THE ROMANIAN ENERGY CENTER ASSOCIATION PARTICIPATED AT THE 2nd ADVISORY BOARD MEETING WITHIN PHOENIX PROJECT

17th of January 2022, Paul LACATUS

The representatives of the Romanian Energy Center Association (CRE) participated and contributed at the 2nd Advisory Board Meeting within the European Project "PHOENIX" – "*Electrical Power System's Shield against complex incidents and extensive cyber and privacy attacks*", on Thursday, 16th of December 2021. This relevant and important Meeting took place in the Online Environment. PHOENIX Project is funded by the European Commission (EC) through the Horizon 2020 Program.

CRE is a direct partner in PHOENIX Project together with its two members TRANSELECTRICA, DELGAZ (RO), as well as TELETRANS, Transport and Distribution System Operators (TSOs and DSOs). Other Energy Stakeholders from Central and South-East Europe: ASM TERNI (IT), ELEKTRO LJUBLJANA (CR), and PPC (GR), as well as other Industrial and Telecommunications partners from 11 European countries (France, Finland, Germany, Greece, Italy, Luxemburg, Romania, Slovenia, Spain, Norway, and Netherlands) are Partners in PHOENIX Project.

The representatives of CRE Association participated on 16th of December 2021 at the Second Advisory Board Meeting of PHOENIX Project. The discussion highlighted the overview of the Project in order to have a better understanding of its direction; the current status, the Assessment and Analysis of Risk Prevention; Secure and Persistent Communication; Situation Awareness and Incidents Mitigation, and Pan-European Electrical Power Energy Systems (EPES) Incidents Information Sharing.

During this valuable meeting, were presented the main achievements with regards to Secure and Persistent Communication (SPC): an Innovative and High-Performance Machine Learning (ML) framework for offline and online / real-time processing situation awareness. The SPC Layer is one of the key components to protect EPES assets, enabling coordinated cybersecurity measures and the Secure Exchange of Cyber Threat Intelligence (CTI), at the same time ensuring Privacy.

The main achievements of the EPES Situation Awareness, Perception and Comprehension were discussed in the Second Advisory Board Meeting: Utilization of Classical and federated ML for the identification of security incidents – Real Network Data and SCADA Data; Differential Privacy Techniques on federated ML to avoid revealing information on Data; and Co-Simulator that translates series of security incidents into valuated attack vectors.

The Assessment & Analysis of Risk Prevention were highlighted by ASM Terni as a member of the PHOENIX Consortium as following: the purpose of the Threat Modelling – identify potential threats to specific systems or infrastructures and analyse which countermeasures can be included to protect the systems.

The feedback from the Advisory Board members was positive with comments on the work that has been done and the strategy of PHOENIX Project towards the right direction.

PHOENIX Project officially started in September 2019, has a three-year implementation period and a budget of 11 million Euro. The coordinator of the Phoenix Project is Capgemini Technology Systems from France. The main objective of the project is to improve the cybersecurity of the EPES. PHOENIX aims to offer a cybershield 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.

CRE already implemented five European H2020 Projects: **SUCCESS**, **RESERVE**, **NRG5**, **WISEGRID** and **SOGNO** and is currently implementing other six projects: **CROSSBOW, PHOENIX, TRINITY, EDDIE, EDGEFLEX** and **CYBERSEAS**.

CRE Association is an active and strategic partner together with its members and other potential members of the International Consortium for the implementation of multiple Energy Projects funded by the EC.