



EXECUTIVE SUMMARY

Session 6 – Customers, Regulation, DSO Business & Risk Management

SUMMARY

For Session 6 there were 179 accepted abstracts of which 150 were in the end submitted. 24 papers were presented in the four main blocks. The blocks, which also are the main focuses of the Session, were oriented around regulation, DSO business as risk, customer and digitalization.

MAIN SESSION 6 - BLOCK 1 - Regulation

The main session of session 6 on Wednesday, June 14th started with the presentation of 6 papers about regulatory aspects and practical experience focussed on smart grid development and flexibility. Starting with the Swedish regulator who presented the broader regulatory framework (e.g. energy market directive 2019/944, indicators for smart grid development), further presenters provided insights from EU projects (e.g. Regulatory learnings from EU funded flexibility projects from the Spanish DSO Iberdrola or the EUniversal project presented by E-REDES and E.On) and realizations in Flanders (Volumetric or capacity-based grid tariffs: A case study for residential consumers by the Ghent University) and Slovenia (Practical experience of flexibility market for DSO in Slovenia by Elektro Ljubljana). The interest audience of the audience in number of participants, but questions as well, represents the increasing interest in regulatory matters, especially when it comes to flexibility and customer engagement.

MAIN SESSION 6 - BLOCK 2 - DSO

The main session on DSO started with a paper on the interaction between the asset owner and asset manager followed with a paper on how to implement flexibility in a DSO. Then the block covered 2 papers on the climate impact to be followed with the hot topic of non-firm network connection and finally a paper on gender equality which is a very important subject to be able to ensure the amount of competences needed in the business.

MAIN SESSION 6 - BLOCK 3 - Customer

In Block 3 on Customers 7 papers was presented – giving different perspectives on a broad span of research and experiences concerning the end-users of electricity. The topics addressed covered new battery technologies, use of batteries in grid operation, coupling between electricity and gas networks, load management concepts, new methods for conducting public consultations, how to develop a grid for net zero, and use of vehicle to home solutions. The block was well attended, and there were a lot of questions from the audience to the presenters.

MAIN SESSION 6 - BLOCK 4 – Digitalization

In Block 4 on Digitalization of the DSO business, 6 papers were presented. The papers gave an insight to experiences from Belgium, Spain, United Kingdom, Sweden and Finland, on different work carried out on topics like how to get the most out of existing data, methods to anonymize data, principles for open data and a presentation of a national platform for data sharing and a presentation of an app to crowdsource asset information sent in by the public.



ROUND TABLE 2 - Dynamic Network Tariffs and Local Flexibility Markets

Round table 2 covered experiences of different stakeholders and regions; Prof. Sambeet Mishra, who is also convener of the CIRED-2020-02 Workgroup on dynamic network tariffs presented an overview of the activities of the working group, Sonja Baumgartner, Electrical engineer at LEW Verteilnetz GmbH and PhD student at the University of Applied Sciences Munich, presented an overview on the potential of tested decentralized load management concepts, Nuran Cihangir Martin, System Strategist at Stedin, shared insights on Power-to-Gas flexibility, Oliver Koch, research associate at the University of Wuppertal, talked about real-time pricing tariffs, Laurence Hunter, Innovation Engineer at National Grid Electricity Distribution, shared experiences from UK. The panelists emphasized the importance of the regulatory framework and see it as a driver for flexibility and customer engagement. Regions like the Nordics and Italy already gained practical experiences and can be used as reference, while market liquidity on local/ decentral level was identified as one of the major topics to look into.

ROUND TABLE 4 - Electrification

In the round table 4 on Electrification leading executives from different companies share their views on the challenges facing the DSOs with regards to electrification in coming years, how this will impact the business, and possible solutions to tackle this task. The panellists contributing to the discussion were: Sabine Erlinghagen, Siemens Grid Software (Germany), Richard Vidlicka, CEZ (Czech republic), Ercole de Luca, Areti / EU DSO Entity (Italy) and Mark McGranaghan, EPRI (USA). The round table was very well attended, with many questions from the audience to the panellists.

ROUND TABLE 6 - Effective Innovation

The round table covered different ways and requirements to conduct effective innovation with the distribution area. Panel consisted of representatives from academia (Nikos Hatziargyriou, Technical University of Athens), research institute (Anne-lise Laurain, EPRI), manufacturer (Ralf Korntner, Siemens), DSO (Pierre Mallet, Enedis) and regulator (Luca Lo Schiavo, Arera. Great interest ways in the ways to provide incentives for innovation and the possibilities for remuneration. For the last question there may be a change from getting remuneration for innovation to instead see innovation as a way to increase your efficiency and remuneration in the business.

ROUND TABLE 7 - Cybersecurity

Tuesday afternoon was held a round table on cyber security. The panellist was: Oliv er Clement, Enedis – representing the DSO Entity, Imanol Garcia Pastor, Ingeteam – representing the CIRED WG Cyber security, Roman Gruber, Siemens AG Austria. The round table focused on three topics: 1) The cyber threat – today and in the future, 2) Regulation on cyber security and 3) Recommendation on “what to do”.

POSTER TOURS

The poster tours were held on Thursday, the last day of the conference, and 8 poster tours were conducted, each with approximately 20 posters. Each presenter was given up to 3 minutes to give the highlights from his/her poster, before giving room for short comments or questions. All tours, even the very last once for the conference, were well attended with around 20 participants.

CONCLUSIONS

Session 6 had a record number of papers in Rome and it reflects the interest and focus on the subjects covered by the Session. The round-tables were especially well visited.