

CEER Specialised Training on Cybersecurity and Data Management and Privacy

19-20 June 2019

CEER Office, Cours Saint-Michel 30a (5th floor), 1040 Brussels

COURSE PROGRAMME

Throughout the world, countries are increasingly facing cybersecurity threats and challenges. Several cybersecurity vulnerabilities became visible during 2017 and several of those were relevant for the energy sector, with a few even specifically targeting this sector. The energy sector is undergoing substantial changes in infrastructure, in the structure of the markets and in cyber security. With evolving cyber threats, our infrastructure is increasingly vulnerable to disruptive or destructive attacks. Though beneficial to both industries and end users, the introduction of advanced technology and modernization to power systems also introduces a whole new set of vulnerabilities that can be exploited by cyber-attacks. In addition, new technologies provide big data to TSOs/DSOs and suppliers. Big data often contain personal information which is distributed amongst different companies. Privacy therefore becomes a concern. Cybersecurity needs to be implemented in order to ensure data management and privacy. A cybersecurity breach concerning energy data may lead to data disclosure, integrity violation or data unavailability.

Regulators must prepare for this new reality by understanding their roles and responsibilities and by taking the necessary steps to improve cyber preparedness of utilities and ensure data protection and privacy. As regulators are tasked with evaluating the investments of utilities, approving tariffs and ensuring the resiliency and reliability of the grid, it is critical for regulators to understand not only all the dimensions of cybersecurity, but also the best methods to tackle this issue from a regulatory perspective. It is within the bailiwick of regulators to decide upon acceptable costs of regulated monopoly grid operators.

This CEER training course aims to provide technical experts from National Regulatory Authorities with an overview of the latest policy developments in cybersecurity and practical experiences on the technical aspects of cybersecurity risk management and preparedness in Europe. It will focus on the economics of cybersecurity and how to translate the needs into policies and regulations. The programme will also explain the links between cybersecurity and data management and privacy and how cybersecurity could be enhanced to ensure data protection and privacy.

This training is composed of one pre-training session and the on-site session on 19-20 June 2019. The participants who register for this training will benefit from a pre-training session which contains useful background documents to equip them with the necessary knowledge before attending the on-site training on 19-20 June 2019.

Wednesday, 19 June 2019
10:30-17:30

WELCOME AND INTRODUCTION

10:30-10:45 Opening remarks and round-table introduction of the participants.

- **Mr Roman Picard, CRE, Co-Chair CEER Cyber Security Work Stream**

SESSION 1 LEARNING FROM TECHNICAL GUIDELINES ON CYBERSECURITY

10:45-11:45 Learning from technical guidelines on cybersecurity.

- The European Commission's Guidelines on cybersecurity;
- An overview of the cybersecurity guidelines from outside the EU;
- A comparative view of the cybersecurity guidelines specific for the energy sector;
- From guidelines to standards: from a checklist to IEC 62443 and ISO/IEC 27001.

- **Mr Stefano Bracco, ACER, Co-Chair CEER Cyber Security Work Stream**

Q&A/Discussion

SESSION 2 RISK PREPAREDNESS IN CYBERSECURITY: PRACTISING YOUR SKILLS

11:45-12:45 Risk preparedness in cybersecurity.

- The basics of risk preparedness
- Drafting a cybersecurity scenario for further testing
- Cybersecurity scenarios and risk assessment

- **Mr Stefano Bracco, ACER, Co-Chair CEER Cyber Security Work Stream**

Q&A/Discussion

12:45-13:45 *Lunch Break*

13:45-16:30 A table-top exercise in cybersecurity: practising your skills on a difficult day in the energy cyberspace.

- **Moderator tbc, ENISA**

Q&A/Discussion

16:30-17:15 Plenary discussion after the table-top exercise.

- **Moderator tbc, ENISA**

17:15-17:30 Final remarks and wrap up of Day 1.

- **Mr Roman Picard and Mr Stefano Bracco, Co-Chairs CEER Cyber Security Work Stream**

17:30-18:30 Reception drinks – For those who wish to join, we will host a small drinks reception at the CEER office – all participants and lecturers welcome!

- END OF DAY 1 -

Thursday, 20 June 2019
09:00-16:30

SESSION 3 ECONOMICS OF CYBERSECURITY

09:00-10:30 Economics of cybersecurity: translating needs into policies and regulations affecting the energy markets.

- Enhancing cybersecurity in different regulatory frameworks
- The “Quality Like” Model: regulating cybersecurity with performance;
- Metrics on cybersecurity: helping in understanding the trends;
- Evaluating effectiveness of cybersecurity activities: who, how and when.

- **Ms Elena Ragazzi, National Research Council – Italy**

10:30-10:45 Coffee break

10:30-11:15 Roundtable discussion: how regulators evaluate investments of utilities and approve tariffs, taking into account the costs of cybersecurity.

- **Moderated by Mr Elbert Jan Van Veldhuizen, ACM**

Q&A/Discussion

SESSION 4 CONNECTING THE DOTS AND LINKS BETWEEN CYBERSECURITY AND DATA MANAGEMENT AND PRIVACY

11:15-12:00 The links between cybersecurity and data management and privacy.

- **Mr Roman Picard, CRE, Co-Chair CEER Cyber Security Work Stream**

Q&A/Discussion

12:00-13:00 Lunch Break

13:00-13:45 Case study on cybersecurity and data management and privacy: Big Data in energy and cloud computing.

- **Mr Janez Stergar, AGEN**

Q&A/Discussion

13:45-15:00 Connecting the dots.

- Minimum Requirements: an essential tool to start;
- Reporting of cybersecurity incidents for energy;
- Maturity Models in cybersecurity for the energy sector.

- **Mr Keith Buzzard, ENTSO-E**

- **Mr Janez Stergar, AGEN**

Q&A/Discussion

15:00-15:15 *Coffee break*

15:15-16:15 Connecting the dots.

- Understanding the way forward: how cybersecurity will be the future of regulation
- Digitalisation and open gaps: blockchain, Artificial Intelligence and Smart-Energy

- **Mr Elbert Jan Van Veldhuizen, ACM**

Q&A/Discussion

16:15-16:30 Final remarks and wrap up of Day 2.

- **Mr Stefano Bracco, ACER, Co-Chair CEER Cyber Security Work Stream**

- END OF DAY 2 -