon Europe CL5-2024-D3-01-17
- Project Modelling and Simulation tools, status update: Task 4
- RDIP Milestones

Decisions:
- The RDIC acknowledges the progress of activities in WG2
- The RDIC takes note of the upcoming inter-TSO workshop on HVDC reliability
- The RDIC agrees on the proposed steps related to Horizon Europe 'Developing and integrating advanced software tools in SCADA systems for high, medium, and low voltage AC/DC hybrid systems' (HORIZON-CL5-2024-D3-01-17)
- The RDIC takes note of the progress of the Project modelling and simulations on Task 4 Interim Report

TOP 15. WG1 Assets and Technologies

The WG1 Convener provides updates on Flagship 3 activities and highlights progress and next steps on the CO2 footprint in TSO business position paper and the Horizon EU Call on HV Cables (CL5-2024-D3-01-15).

Topic point:
Flagship 3:
- Status and next steps of the position paper on CO2 footprint in TSO business
- Horizon EU Call on HV Cables

Decisions:
- The RDIC acknowledges and endorses the proposed approach put forth by WG1 for the paper concerning CO2 footprint emissions in TSO business and recommends its submission to PCG for an initial review
- The RDIC also acknowledges the status of the Horizon Europe call related to HVAC, HVDC, and High-Power cable systems (HORIZON-CL5-2024-D3-01-15)

TOP 16. TF Demonstration and Innovation Coordination

The convener of TF DIC informs RDIC members about the status of different HE calls and the coordination activities. The completion of the future calls and their submission to national contact points is achieved in close cooperation with TF DIC. Furthermore, the convener provides updates on the forthcoming EU 2025-2027 Horizon Europe work programme and outlines TF DIC preparations to follow that activity closely, ensuring timely dissemination of information to TSOs regarding new calls.

Topic point:
- HE Calls Coordination/Status
- Future calls – deadline
- Inter TSO project - status

Decisions:
- The RDIC takes note of the progress and finalization of the Horizon Europe calls coordinated by TF DIC and Thematic WGs
- The RDIC acknowledges the coordination process between TF DIC and WGs in proposing further support (calls) from EU 2025-2027 Horizon Europe work programme.

TOP 17. WG RDIP

The WG convener provides an update on the recent developments of the RDI Roadmap 2024-2034, highlighting the ongoing internal work as a significant step in the workstream, following the identification of the challenges for the system operators implied by the current EU agenda.

Topic point:

- RDI Roadmap update – progress and next steps

Decisions:
- The RDIC takes note of the acceleration activities related to the new RDI Roadmap 2024-2034
- The RDIC welcomes the involvement of the thematic Working Groups in shaping the updated Flagship topics of the RDI Roadmap

BLOCK 4: INTER TSO-PROJECTS & DISSEMINATION

TOP 18. Dissemination & Communication

The Secretariat provides a list of events and webinars related to the RDIC for the rest of 2023.

Topic point:
- Events & communication opportunity update

Decisions:
- The RDIC takes note of the plan of RDI-related events for 2023

BLOCK 5: AoB & APPROVAL OF DECISIONS

TOP 19. Any other business

The Secretariat explains in more details the partnership for skills on digitalization of the energy system and shares the invitation by PSE to organise the RDIC meeting of June 2024.

Topic point:
- Partnership for skills on digitalization of the energy system
- Invitation by PSE to Warsaw for the RDIC meeting of June 2024

Decisions:
- The RDIC takes note and requires the initiation of an evaluation process for joining the Partnership for skills on the digitalisation of the energy system.
- The RDIC welcomes and accepts the invitation by PSE to Warsaw for the RDIC meeting of June 2024

TOP 20. Approval of the decisions

Topic point:
- Approval of the decisions.

Decisions:
- The RDIC approves the decisions and final minutes of the meeting.