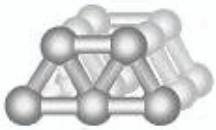
# Call for papers
# Fourth International CRIS conference on Critical Infrastructures (CRIS 2009)



## Linköping, Sweden, 28-30 April 2009

### Submissions:

Manuscripts (8 pages, IEEE format) that describe original unpublished work (not submitted elsewhere) are solicited for post conference publications in a proceedings that will appear in IEEE explore (approval pending). Selected papers will be published in the international journal of critical infrastructure protection (Elsevier publishers) as a fast track submission.

### Important dates:

Paper submission due: Jan 14th 2009
Acceptance notification: Feb 15th 2009
Final manuscript deadline: Mar 15th 2009
Work-in-progress papers: Mar 15th 2009

### Conference chairs:

Simin Nadjm-Tehrani, Linköping University, Sweden, (simin@ida.liu.se)

Virgilio Centeno, Virginia Tech., USA, (virgilio@vt.edu)

### Program Commitee:

Michael Behringer (Cisco, France)
Sandro Bologna (ENEA, Italy)
François Bouffard (Univ. Manchester, UK)
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Chris Johnsson (Univ. Glasgow, Scotland)
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Frank Kargl (Ulm University, Germany)
Daniel Karlsson (Gothia Power, Sweden)
Himanshu Khurana (UIUC, USA)
Engin Kirda (Eurecom, France)
Javier Lopez-Muñoz (Univ. Malaga, Spain)
Zofia Lukszo (TU Delft, The Netherlands)
Klara Nahrstedt (UIUC, USA)
Arun Phadke (Virginia Tech., USA)
Hugo Straumann (Swisscom, Schweiz)
Ludovic Pietre-Cambacedes (Telecom ParisTech, France)
Nahid Shahmehri (LiU, Sweden)
Pascal Sitbon (EDF, France)
Arun Somani (Iowa State Univ., USA)
Hugo Straumann (Swisscom, Switzerland)
Mats Söderström (LiU, Sweden)
Stephen D. Wolthusen (Univ. London, UK)
Felix Wu (University of Hongkong, China)

The 4th CRIS conference follows a series of successful international conferences on the theme of critical infrastructures (Bejing 2002, Grenoble 2004, Virginia 2006) in which actors from several communities come together to discuss the latest studies of vulnerabilities, research challenges, and results within the area of critical infrastructures. Presentation of state-of-the-art research is combined with discussion forums in which a range of stakeholders from the industry and government organisations to vendors and technology providers exchange their latest findings.

**The special theme of the 2009 conference is:**

"Critical infrastructures: Migration from existing technologies to future platforms"

The theme reflects the fact that there is a major technology shift in the 21st century with an unprecedented pace affecting all major infrastructures on which the society depends. Energy and climate concerns have brought about a wide range of new technologies for energy generation and distribution with associated decentralised regimes. Progress in microelectronics has made wireless networking a basic tenet of everyday life, and enables mobile networking with no fixed infrastructure a possibility in future scenarios. Spontaneous networks are already being promoted as a potential in disaster relief scenarios.

At the same time, the vulnerabilities and threats to the existing (traditional) infrastructures follows an exponential development, both due to wider deployment of software-intensive components and global political-economic factors that make automated and sophisticated attacks much more widespread than a decade ago.

We specifically encourage contributions that address the migration path between the old and the new; specifically, the sound and healthy transition from a protection strategy that is built around the notion of defence-in-depth, to the novel ideas of self-organising and self-managing networks with built-in resilience; or a realistic transition from a centralised power system control to open, autonomic, decentralised control architecture. The conference will (non-exclusively) address the following research areas:

- Dependability/resilience of IP network infrastructure
- Interaction between IP network resilience and other critical infrastructures
- Inherently resilient infrastructures and their scalability
- Quality of service assurance: migration to emerging infrastructures
- Monitoring and mitigation of threats: reusable components
- Socio-economic factors affecting the migration to new technologies
- Management of risk in migration to emerging infrastructures
- Resilience to failures and attacks: migration strategies
- Information network management, monitoring and configuration
- Power trading and its impact on resilience of the network
- From brittle to ductile power networks
- Wide Area Measurement System Applications
- Studies related to recent protocols (e.g. IEC 61850 in power)
- Power System Monitoring, Protection, and Control
- Distributed power generation and infrastructure change
- The changing role of energy end users
- Open information architecture for critical infrastructures
- Quantitative evaluation of infrastructure interdependencies
- Information infrastructures for disaster management