



ISCRAM2009
**The 6th International Conference on Information Systems for
Crisis Response and Management**

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

TRACK: OPEN-TRACK

CALL FOR PAPERS

FOR A SPECIAL SESSION ON

**Information Processing in Environmental Crisis
Management & Response**

Session ID: OPEN1

Motivation

Environmental crisis management involves inherently complex information management and decision making processes that have to be carried out in an accurate, efficient, and dependable manner across different systems, organizations, geographic areas and time scales. Three major elements can typically be identified in an environment crisis management system: environment monitoring, impact assessment, and decision making. In this CFP on environmental crisis management we attract practitioner and academic contributions with the focus on information processing: what are lessons learned from practice, what is current state of the art and what is the next-gen state of the art.

Research Area

Early and reliable detection of critical events (e.g. chemical pollution) is critical in any environment management system. Environment monitoring is therefore a key component, performing processing and analysis of information obtained from sensors and people. This requires (i) efficient acquisition of information from (mobile & heterogeneous) sources spread over large areas, (ii) interpretation of complex observation patterns at different temporal and spatial scales, (iii) inference of the likely physical causes of the sensed anomalies and (iv) prediction of the temporal and spatial evolution of the pollution and (v) a clear and understandable presentation of the results.



Impact assessment is performed in combination with domain-specific models and expertise, by identifying the vulnerabilities of the ecosystem including its population, infrastructure, etc. in an affected area, and taking into account the estimated dynamics of the critical phenomena. This includes the prediction of the likely evolution of the incident and its impact and the possible effects of mitigating measures.

Decision making involves planning and evaluation of alternatives, and the implementation of preventive and corrective actions, such as alerting, containment, evacuation, etc. Typically this implies real-time collaboration between experts and authorities from different domains and distributed decision making.

Of special interest is the combined contribution of humans and machines to this information processing: the combination of human experience, flexibility and creativity with machine precision improves environmental crisis management and response.

Topics

The list of topics below is not exhaustive; contributors (practitioners and academics alike) are invited to submit relevant work.

- Case study analysis of environmental crisis management with emphasis on both human based & automated information processing. In particular, approaches and tools in the context of:
 - Monitoring/detection
 - Scenario development
 - Impact assessment
 - Planning and evaluation of countermeasures
 - Decision making.
- Practical and theoretical aspects of multi-stakeholder information processing in environmental crisis management regarding:
 - Human-based reasoning/decision making.
 - Automated reasoning approaches.
 - Combination of human-based and automated reasoning.
- ...

Type of contribution:

For this session we aim at a combination of practitioners and academics, where contributions are presented and lively discussions will be stimulated.

- **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.



Please clearly indicate in your contribution whether you are an academic or practitioner contribution.

Important Notice:

- All submissions must be formatted according to the ISCRAM 2009 formatting guidelines. Templates and instructions are published on www.iscram.org.
- All submissions must be submitted through the ISCRAM 2009 conference paper submission web page at www.conftool.com/iscram2009. Instructions for the ConfTool system can be found on 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:

- 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.