

Smart Energy Grid Security Workshop (SEGS'13)

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ABSTRACT

The Smart Energy Grid Security (SEGS) Workshop aims to foster innovative research and discussion about smart energy grid security and privacy challenges, issues, approaches, and solutions. SEGS publications offer perspectives from both academia and industry, and present novel research on theoretical and practical aspects of smart grid security and privacy, including design, analysis, experimentation, and fielded systems. SEGS also includes presentations from other communities, such as law, economics, and HCI, that present these communities' perspectives on technological issues. The scope of the workshop encompasses all aspects of the smart grid, including distribution, transmission, generation, metering, e-mobility, and integration of distributed energy resources.

Categories and Subject Descriptors

C.2.0 [Computer-Communication Networks]: General—Security and protection (e.g., firewalls); C.3 [Special-Purpose and Application-Based Systems]: Real-time and embedded systems; D.4.6 [Operating Systems]: Security and Protection; J.7 [Computers in Other Systems]: Industrial Control; K.4.1 [Computers and Society]: Public Policy Issues; K.6.5 [Management of Computing and Information Systems]: Security and Protection

Keywords

smart grid; critical infrastructure; security; data protection; privacy

1. INTRODUCTION

Smart grid security is an upcoming topic of great importance, but there is currently little understanding and communication between the electricity sector and the security community. The subject of smart grids has been discussed in industry for many years now and smart meters have already been deployed in multiple countries around the world.

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There are over 20 annual conferences and events sponsored by utilities and leaders in the energy industry. However, there is currently a large gap in the security research community specifically addressing smart grids. This workshop aims to fill that void and encourage more research into the area of smart grid security by providing a forum for security researchers to present their work. The workshop also includes an invited speaker from the electricity sector who will share his expertise with the audience and thus help in guiding future research efforts. This workshop serves as an opportunity to foster collaboration between the power industry and the ACM CCS research community.

2. TOPICS OF INTEREST

The SEGS Workshop focuses on the following topics:

- Smart grid architectures and models
- Smart grid networks and communication
- Security and dependability in safety-critical, real-time systems
- Data protection and privacy
- Grid management
- Trust and assurance
- Intrusion detection and monitoring on smart grids
- Algorithms and protocols for critical infrastructures
- Risk and threat analysis
- Smart grid standards, testing, and certification
- Testbeds and field trials
- Usability and legal issues on grid security
- Cloud computing and smart grids

3. FORMAT

SEGS is a full-day workshop on the final day of the ACM CCS 2013 Conference. The program includes an invited talk called "The Future of Smart Grids". The talk will be given by an expert from the power industry, who can give an insider view on the security issues, requirements, and approaches taken right now and on the development of the smart grid in the future. In addition to the invited talk, the program is split into four sessions consisting of presentations from six regular papers and six short papers.

4. PROGRAM COMMITTEE

We are thankful for the service of our program committee members:

- Kevin Butler, University of Oregon, US
- George Danezis, Microsoft Research, UK
- Benessa Defend, ENCS, Netherlands (Organizer)
- Sandro Etalle, TU Eindhoven and University of Twente, Netherlands
- Raymond Hallie, ENCS and Alliander, Netherlands
- Maarten Hoeve, ENCS, Netherlands
- David Irwin, University of Massachusetts Amherst, US
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- Erwin Kooi, Alliander, Netherlands
- Maryna Krotofil, Hamburg University of Technology, Germany
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- Jos Weyers, TenneT, Netherlands
- Kenzo Yoshimatsu, Control System Security Center, Japan