









REPRESENTATIVES OF THE ROMANIAN ENERGY CENTER ASSOCIATION DISCUSS "THE ROLE OF STANDARDIZATION TO FOSTERING THE DIGITALIZATION OF THE ELECTRICITY GRID" AT EUROPEAN CONFERENCE WITHIN CROSSBOW PROJECT IN BRUSSELS

3rd NOVEMBER 2021 - HYBRID INTERNATIONAL CONFERENCE

CONFERENCE HIGHLIGHTS

11th of November 2021, Carina Ioana ZIDARU

The representatives of the Romanian Energy Center (CRE) Association organized and actively participated in "THE ROLE OF STANDARDIZATION TO FOSTERING THE DIGITALIZATION OF THE ELECTRICITY GRID" EUROPEAN CONFERENCE within the "CROSSBOW" Project – "CROSS BOrder management of variable renewable energies and storage units enabling a transnational Wholesale market", on 3rd of November 2021. CROSSBOW Project is funded by the European Commission (EC), through the Horizon 2020 Program. The European Standardization Conference was organized in Hybrid Format – Online and in Person at the Permanent Representation of Romania to European Union in Brussels. The lineup was secured by High-level Representatives of CROSSBOW Consortium, European and National Institutions and Experts in the Energy Field, as well as in the Standardization Domain, who provided unique and important perspectives.

Representatives of the Romanian Energy Center Association, in collaboration with the Romanian National Standardization Body – <u>ASRO</u> organized the "<u>European Standardization Conference</u>", in the framework of <u>CROSSBOW</u> Project. Synergy with <u>PHOENIX</u> H2020 Research and Innovation Project in terms of standardization was part of the agenda as well.

The main objective of this International Conference was to identify critical industrial challenges and standards needs within **CROSSBOW** framework. Identifying the Synergy with **PHOENIX H2020** Research and Innovation Project in terms of Standardization allowed a better understanding of the landmarks for the mandatory development of new standards based on the results of the two Projects.

The <u>Agenda</u> of this International Conference underlined the industrial challenges and standards needs within CROSSBOW framework. Identifying the Synergy with **PHOENIX H2020** Research and Innovation Project in terms of Standardization allowed a better understanding of the landmarks for the mandatory development of new standards based on the results of the two Projects.

The International Event was attended by 25 participants In-Person and over 90 in total, including Online Participation from 22 countries, representing Energy and Standardization Companies, European and National Institutions, as well as Universities and Professional Associations.



Opening the European Standardization Conference, Mihai PAUN — Director Development and Innovation, CRE presented the main objectives of the European Event and invited speakers and panellists to express their opinion related to the challenges and standards needs in order to Foster the Digitalization of the Electricity Grid. "Education is fundamental for digitalizing the Energy Sector", highlighted Mihai PAUN in his opening remarks.

The High-level representatives of **CROSSBOW**, European and National Institutions, Experts in the Energy and Standardization domain which contributed to the discussions were: Dr. **Mihai PAUN** – Director Development and Innovation, CRE; H.E. **Luminita ODOBESCU** – Ambassador Extraordinary and Plenipotentiary, Permanent Representative of Romania to EU; Mr. **Frank HAJDINJAK** – Vice-President, CRE; Mr.

Ganesh SAUBA – Principal Consultant, Energy & Cybersecurity, DNVGL; Ms. **Elena SANTIAGO** – Director General, CEN-CENELEC; Ms. **Iuliana CHILEA** – Director General, ASRO; Mr. **Esteban Pastor CALATAYUD** - Project Manager, ETRA; Ms. **Mercedes MIRA COSTA** – Project Manager, CEN-CENELEC; Ms. **Mihaela ALBU** – Professor, POLITEHNICA UNIVERSITY OF BUCHAREST, Mr. **Dragomir RADOYTSEV** – Policy Officer, E.DSO; and Mr. **Andreas HERMANN** – Committee Manager, ASI.



During the Introductory Session, E.S. Luminita ODOBESCU – Ambassador Extraordinary and Plenipotentiary, Permanent Representative of Romania to EU stressed that "Energy transition must be fair and balanced and there is a need to deploy and invest more and more in Digital Technologies to reach Climate Neutrality. Research and Innovation have a key role in the Energy Sector and Europe needs Innovative Affordable Solutions".

Frank HAJDINJAK — Vice-President, CRE expressed his views on Innovation for Digitalizing the Power Sector in Europe topic and pointed out that Energy Sector plays a major role in the Digitalizing the Power Sector in Europe, and innovation of the Electricity Grid is a major part as well. In this context, underlined the need for integrating new gender capacity and different

flexible storage solutions in order to digitize the Power Sector in Europe. "The Research and Development (R&D) Department is an important part of CRE Association". The role of Innovation in European Projects at CRE is to sett up innovation activities with regards to the implementation and Commercialization of new Products and Services.













Further on, based on the experience in the Standardization framework, representatives of ASRO and CEN-CENELEC provided unique and important perspectives during "Session I – Keynote Speeches on the Key Role of Standardization to Fostering the Digitalization of the Electricity Grid".

Opening and moderating Session I, Mr. **Ganesh SAUBA** – Principal Consultant, Energy & Cybersecurity, DNVGL presented the objectives which consisted in presenting the Key Role of the Standardization, identify challenges and standards needs in order to Foster the Digitalization of the Electricity Grid.

"It is very important to contribute to the development of European standards. Academia plays a key role in the standardization activity, and standards have a fundamental role in the digitalisation and innovation of Europe", pointed out Elena SANTIAGO — Director General, CEN-CENELEC. With regards to the Digital Transformation of Industry, Elena SANTIAGO in her presentation, underlined the fact that European Industry is increasingly using digital technologies and Traditional sectors like the Energy Sector need ICT standardization responses.





