52nd Research, Development and Innovation Committee Meeting

Date: 9 June 2020
Time: 08.45 – 14.00h
Place: Web-conference

Final Minutes *(incl. Decisions and Actions)*

Participants

Chairman

	Statnett	Norway

Vice Chairman

	Eles	Slovenia

Members

1.	50Hertz Transmission	Germany
2.	Amprion	Germany
3.	APG	Austria
4.	Ceps	Czech Republic
5.	Eles	Slovenia
6.	Elering	Estonia
7.	Fingrid	Finland
8.	Litgrid	Lithuania
9.	PSE	Poland
10.	REE	Spain
11.	REN	Portugal
12.	RTE	France
13.	Statnett	Norway
14.	Swissgrid	Switzerland
15.	TenneT TSO BV	The Netherlands
16.	TenneT TSO GmbH	Germany
17.	Terna	Italy
18.	TransnetBW	Germany

19.	AS Augstsprieguma tïkls	Latvia
20.	Eles	Slovenia
21.	Elia System Operator	Belgium
22.	IPTO	Greece
23.	National Grid	United Kingdom
24.	OST	Albania
25.	Terna	Italy
26.	Transelectrica	Romania

Conveners WGs

1.	WG Research Development and Innovation Planning (WG RDIP)	Norway
2.	WG 1 Power System Modernisation	Germany
3.	WG 2 Security and System Stability	Germany
4.	WG 3 Power System Flexibility	Greece
5.	WG 4 Future of energy systems	Italy
6.	WG 5 ICT and Digitalisation of Power System	Czech Republic

Observer

1.	Mavir	Hungary

Excused

1.	CGES	Montenegro
2.	Eirgrid	Ireland
3.	Energinet.dk	Denmark
4.	ESO	Bulgaria
5.	HOPS	Croatia
6.	JSC EMS	Serbia
7.	Landsnet	Iceland
8.	MEPSO	Republic of North Macedonia
9.	Scottish Hydro Electric Transmission	United Kingdom
10.	SONI	United Kingdom
11.	Svenska Kraftnät	Sweden

Secretariat

1.	ENTSO-E	Belgium

TOP 1 - Attendance, quorum

The Chair welcomes all participants to 52nd RDIC meeting hold via webconference due to the particular circumstances related to Covid-19. The RDIC Chair opens the meeting, checks the quorum and confirms that participants can formally cast their vote via teleconference on decisions proposed during the meeting.

Decisions:
- The RDIC takes note that 24 out of 33 TSOs represented in the Research, Development and Innovation Committee are present. The RDIC is quorate.

TOP 2 - Approval of draft agenda, Dashboard and Budget

The RDIC Chair reviews the draft agenda. Additional topics are suggested to be discussed: the follow-up on the ENTSO-E position paper on the reduction of SF6 emissions and introduction of alternative technologies as part of the TOP 12; EU project call on Cybersecurity and cooperation with ESA as part of TOP 14 (Any other business). The ENTSO-E Secretariat gives the status of the RDIC Dashboard. The RDIC Budget for 2020 is reviewed and discussed.

Decisions:
- The RDIC approves the draft agenda.
- The RDIC takes note of the RDIC Dashboard activities and the good advancement of the activities.
- The RDIC takes note of the available RDIC budget for 2020.

Actions:
- The RDIC requests the Working Groups to enhance their efforts for planning and allocate budget as soon as possible other ways percentages of the budget need to be released.
- The RDIC takes note that the decisions are not followed completely by the members and requires to put in place an KPI on the follow-up and implementation of the decisions by members.

TOP 3 - Report from Board meeting 3rd June 2020

The RDIC Chair presents the discussion points and highlights from the last ENTSO-E Board meeting on 3 June 2020. The RDIC Chair highlights RDIC related topics, such as the RDI Roadmap 2020-2030, the cross-committee work and the budget projection for the coming period.

Decisions:
- The RDIC takes note of the report from the Board.
- The RDIC welcomes the approval of the ENTSO-E RDI Roadmap 2020-2030 Executive Summary by the Board.

Actions:
- The RDIC proceeds with the request of the Board to approve the full document of ENTSO-E RDI Roadmap 2020-2030 based on the Executive Summary and as described under TOP5.

