

Geo-information for Disaster Management (Gi4DM)

Disasters of natural and technological origin have caused enormous socioeconomic losses and millions of victims in the past years. A good cooperation and coordination of crisis response operations are of critical importance to react rapidly and adequately to any crisis situation. Technology progress to support crisis response has advanced greatly in the last few years. Systems for early warning, command and control, decision-making have been successfully implemented in many countries and regions all over the world. However, many aspects related to efficient collection and integration of geo-information, applied semantics and situation awareness for disaster management are still open.



Gi4DM 2012

The 8th edition of Gi4DM is initiated by the Public Safety Regions of the Netherlands and aims to become a place for the exchange of experiences, knowledge and ideas towards finding appropriate solutions to crisis response challenges. Researchers will be able to talk with officers and responders on the ground to check and validate their direction of research. Technicians will be able to work with their prototype systems in real field tests. Vendors will be able to show products that can collaborate on interoperability. Officers will be able to see tests and demos displaying the state-of-the-art technologies.

Last but not least, this event will be entertaining and pleasant. To make all this true, many exciting events will be organised next to the scientific presentation and discussions:

- Public Safety District Twente will organise the *Troned* main exercise
- Several test scenarios will be developed in collaboration with *Schiphol Airport*, *Tata steel* and *Studio Veiligheid*
- The national Dutch first responders Platform for Innovation, *iBridge*, will demonstrate a number of field tests
- Demo tents will be set up at the former facilities of *Twente Airport*
- Heated tents and F16 hangars for accommodation will be available for everyone who wants to be close to the field tests and exercises
- Workshops and discussion hours will be organised through the days (and nights).

Objectives

To advance the roles of geo-information technologies and sensor and communication networks in the fields of public safety and crisis management with focus on intelligent use of geo-information, semantics and situational awareness.

- To examine and evaluate semantics and geo-information technologies and their application for work in crisis situations.
- To examine and evaluate sensor and communication networks and their roles for improving situational awareness.
- To share best practices, discuss user requirements and make suggestions for future research directions.

Conference topics

Topics of interests include but not limited to:

Data modelling and visualisation

- Cross border and cross sector semantics
- 3D/4D Geographic Information Systems (GIS)
- Integration of data: Building Information Models (BIM) and GIS
- Standardisation (models, icons, symbols)
- Service discovery, filtering and composition (Web services, Net-centric)
- Interface design for crisis management
- Visualisation and Visual Analytics

Sensor and communication networks

- Distributed sensing and computing for crisis response
- Multi-platform and multi-sensor data collection
- Crowd sourcing and Volunteered Geographic Information
- Ad-hoc cloud
- Context awareness and self-organisation in Wireless Sensor Networks (WSNs)
- Time critical, reliable, and self-organizing WSNs
- Opportunistic sensing, networking, and dissemination

User requirements and best practices

- Coordination among agencies and stakeholders
- Security and privacy
- Design requirements and design processes for information systems
- Simulation tools for crisis situations
- Serious games, training and crisis response
- Decision enhancement systems
- Evacuation and navigation systems



Paper Submission and Publication

All papers will be reviewed by a scientific committee and experts in the field. Accepted papers will be published in a Springer book. Authors of selected papers will be invited to extend the paper for possible publication in special issues of International Journals. Two types of papers are solicited:

Scientific Papers

Gi4DM welcomes scientific contributions reporting new techniques, protocols, designs, analysis, technology developments, frameworks, etc. as well as research in progress. Prospective authors are encouraged to submit full papers (max 12 pages) or short papers

(max 6 pages) in Springer format. Scientific papers will be evaluated on their originality, novelty, and impact.

Professional/Demo Papers

Gi4DM welcomes professional/demo papers demonstrating innovative systems and practical approaches or engineering contributions, in which applied (geo-)informatics is used. Professional/Demo papers are limited to 6 pages in Springer format.

All papers should be submitted via the *EasyChair* link on the web site <http://www.gi4dm.net/2012>.



Program Committee

Conference Chairs:

Sisi Zlatanova, Delft University of Technology
Rob Peters, Public Safety District Kennemerland
Paul Havinga, University of Twente

Co-Chairs:

Arta Dilo, University of Twente
Gerke Spaling, Public Safety District Twente
Jakob Beetz, Eindhoven University of Technology
Ike Kortleven, iBridge platform

Advisory Scientific Committee:

Orhan Altan, ISPRS, Chair JBGIS ad hoc Committee RDM
Joep Crompvoets, EuroSDR
Dieter Fritsch, EuroSDR
Yerach Doytsher, FIG
David Mitchell, FIG
Abbas Rajabifard, GSDI
Tony Milne, IEEE GRSS
John Labrecque, IAG
Chris Rizos, IAG
Milan Konecny, ICA
Zentai Laszlo, ICA
Steve Shipman, IHO
Yoshikazu Fukushima, ISCGM
Piero Boccoardo, ITHACA
Alik Ismail-Zadeh, IUGG
Ramesh Singh, IUGG
Robert Backhaus, UNOOSA

Hosts and Demonstrations:

Sjoerd vd Schuit & Rob Boots, iBridge
Mario Schoonderwoerd, Disaster project, FP7
Peter de Bruijn, Studio Veiligheid

Important deadlines

Full paper submission: September 15th, 2012
Short paper submission: September 15th, 2012
Notification of acceptance: September 30th, 2012
Final paper submission: October 7th, 2012

Registration fees

Early registration deadline: October 4th, 2012

- Before 4th of October, 2012 150 euro
- After 4th of October, 2012 200 euro



Venue

The conference will be organised at two locations:

- University of Twente, Spiegel Building, Enschede, <http://www.utwente.nl/en/> (oral presentations)
- Former Airport Twente, VR Twente <http://www.vrtwente.nl/>, Enschede (posters, demos, hands-on, panels)

Contact

For more information, please feel free to contact us at:

- PC e-mail: pc@gi4dm.nl
- Info e-mail: info@gi4dm.nl

Conference Website

<http://www.gi4dm.net/2012>

The 8th International Conference on Geo-information for Disaster Management



Gi4DM 2012: Call for Papers



Enschede, the Netherlands
December 13-16, 2012



Gi4DM is coordinated by the Ad-Hoc committee on Risk and Disaster Management of the Joint Board of the Geo-information Societies (JBGIS)