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# Critical Information Infrastructures Security

8th International Workshop, CRITIS 2013  
Amsterdam, The Netherlands, September 16-18, 2013  
Revised Selected Papers

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# Preface

This volume contains the revised proceedings of the 8th International Workshop on Critical Information Infrastructures Security (CRITIS 2013). The conference was held in the EYE and the Shell Technology Centre Amsterdam, The Netherlands, during September 16–18, 2013. The conference was organized by The Netherlands Organisation for Applied Scientific Research TNO.

CRITIS 2013 continued the now well-established series of successful CRITIS conferences. This conference started with an additional half-day of keynote talks that sought to provide additional perspectives by critical (information) infrastructure (C(I)I) stakeholders such as policymakers, CI operators, and researchers. The focus of the keynote talks was on *resilient smart cities*, which require resilient and reliable information and communication networks. Related notions are resilient smart grids and smart mobility, which are key enablers for smart cities.

The titles of these keynote talks were:

- “Amsterdam, A Smart City” (Ton Jonker, Amsterdam Economic Board)
- “A Hyperconnected World: EYE on the Past, Present and Future” (Henk Geveke, TNO)
- “From Requirements for Critical Industry Sectors Towards Jointly Protecting our Critical Service Chains” (Ben Krutzen, Shell)
- “Smart City, A Vision on 2030” (Max Remerie, Siemens)
- “Future Visions of Super Intelligent Transportation” (prepared by Marie-Pauline van Voorst tot Voorst, Netherlands Study Centre for Technology Trends)

During the main conference, the following keynote talks were held:

- “Future C(I)IP Challenges – A View from the Financial Sector” (Leon Strous, DNB)
- “Smart Cities, a View on Developments” (Giampiero Nanni, Symantec/EMEA)
- “European Critical Internet Infrastructure: Past, Present and Future Research” (Rossella Mattioli, ENISA)
- “From R&D to an International Operational Monitoring Centre: Monitoring the State of Critical Infrastructure(s) Using Sensor Systems” (Robert Meijer; Stichting IJkdijk, University of Amsterdam, and TNO)

All keynote speeches stimulated the debate between CI domain stakeholders and researchers in particular on the nearby and long-term organizational and R&D challenges during the remainder of the conference and hopefully thereafter. A House-of-Commons style debate, which actively involved all conference

participants, took the debate another step forward while bridging the views of the CI policymakers, CI operators, and the various research communities.

As in previous years, the technical Program Committee received a large set of paper submissions. The Program Committee provided insightful reviews and comments to the submitters of 57 papers. At least three independent and blind reviews per submission took place resulting in the selection of 16 full papers, yielding an acceptance rate of 28%. Another four submissions were accepted as short papers. All these papers are published in this proceedings volume.

The selected papers and their presentations were grouped in the conference program as New Challenges, Natural Disasters, Smart Grids, Threats and Risk, SCADA/ICS and Sensors, and Short Papers. The same grouping can be found in this volume.

To stimulate international collaboration and exchange of ideas, the program chairs selected a couple of submissions not chosen for the main conference, but nevertheless of considerable value and timeliness. These contributions were discussed in an interactive parallel work-in-progress session. To stimulate collaboration even more, the conference organizers started the building of a Critical Information Infrastructures Security LinkedIn community for young (of mind) researchers: Young CRITIS. The intention is to build a virtual international community that allows junior researchers in the C(I)I domain to interact and network with peers and experienced researchers in the C(I)I domain. It is hoped this will enable researchers to reach faster and better research results and may also lead to further joint international research.

Organizing a conference like CRITIS entails an effort that is largely invisible to the participants. We, therefore, want to acknowledge the personal commitment of the local organizing team, general chairs, the contributions by the keynote speakers, as well as the support of the host organization TNO, the City of Amsterdam, The University of Twente, The Hague Security Delta (HSD), and the Shell Technology Centre Amsterdam (STCA). The Program Committee chairs express their gratitude to the Technical Program Committee members, who volunteered their services and devoted considerable time in preparing insightful reviews and comments to the authors of the papers. Together with the contributions to the discussions and interactions between all conference participants, this resulted in a very successful and stimulating CRITIS 2013.

October 2013

Pieter Hartel  
Eric Luijff



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