

Efficiency of electrical grids under cyber attacks on their SCADA

ENEA, Rome 16th December 2014

Efficiency, Resilience and Quality of Service of Critical Infrastructures (CI), such as electrical grids depend upon Resilience and Quality of Service of their SCADA. SCADA systems, which constitute the nervous systems of physical infrastructures, are severely threatened by cyber-attacks, since they have just emerged from a significant transition, i.e. evolving from a proprietary and closed architecture to open, standard-based solutions aimed to enforce interoperability and deployment of smart systems.

The European CockpitCI project have developed a modelling framework and a tool for the community of CI owners to early detect, analyse and mitigate attacks in order to improve CI Efficiency, Resilience and Quality of Service and avoid disastrous cascading effects.

The present workshop intends to present project results. Furthermore, cyber security issues for SCADA and CI operators will be addressed and business impacts will be discussed.

AGENDA

- 09.00 Registration
- 09:30 **Welcome**
Maria Cristina Corazza & Vincenzo Artale - ENEA, Italy
- 09:40 **CockpitCI Project Overview**
Antonio Graziano, SELEX ES, Italy
- 10:00 **Cyber Analysis and Detection Layer**
Tiago Cruz, University of Coimbra, Portugal
- 10:20 **Security assurance of Detection Layer**
Moussa Ouedraogo – CRPHT, Luxembourg
- 10:35 **Integrated Detection Mechanism**
Leandros Maglaras, University of Surrey, England
- 10:50 **Detection tools: concrete examples and user guide policy**
Mathieu Aubigny, itrust, Luxembourg
- 11:00 **Efficiency of electrical grids under cyber attacks on their SCADA**
Michele Minichino, ENEA, Italy
- 11.25 **Coffee break**
- 11:40 **Grid Quality of Service indicators under cyber attacks**
Serguei Iassinowski, Multitel, Belgium
- 12:00 **Integrated Risk Predictor**
Chiara Foglietta- University of ROMA TRE, Italy
- 12:30 **Validation Process in the Multinational R&D CIIP Projects: CockpitCI example**
Leonid Lev - Israel Electric Corporation, Israel
- 12:50 **A strategy to protect against Cyber threats**
Sigal Barda – ECI Telecom, Israel
- 12:50 **ECI presentation**
- 13:05 **Lunch**
- 14:20 **Cyber Security for Automation Process**
Antonio Cerilli - Schneider, Italy
- 14:30 **Safe Network Integration**
Shaul Pescovsky – Waterfall Security Solutions, Israel



DEMO SESSION:

- 14:45 **CockpitCI tool in validation environment** - Leonid Lev - Israel Electric Corporation, Israel
- 15:15 **Shadow Remote Terminal Unit** -Tiago Cruz, University of Coimbra, Portugal
- 15:30 **Smart Remote Terminal Unit** - Giovanni Corbò, University of ROMA TRE, Italy
- 15:45 **Modelling versus remote hybrid test bed** - Benedetto Fresilli, ENEA, Italy
- 16:00 **Coffee break**
- 16:15 **Open issues and conclusions**