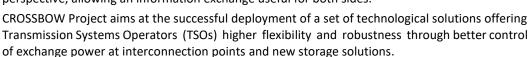
During her intervention, Iuliana CHILEA – Director

General, ASRO underlined the importance of Research and Innovation Projects and empathize with the full implementation and dissemination of those projects. "Standardization support the development of Power Systems and there is a coordination between the Standards Requirements and Technical Regulation".

Furthermore, according to the experience in EU funded Innovation Projects, CRE covered practical insights and the main results of CROSSBOW and PHOENIX - H2020 Research and Innovation Projects during "Session II - CROSS Border Management of Variable Renewable Energies and Storage Units Enabling a Transnational Wholesale Market (CROSSBOW Project)". The CRE Association is constantly engaged in providing innovative solutions and new services for the

Energy Sector as the addressed topic of *Standardization to Fostering the Digitalization of the Electricity Grid* is a very relevant subject for CRE and its Members.

Opening and moderating Session II, Mr. **Cristian COLTEANU** - Manager Strategy and International Affairs, CRE, introduced the objectives which consisted in presenting CROSSBOW Project, the products developed during its implementation period as well as identifying the industrial challenges and standardization needs for these specific products and the overall framework. The project results will be analysed from product developers' perspective and standards entities perspective, allowing an information exchange useful for both sides.







Esteban Pastor CALATAYUD — Project Manager, ETRA stressed the strategic goal of CROSSBOW Project: propose the shared use of resources to foster cross-border management of variable renewable energies and storage units, enabling a higher penetration of clean energies whilst reducing network operational costs and improving economic benefits of RES and storage units. The Products developed during the implementation period were explained as well.

During his intervention through the Session II, Dan PREOTESCU – Senior Project Manager, CRE, highlighted the overview of CROSSBOW Project, in order to have a better understanding of its direction during the implementation period. CRE contributes to the evaluation of the technical and socio-economic impact of CROSSBOW integrated solutions, to the definition of business models and solutions for overcoming local, regional and global barriers, and to the exploitation,

business innovation strategy and contribution to standards.

"The economic areas where the CROSSBOW products may have a significant impact on the standardization are the following: Cybersecurity, Type and Quality of Services provided/included in the Software, Internal structure of the Software (modularity rules), and Transmission of Data and information", pointed out Dan PREOTESCU.

Paul LACATUS – Project Manager, CRE, provided interesting views related to "PHOENIX" Project – "Electrical Power System's Shield against complex incidents and extensive cyber and privacy attacks". "Cybersecurity is one of the most important challenges of our time, and the Information



Technology and Communications (ITC) Sector became more and more important in our life and our society". In the context of Standardization topic, the goal of cybersecurity standards is to improve the security of IT systems, networks, and critical infrastructures.











PHOENIX Project started in 2019 and it will end in 2022. The main objective of the project is to improve the cyber security of EPES. PHOENIX aims to offer a cyber-shield armour to European EPES infrastructure enabling cooperative detection of large scale, cyber-human security and privacy incidents and attacks, guarantee to minimize cascading effects in infrastructure, the environment, the citizens and the end-users at reasonable cost.

Furthermore, The International Event provided important perspectives during the Panel Discussion on the Impact of Standardization on Digitalizing the Electricity Sector.







"The lack of European standards can be challenging. Within the Joint Technical Committees there is Data Protection that focuses on cybersecurity and there are competing aspects that evolve technology", pointed out Mercedes MIRA COSTA – Project Manager - Energy & Living Unit, CEN-CENELEC.

Mihaela ALBU – Professor, POLITEHNICA UNIVERSITY OF BUCHAREST mentioned that standards are developed with the support of the experts and we should use their knowledges to cover those standards.

"Any standard must be opened to adapt to the need of innovation. There is a negative aspect, related to Innovation: the cybersecurity, where we discussed about threats", highlighted Dragomir RADOYTSEV – Policy Officer, E.DSO for Smart Grids.

"For an innovative product to become suitable to become a standard, the first step is searching for existing standards. There is a risk of "over-

standardization", when too much products are standardized", underlined Andreas HERMANN – Committee Manager, ASI.



"When an innovative product becomes suitable to be developed into a standard, the product will be interoperable", underlined Ganesh SAUBA. Emiliano MARQUESINI — Senior Advisor, CRE pointed out that the contribution of the working groups to the implementation of these standards is very important. "The standards need to progress in parallel". In its concluding remarks, ASRO representatives reiterated their willingness to actively participate in current or future EU Funded Projects. CEN-CENELEC representatives are pleased to support the establishment of EU Projects Liaisons between Project Partners and CEN-CENELEC Topic

Experts and relevant Working Groups.

CRE Association would like to express its Special Thanks to the valuable speakers who contributed to the important discussions and to those who were interested to participate in the online environment.



Conclusions and Final Remarks

In his final remarks, **Mihai PAUN – Director Development and Innovation, CRE** summarized the entire discussion, by pointing out that: "There is a need for deployment and investments in Digital Technologies to reach Climate Neutrality. Standardization facilitates the Dissemination of Information for Digitalization. Europe needs Innovative and Affordable Solutions as there are EU Energy Opportunities for Innovation and Funding Programs available".



CRE Association is an active and strategic partner together with its members and other potential members in international consortia for deploying energy projects funded by the EC, such as: CROSSBOW, PHOENIX, TRINITY, EDDIE, EDGEFLEX, SUCCESS, RESERVE, NRG5, WISEGRID, SOGNO and CYBERSEAS.