TOP 4 - Updates on ENTSO-E cyber incident

The ENTSO-E Secretary-General welcomes the work carried out the RDIC and the Working Groups and goes afterwards in the presentation of the cyber incident including the possible risks created and preventive actions put in place by the Secretariat. As part of these actions, ENTSO-E decided to build up a new SharePoint environment. The RDIC discussed the impact on other infrastructure and the Secretary General presents the next steps.

Decisions:
- The RDIC takes note of the presentation by the Secretary-General on the status of the cyber incident and the fact that the new SharePoint environment is active since 25 May 2020.

TOP 5 - ENTSO-E RDI Roadmap 2020-2030

The RDIC Chair opens the discussion on RDI Roadmap 2020-2030. The Convener of WG RDIP presents the content of the document and the scope of each chapter. The Convener of WG RDIP opens and discuss with RDIC members the scope and planned recommendations from TSOs to be included in Chapter 8: Towards Implementation. The Secretariat highlights the ENTSO-E Board feedback and expectations of key Stakeholders. In addition, the Secretariat introduces the questionnaire's results on the TSOs interests, and the intensity of the effort required for the Flagships. The RDIC members discuss the next steps and timeline plan.

Decisions:
- The RDIC takes note of the latest draft of the ENTSO-E RDI Roadmap 2020-2030.
- The RDIC approves the planned public dissemination activities of the RDI Roadmap: i) InnoGrid webinar organised on 30 June 2020 and ii) Deep dive dedicated webinar organised on 2 July 2020 which will kick-off the public consultation phase.
- The RDIC decides to give the Chair and Vice Chair the decision of printing the Roadmap after the closing of the public consultation.
- The RDIC decides to send formally the RDI Roadmap for ACER approval immediately after the closing of the public consultation as per ENTSO-E procedures in July 2020.

Actions:
- The RDIC takes note of the following comments which requests to be taken in the Roadmap:
  - Estimation of effort needed: number of pilots, desk top studies, small scale, large scale demonstrators according to the questionnaire.
  - Current level of RDI effort in the TSO community and the EC goals for Europe and decides to refer to the previous paper on RDI schemes for TSOs.
  - Check Figure 11 and adjust it.
- The RDIC takes note of the comments and decides to take in the Implementation Plan:
  - Resources: gaps in resources and estimation in ranges,
  - Financing: the need to increase the RDI efforts by increasing the present spending from 0.5%
  - public acceptance and the need for innovation
- The RDIC requests WG RDIP to collect final comments before 15 June 2020 and send the full document for RDIC written approval on 16 June 2020 with closing 22 June 2020.

- The RDIC requests the ENTSO-E secretariat to take the necessary measures for publishing electronically the ENTSO-E RDI Roadmap 2020 -2030 at latest by 29 June 2020.
- The RDIC requests the ENTSO-E secretariat to send the Roadmap to ACER on 30 June 2020 informally when opening for public comments.

TOP 6 – RDIC Terms of Reference in the context of Active 2020+ programme

The RDIC Chair presents the upcoming task of updating the RDIC Terms of Reference (ToR) in the context of Active 2020+ programme. The RDIC Chair informs the RDIC members that the next steps will be coordinated between all ENTSO-E Committees and after an agreement would be reached, which will provide input for the ToR update.

Decisions:
- The RDIC takes note that the RDIC ToR needs to be updated following the relevant actions within Active2020+ programme.

BLOCK 2: WORKING GROUPS

TOP 7 - WG RDIP

The WG RDIP Convener presents the progress on Working Group's activities on Roadmap and Implementation Plan development. The RDIP Convener presents the key elements and approach planned for the Implementation Plan and invites the RDIC members to suggest the additional elements and join the development. The RDIC members discuss the involvement and responsibilities of other ENTSO-E Committees and related workshop for the engagement.

Decisions:
- The RDIC approves the new approach for the new Implementation Plan.
- The RDIC takes note of WG RDIP intention to develop an Implementation Plan of the newly approved R&D&I Roadmap
- The RDIC decides to organise two workshops: one internal with the RDIC members and one with the cross committee for the Implementation Plan.

Actions:
- The WG RDIP establishes an outline and an action plan for the Implementation Plan that will be presented at the next RDIC meeting.
- The ENTSO-E Secretariat investigates the possibility to engage an external consultant for the writing of the Implementation Plan based on the outline.

