

# International Workshop on Resilience and ICT for Secure Open Cities - ReISOC 2011

To be held in conjunction with the 4th IEEE International Conference on Cyber, Physical and Social Computing – IEEE CPSCom 2011 <<http://cpscom.org>>

## Scope

Threats to cities and their critical/social infrastructures, e.g. natural disasters, crime, and terrorism, endanger human life directly and indirectly. Parts of social infrastructures won't be available due to damages. Both emergency response and recovery activities will be hindered, if not even be impossible. Resilience is gaining in importance as a core concept to cope with such threats. Resilience means strengthening social infrastructures to prevent or mitigate threats and its ultimate level would be immunity to such threats. Resilience is not only understood in terms of resistance against attacks and threats (i.e. prevent and protect) but also in terms of the ability to adapt social infrastructures to deal with threats and attacks (i.e. respond and recover).

Information and communication infrastructure (ICT) in its vital role to enable communication and coordination is the primary part of social infrastructures and therefore one of the central objects of resilience research. When a threat becomes a reality, ICT still has to provide its services to rescue organizations and for catastrophe management. To ensure availability of ICT for affected social infrastructures, these ICT systems must be able to flexibly - or even autonomously - adapt to changing environments. Such flexibility implies granting access to services and data to an "outsider" and thereby making him or her an "insider" of the failed part of the affected social infrastructures. This opens an enormous potential of misuse and place challenges on security and privacy. For instance, controllability of data usage by the data owner is not given anymore leading to risks regarding confidentiality and integrity.

## Objective

ReISOC-2011 aims to identify further requirements and scientific challenges as well as to discuss novel idea, ongoing work, and best practices regarding ICT support for "Resilience and ICT for Secure Open Cities", in particular to Compliance, IT-Security, and Privacy. We encourage researchers and experts from industry to submit original, unpublished contributions addressing promising approaches to provide and manage resilient ICT infrastructures.

## Topics

Suggested topics, but not limited to, are:

### (a) Autonomic and Dependable Computing

- Methods and Techniques for Self-Configuration, Self-Healing, Self-Protecting, etc.
- Distributed Systems and Agents
- Flexible and Secure Orchestration of ICT Services
- Trustworthy Organic Computing

### (b) Risk and Vulnerability Analysis

- Identification of Vulnerabilities in Service-Oriented Computing
- Anomaly Detection
- Risk Assessment Methods for Automated Business/Service Processes
- Economics of Controls

### (c) Policy Specification Models and Languages

- Matching of High-Level Policies with Security-related Execution Traces
- Automatic Identification of Conflicts between Policies
- Automatic Resolution of Policy Conflicts

### (d) Policy Enforcement Mechanisms

- Algorithms to Forecast Vulnerabilities
- Digital Forensics
- Privacy in the Secondary Use of Personal Data
- Observability of Control and Data Flows

### (e) Methods for Resilience & Best Practices

- Recovery-oriented Computing
- Resilience in the Internet
- Resilience in Cryptographic and Communications Protocols
- Business Continuity Plan and Business Continuity Management

## Workshop Organizers

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## Paper Submission

Papers submitted to ReISOC-2011 will be peer-reviewed by at least three different reviewers. Accepted papers will be included in the conference proceedings of IEEE CPSCom 2011 and published by IEEE Computer Society (EI indexed). Selected best papers will be recommended for publication in the special issue "Security and Privacy in Business Networking" of the international journal "Electronic Markets" published by Springer and in special issues of several SCI-indexed international journals. Successfully recommended workshop submissions should be revised and enhanced for publication in the journal.

Submissions to the workshop should clearly state the research contribution, their relevance to the workshop, as well as their relation to prior research. Authors are invited to submit original, unpublished research papers limited to 6 pages following the IEEE CPSCom 2011 guidelines. Papers must be submitted electronically in PDF format through the online submission system at <<https://www.easychair.org/conferences/?conf=reisoc2011>>. Authors of accepted papers must sign a copyright statement and guarantee that their paper will be presented at the conference. Visa information can be obtained at <http://cpscom.org/vt.html>.

## Program Committee (Tentative)

- Rafael Accorsi, Albert-Ludwig University Freiburg, Germany
- Markus Aleksey, ABB Corporate Research, Germany
- David Basin, ETH Zurich, Switzerland
- Rainer Boehme, University of Muenster, Germany
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- Edgar Weippl, Secure Business Austria, Austria
- Sven Wohlgenuth, National Institute of Informatics, Japan
- Rigo Wenning, W3C / ERCIM, France
- Hiroshi Yoshiura, The University of Electro-Communications of Tokyo, Japan

Visit our website on <http://www.nii.ac.jp/jeisec/reisoc/>

## Important Dates

- 2011-06-10: Submission Deadline
- 2011-06-24: Submission Deadline (extended)
- 2011-07-18: Author Notification
- 2011-08-26: Author Registration/Camera-ready Version
- 2011-10-19: ReISOC-2011 at IEEE CPSCom 2011 Conference

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The conference takes place in Dalian (China).

JEISec, the organizing institute, is operating in Tokyo (Japan).

