



**ISCRAM2009**  
**The 6<sup>th</sup> International Conference on Information Systems for  
Crisis Response and Management**

**Gothenburg, Sweden**  
**May 10-13, 2009**  
**<http://www.iscram.org>**

**CALL FOR PAPERS**  
**FOR A SPECIAL SESSION ON**  
**SIMULATION AND EMERGENCY MANAGEMENT**

**Session ID: OPEN 4**

**Motivation**

Simulation has been used for many years in domains such as chemistry, physics and biology. However, it is only relatively recently that computer-based simulation has been used for simulating social systems such as emergency management. In this area it has now become a powerful tool. One of its main uses is anticipating and predicting future events through playing "what-if" scenarios. In order to be adequately prepared for emergency situations it is necessary to be able to assess in some way the effectiveness of the intended plans and strategies. However, simulation for the purpose of prediction is only one of its many uses. Simulation may be successfully employed for training emergency personnel, to gain a more in-depth understanding of real emergency situations, to assist in the discovery and formalization of social theories relating to emergency management, and to help develop new tools or ways of working for emergency personnel, etc.

**Research Area**

This session focuses on the following two key issues:  
Firstly, a crucial point in the field of simulation and emergency management concerns how **to make simulation usable as an effective and efficient** tool supporting planning, decision making, assessment, etc. **in all phases of the response and management process** (i.e. during, before and even after emergency situations).

A second area concerns **socio-cognitive modelling and simulation** in emergency management. This aspect focuses on the delicate interplay between human cognition, e.g. decision making, and the social-technical system, e.g. our organisational structures, in which emergency managers find themselves. Socio-cognitive modelling recognises that social and cognitive aspects are reciprocally connected; that is, our cognitive behaviours are affected by our social environment, and likewise, our environment is changed by our cognitive influence. In order to understand emergency



situations we must understand how actors interact with each other and with their environment. We are therefore interested in how individuals collectively organise themselves, (their interactions, cooperation or competition) in their socio-technological environment in order to effectively manage an emergency.

The session covers both theoretical and applied work on simulation in the context of crisis response and management. Simulation practices, mainly successful one, are very welcome.

### Topics

Main topics include (but not limited to):

- **Simulation practices:** Live simulation and Computer based simulation (agent-based, virtual reality, etc.)
- **Agent based social simulation** of emergency situations
- **Simulation methodological work:** modelling methodology, analysis methodology, validation methodology, etc.
- **Simulation for training and education**
- **Understanding the emergency management process** through modelling and simulation
- **Theory discovery and formalisation** through modelling and simulation
- Use of modelling and simulation in **designing new socio-technical systems**
- **Simulation and interoperability:** norms, standards, ontologies, etc.
- **Simulation and distribution:** parallel, collaborative, web-based, etc.
- **Simulation and scalability:** large-scale complex socio-technical systems
- **Virtual reality simulations**
- Simulating emergency situations as a **complex adaptive system**

### Type of contribution:

Both academic and practitioner contributions are welcome.

- **Academic contribution:** we invite researchers from academia or research labs to present their research or research-in-progress papers. Prospective presenters submit a regular research (or research-in-progress) paper.
- **Practitioner contribution:** we invite practitioners to present their practice or experiences in information systems development, use or needs. Prospective presenters submit a short practitioner paper or a Powerpoint presentation along with an abstract.

### Important Notice:

- All submissions must be formatted according to the ISCRAM 2009 formatting guidelines. Templates and instructions are published on [www.iscram.org](http://www.iscram.org).



- All submissions must be submitted through the ISCRAM 2009 conference paper submission web page at [www.conftool.com/iscram2009](http://www.conftool.com/iscram2009). Instructions for the ConfTool system can be found on [www.iscram.org](http://www.iscram.org).
- All papers and presentations will go through a double-blind review process, leading to a decision of (conditional) acceptance or rejection.
- Accepted papers will be included in the ISCRAM 2009 program and published in the official proceedings if and only if
  - (1) the paper is formatted according to the instructions,
  - (2) the authors sign the copyright transfer form and
  - (3) one of the authors registers for the conference and pays the registration fee before the cut-off date for early registration.
- Authors who have multiple papers accepted can only register for and present one paper at the conference; co-authors need to register separately.

#### Session Chairs:



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### **Important ISCRAM 2009 Dates:**

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|---------------------------------------|-------------------|
| • Submission deadline:                | January 11, 2009  |
| • Notification of conditional accept: | February 16, 2009 |
| • Final submission revised paper:     | March 1, 2009     |
| • Final author notification:          | March 9, 2009     |
| • Early registration deadline:        | March 22, 2009    |
| • Conference:                         | May 10-13 2009    |

### **About ISCRAM:**

The ISCRAM Community is a worldwide community of researchers, scholars, teachers, students, practitioners and policy makers interested or actively involved in the subject of Information Systems for Crisis Response and Management. At its annual international conference alternating between the US and Europe, the ISCRAM Community gathers to present and discuss the latest research and developments in this growing area during an interactive and stimulating 3 day program. The ISCRAM Community also organizes an International Summer School for PhD students and ISCRAM-CHINA, an annual conference for ISCRAM research in China. All information on ISCRAM can be found at <http://www.iscram.org>

This year the conference will be held from 10-13 May at the Göteborg University located in Gothenburg, Sweden. The conference will be hosted by the Viktoria Institute and the IT-university of Gothenburg. All details on this conference will be made available via the ISCRAM website mentioned above.