TOP 8 - WG2 Security and system operation of tomorrow

The WG2 Convener presents the progress on Working Group's activities of Interoperability workstream and results of stakeholders' consultation. The WG2 Convener presents the status and next steps on HVDC CGMES development, and also the status of ongoing cross-committee work on Grid Forming Position Paper, TSO-DSO Task Force on Smart Grid Indicators, SOC project innovative system operational concepts and SDC Connection Code Amendment.

Decisions:
- The RDIC takes note of HVDC Interopeability workstream and alignment with stakeholders and European Commission.
- The RDIC takes note of the H2020 call „Demonstration of innovative critical technologies to enable future large-scale deployment of offshore renewable energy technologies" which will be published soon.
- The RDIC takes note of the work carried out in cooperation with TSO-DSO Task Force on Smart Grid Indicators.
- The RDIC takes note of the cross-committee cooperation work with SDC on Grid Forming position paper and connection code amendment and with SOC on Innovative System Operational Concepts.
- The RDIC takes note of the developments of HVDC CGMEs and expected tool demostration with CGMES subset by September 2020.
- The RDIC decides to relate to Flagship 5 the Grid Forming position paper and request to be presented to the Board after RDIC approval in October 2020.

Actions:
- The RDIC members are requested to provide input regarding any examples in the national regulations of performance indicators grid "smartness". Some indicative but not limited examples would: (a) Percentage of underground and overhead lines operating under dynamic line rating; (b) Percentage of the charging stations defined on system load that can be controlled remotely for grid support functions and flexibility; (c) HVDC lines utilised to influence load flow by integration of their controllability into the system operation.

Top 9 - WG 5 Digital & Communication

The WG5 Convener presents the progress on Working Group's activities on Wide Area Monitoring Systems (WAMS) project. The RDIC members discuss the scope, timeline and initial feedback from Digital Committee. The WG5 Convener informs that the questionnaire on the topic is planned to be prepared and distributed between TSOs. The RDIC Vice-Chair highlights the need to involve SOC at early beginning. In addition, the WG5 Convener presents a new proposal for the 2nd edition of TSO Hackathon, which means transforming the event into a digital one due to the restrictions and uncertainty caused by COVID-19 outbreak.

Decisions:
- The RDIC takes note that WG5 initiated a survey among TSOs about data usage from Wide Area Monitoring Systems (WAMS) as a preparation for a pan-EU level project on the subject.
- The RDIC takes note of the proposal to organise the 2nd Hackathon in autumn 2020.
- The RDIC takes note of the Hackathon #2 as a digital event in Q3 2020 in reflection of the pandemic situation.

Actions:
- The RDIC requests that also SOC, in addition to Digital committee, to be consulted before launching the WAMS work stream.
- The RDIC takes note about the 2 options presented for the 2nd Hackathon. The WG5 is requested to come-up with a proposal and arguments for decision by the RDIC management and Conveners regarding the extent to which Hackathon means should be used for a Flagship area (ex. Flagship 6) or the whole RDI Roadmap and address risks, pros and cons, etc…
- The RDIC requests to identify the digital tools to be used for the Hackathons.

TOP 10 - WG3 Flexibility and Economics

The WG3 Convener presents the progress on Working Group's activities on flexibility framework dissemination. The Convener reviews the main messages of EC & ENTSO-E Green Deal Workshop on Digitalization of the Grid and WG3 input to the gap analysis on NC DSF and the outcome of the survey on flexibility needs quantification. The WG3 Convener also presents the scope and timeline of upcoming H2020 OneNet project.

Decisions:
- The RDIC takes note of the dissemination of the flexibility framework.
- The RDIC takes note of the results of the flexibility needs survey.
- The RDIC takes note of the next steps for OneNet project: signature of the Grant Agreement by June 2020 and its kick-start in September 2020.

Actions:
- The RDIC requests WG3 to finetune its inputs on the gap analysis for a network code on distributed flexibility. It extends the deadline until 30 June 2020 and takes note of the WG3 intention to hire a consultant for a review of TSOs methodologies.
- The RDIC requests WG3 to review TSOs methodologies for assessing future flexiblity needs and provide recommendations.
- The RDIC takes note of the next steps for OneNet project and request WG3 to remain the contact point for RDIC with OneNet.

