

ISCRAM2013

Integrative and Analytical Approaches to Crisis Response and Emergency Management Information Systems

10th International Conference on

Information Systems for Crisis Response and Management

Kongresshaus Baden-Baden Baden-Baden Germany TRACK: Efficient Planning and Decision Support for Robust Critical Infrastructure Systems

Introduction of the track

Neither on a civil nor on an industrial or economic level are we prepared to cope with the consequences of unexpected Critical Infrastructure (CI) disruptions, which may result from extreme events. Functioning CI systems, such as energy and water supply, communication, transportation and logistics are not only essential for everyday life, but also for fast and efficient disaster response, relief and recovery. In consequence of an increasing level of interdependencies between different infrastructure sectors, the potential for cascading failure across mutually dependent systems is perhaps the most notable. The increasing complexity of CIs implies that the information about specific infrastructures, their state, their capacities or vulnerability is often available only locally, and IT-based mechanisms and tools to combine and process this information into a valid basis for the decisions at hand need to be developed. An additional challenge is constituted by the fact that functioning CIs are of vital importance for efficient disaster response, relief and recovery; while at the same time they are themselves prone to failure when natural hazards occur. In order to assess and handle potential risks from natural hazards to CI systems and their respective direct or indirect impact on mankind as well as the environment, this Track seeks for contributions on integrated approaches for the efficient planning of robust and resilient CI systems. We particularly invite contributions bridging the gap between Operations research and modeling of CI systems and crisis and emergency management.

Track topics

-	Modelling and simulating (the consequences of) CI disruptions for decision support
-	Natural hazard modelling and impact assessment on CI systems
-	Approaches to NATECH (naturally induced technological hazards) risk assessment
-	Robust system planning and risk mitigation
-	Economic impact assessment and modelling
-	(Multi-criteria) evaluation of alternative risk mitigation strategies
-	<i>Approaches for integrating qualitative and quantitative information for decision support</i>
-	Participatory techniques of decision support
-	Stress testing of critical infrastructures against natural hazards
-	Risk perception, acceptance research and prospect theory

Track Chairs



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Type of submissions

ISCRAM2013 is soliciting three types of submission:

- 1. Full research papers, which will be double blind peer reviewed. It is intended that these will report completed work which can be assessed to the highest academic standards. Such papers should be no more than 10 pages with figures & tables (~5000 words)
- 2. Work in progress and discussion paper which will be subjected to a light peer review to ensure clarity. Such papers should be no more than 5 pages with figures & tables (~2500 words)
- Practitioner reports and discussions which raise issues, examples and case studies of importance in responding to and managing crises. These submissions will be subject to a light peer review to ensure clarity. Such papers should be submitted in the form of an extended abstract (maximum two pages, ~ 1200 words). <u>All</u> practitioner reports should be submitted via the dedicated "Practitioner report track".

Note that the designation of the paper and its reviewing will be indicated in the conference proceedings. Also we are not trying to create some concept of first and second quality papers. Rather we are aware that some report finished work which can be assessed in the sense of full peer review and contribution to research, while others offer ideas and thoughts which will stimulate discussion at ISCRAM conferences. The latter are vital if we are to make the conference valuable for shaping our subject.

Note that the ISCRAM MS Word template for submissions is available at <u>http://www.iscram.org/iscram2013</u>

Submission Process and Deadlines

Authors must submit papers and posters electronically at <u>https://www.conftool.com/iscram2013/</u>. All papers must use the ISCRAM paper template. Deadlines for each submission format are listed below.

Submission Deadline Schedule for Papers, Posters, and PhD Colloquium:

Full paper submissions -- November 15th, 2012 *Work-in-progress paper, practitioner papers, posters* -- January 15th, 2013 *Doctoral student colloquium papers* -- February 15th, 2013

Submission site: https://www.conftool.com/iscram2013/

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. Full information on ISCRAM can be found at www.iscram.org.