

CYBERSECURITY DOMAIN - SMART GRID FORUM ARTICLE

“GETTING AHEAD OF THE THREAT-SCAPE”

3rd of March 2021, Carina Ioana ZIDARU

The Romanian Energy Center Association (CRE) is pleased to share a very interesting article entitled „GETTING AHEAD OF THE THREAT-SCAPE”, published by Smart Grid Forums, on 2nd of March 2021. The article describes the results of a survey made to measure the level of cyber-awareness of power grid technical workforces. The Smart Grid forum received 41 responses as follow: 27% from utilities, 47% from technology suppliers, and 26% from industry advisors.

Following the study, the [Smart Grid Forums](#) underlined a variety of key results: 78% of participants believe their organizations are either in-line with or ahead of the threat landscape; 38% think that the Solar Winds attack on US government systems, has had some influence on their cybersecurity roadmap; 95% feel that cybersecurity is now everyone’s business and that technical workforces must be cyber-educated and qualified as a core component of their roles going forward; 75% feel that their existing organizational cyber-awareness programs are either very effective or quite effective, and so on the face of it we appear to be operating on a fairly level playing field with the hackers; 22.5% of respondents believe their company are ahead of threats-cape and 17.5% feel that their cyber-awareness programs are very effective.

These key results underline that is fundamental to ensure that the right awareness programs are implemented and deployed all across the organizations. Within Smart Grid Forum, a couple of the suggestions came through the survey such as: the need for the Board to own the cyber-awareness programme and to allocate more budget to it; the need for more frequent, structured, and officially certified programs that are made available to a wider range of power grid employees; the necessity to create a central repository of cybersecurity incidents and success stories worldwide; to inform, inspire and empower technical workforces and make cybersecurity a core component of their roles.

In this regard, Romania will host the [European Cybersecurity Industrial, Technology and Research Competence Center \(ECCC\)](#), the first European Agency that will be based in Bucharest. The main objective of this institution in collaboration with specialized national hubs, will be to centralize the technological and industrial security ecosystem of the Member States, to prevent cyber-attacks and other cyber threats.

Additionally, [CRE](#) Association is constantly concerned in the cybersecurity field, being also very active to find solutions to improve awareness of cyber threats and attacks for the power energy infrastructure. Some examples of CRE practical actions, in terms of cyber security projects in which the Department of Innovation and Development has an important contribution will follow.

The [SUCCESS](#) Project- **Securing Critical Energy Infrastructure**, which started in 2016 and ended in November 2018. CRE had an important role in the SUCCESS Project, being the coordinator of the activities dedicated to the development of a new generation meter concept entitled New-generation Open Real-time smart Meter (NORM). This type of meter integrates intelligent metering, phasor measurement and information security features at the highest level, based on Physical Unclonable Function (PUF) technology. This project developed on several Pilot applications, an adaptable general security framework, which had the ability to visibly reduce the risks of cyber threats and attacks, with the support of NORM smart meters.

The [PHOENIX](#) Project - **Electrical Power System’s Shield against complex incidents and extensive cyber and privacy attacks**, started in 2019 and it will end in 2022. The main objective of the project is to improve the cyber security of European Electrical Power Energy systems (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.

Moreover, the 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](#).