TOP 11 - WG4 Future of energy system

The WG4 Convener presents the progress on Working Group's activities. The Convener reviews the results and main feedback form Electromobility workshop organized with DG Ener on 27 May 2020. The Convener also informs RDIC members about the planned scope of Smart sector integration workstream. The Convener presents the WG4 inputs for the cross-committee cooperation with SDC on Sector Coupling and TEN-E Task Force. The Convener informs about the initial results of the Trend Spotting activity and planned next related deliverables.

Decisions:
- The RDIC agrees to structure the acquired information on Electromobility in form of a White Paper, to feed the ecosystem discussion from TSO perspective and welcomes cooperation with other organisations.
- The RDIC agrees to proceed with a similar exercise as the one on Electromobility on Power-to-Heat and/or Power-to-Gas in a second stage after the finalization of the electromobility White Paper.
- The RDIC takes note of the Trend Spotting activity and its first Factsheets produced and asks the RDIC members to send comment for improvement.
- The RDIC takes note of WG4 involvement in the SDC workstreams (Sector Coupling, TYNDP scenario, EC consultations).

Actions:
- The RDIC agrees to use the budget for drafting WG4 deliverables by qualified consultant and start with the development of Electromobility White Paper.
- The RDIC requires the deliverables of the WG4 should support the RDI Roadmap Flagships and their implementation (Flagship 1 and 2).

TOP 12 - WG1 Assets and Technologies

The WG1 Convener presents the progress on Working Group's activities on the cooperation with European Space Agency (ESA) pilot development. Convener also introduces to the RDIC members the procurement results of the consultation services for finalization of technology factsheets. The WG1 Convener presents the upcoming EU legalization changes on the lead usage, which directly affect technologies like offshore cables. The RDIC members discuss the legislation timeline, possible risks and possibilities for the next steps. The Convener shortly presents the follow-up actions of ENTSO-E position paper on the reduction of SF6 emissions and introduction of alternative technologies.

Decisions:
- The RDIC welcomes the ENTSO-E -ESA cooperation on TSOS agreed pilot projects based on cost effective space based methods on : i) Vegetation Management, ii) Change Detection Service (Identification of new objects & buildings), iii) Disaster Management Service (Detection of abrupt damages/anomalies) and iv) Ice loading on conductors to last under November 2021.
- The RDIC welcomes the work started with the consultant Dowel to finalize the Technology Fact Sheets.
- The RDIC takes note of the workstream "Status on use of lead in offshore cables".

Actions:
- The RDIC agrees to gather the inputs on the workstream on the lead in cables: Statnett, Litgrid are willing to contribute to this exchange, other TSOS will be invited to contribute in a workshop to identify the next steps.

BLOCK 3: INTER TSO-PROJECTS & DISSEMINATION

TOP 13: Dissemination & Communication

The Secretariat presents the official agenda for InnoGrid Virtual Sessions for 2 webinars, which will be held on 18 and 30 June 2020. Over 400 participants are registered in both InnoGrid Sessions. The RDIC members discuss the BNI webinars topic plan, including topics like smart sector integration, flexibility assessment and offshore wind.

Decisions:
- The RDIC acknowledges the agenda for InnoGrid Virtual Sessions for 2 webinars to be held on 18 and 30 June 2020, including the first presentation of the RDI Roadmap 2020-2030.
- The RDIC takes note of the updated agenda for Business Network for Innovation webinars which consists of 3 webinars in the second half of 2020.

Actions:
- The RDIC envisages a swap in the order of the themes of the 3 BNI webinars.

BLOCK 4: AoB AND APPROVAL OF DECISIONS

TOP 14 - Any other business

The RDIC Chair opens the discussion on the EU project call on Cybersecurity and cooperation with ESA for recovery actions from COVID-19.

Decisions:
- The RDIC takes note of the following points:
    - Cyber security EU funded project proposal – open in the Slido but no further information from other TSOs except Eles and Statnett. The topic should be taken in the next RDIC meeting.
    - ESA – Covid 19 – answer to be provided after the consultation of RDIC Chair.

TOPIC 15 - Approval of the decisions

The ENTSO-E Secretariat reviews the draft decisions of the 52nd RDIC meeting.

The RDIC Chair thanks all participants for the fruitful discussion.

Decision:
- The RDIC approves the decisions and draft minutes of the meeting.