

ISCRAM 2012 Conference Proceedings

Book of Papers

**9th International Conference on Information
Systems for Crisis Response and Management**

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Jozef Ristvej
Zeno Franco

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ISCRAM Association

Message from the Conference program (Co-)Chairs

Leon Rothkrantz, Jozef Ristvej, Zeno Franco

This year's ISCRAM conference is being held in Vancouver, Canada. The ISCRAM Conference offers the opportunity to researchers and practitioners to present new knowledge and research and to exchange information. This year there was a significant increase of research papers, which shows that the research topics of ISCRAM attracts many researchers all over the world. Researchers will present papers on all facets of crisis management. The presented papers range from the area of fundamental research up to the area of applied research and practitioners reports. ISCRAM provides also a forum for starting researchers and PhD students by offering tutorial, seminars, colloquia and discussion groups. A special event is the SAHANA workshop.

The main research topics of ISCRAM are design and implementation of information systems for crisis response and management. The recent disaster in Japan, caused by an earthquake, and resulting tsunami and nuclear plant disaster shows that the research topics of ISCRAM are still very alive. Experts from different area are invited to present special lectures. New topics as "social media" and "multimodal communication systems" will be presented by many papers.

Since the first ISCRAM conference eight years ago, community-building has been an important goal of the ISCRAM Association. The previous eight ISCRAM conferences – along with ISCRAM workshops, Summer Schools, publications and numerous other activities – have established a tradition of research excellence and close interaction with the profession of crisis management. Out of this tradition have come many successful partnerships within and across academia and industry, and a growing body of work that has come to define our community. ISCRAM is an International Community. Up to now it has been organized in Europe and the United States, but researchers from all over the world, from more than 30 countries and many continents will visit the Conference to present their work or take part in the discussion.

A note on the refereeing process

The work presented at this year's conference spans multiple disciplines, incorporating a range of methodological approaches and specific domains of application. The following types of submissions were available for ISCRAM 2012:

1. Full papers, which report on completed research;
2. Short papers in two categories:
 - Practitioner papers, which report on the state-of-the-art in practice, and
 - Work-in-progress papers, which report on work in its early stages;
3. Posters, which provide short synopses of ongoing work or projects.

Review criteria (and maximum length of submission) differed depending on the type of submission¹. Full papers were double-blind reviewed against the following five criteria:

- *Contribution*: The paper will likely make a contribution to the field;
- *Originality*: This material presented is new;
- *Validity*: The conclusions are supported by the analysis;
- *Relevance to conference*: The material is relevant and appropriate to the conference;
- *Manuscript clarity and correctness*: The writing is clear and free from errors.

For short papers, a less restrictive set of criteria were used to enable a broader range of topics and approaches to be covered:

- *Relevance to conference*: The material is relevant and appropriate to the conference;
- *Significance*: Significance for theory or practice; and
- *Clarity*: Clarity of focus and purpose.

Papers were subject to at least two double-blind, peer reviews, as well as to an editorial review by the chair of the track to which the paper had been submitted. The full papers are also reviewed by a member of the Scientific Committee.

It is important to note the Track chairs played a key role in the review process. They invited experts from special area to review the paper.. . In case the reviewers disagree considerable a meta-reviewer was invited to compare different reviews and to come to final review advice. The members of the Program committee made the final decision varying from acceptance, revision or rejection, strongly advised by the track chairs. The Program Committee is indebted to the efforts of all of the Track Chairs for assisting with the review process.

Acceptance rates

Finally the members of the Program Committee made the following decisions:

Full papers	Short papers
45 papers accepted	56 papers accepted
38 papers suggested as short paper	18 papers suggested as posters
7 papers suggested as posters	8 papers rejected
7 papers rejected directly	
Rejection rate of Full Papers 54 percent	Rejection rate of Short Papers 32 percent

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There are a huge number of people who have helped in producing this conference. First of all the members of the Conference and Program Committee and representatives of the ISCRAM board and their helpers. But we want to thank all the (c Track Chairs, Track Co-Chairs and reviewers, as well as all the member of the Scientific Committee for their help in the review process and organizing the tracks and special sessions.

We thank everyone for their hard work and dedication to this conference, and we look forward to the latest installment of the ISCRAM tradition.

Leon Rothkrantz, Jozef Ristvej and Zeno Franco

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Peter Berggren; Björn JE Johansson

- Education and Training

Chris Hagar; Andrew Collins

- Planning, Foresight and/or Risk Analysis

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Vrije Universiteit Amsterdam, The Netherlands; palmer@cs.vu.nl

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Carnegie Mellon University, Silicon Valley, United States of America; art.botterell@sv.cmu.edu

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Carlos III University (UC3M), Spain, Kingdom of; sherranz@inf.uc3m.es

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Department of Geography, The Pennsylvania State University, United States of America; susantbm@gmail.com

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University of Siegen, Germany, Federal Republic of; torben.wiedenhofer@uni-siegen.de

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Gaoussou Camara¹, Sylvie Despres², Rim Djedidi², Moussa Lo¹

¹LANI, Gaston Berger University, Saint-Louis, Senegal; ²LIM&BIO, Paris 13 University, Bobigny, France; gaoussoucamara@gmail.com

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Yasir Javed¹, Tony Norris¹, David Johnston²

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Victor Amadeo Bañuls Silvera², Murray Turoff¹, Starr Roxanne Hiltz¹

¹New Jersey Institute of Technology, USA; ²Universidad Pablo de Olavide, Spain; vabansil@upo.es

05a. Track Planning and Foresight (Full Paper)

ID: 197

[Crowd Sentiment Detection during Disasters and Crises](#)

Ahmed Nagy, Jeannie Stamberger

Carnegie Mellon University, United States of America; ahmed.nagy@gmail.com

06a. Track Social Media and Collaborative Systems (Full Paper)

ID: 200

[Social Media – Truly Viable For Crisis Response?](#)

Murray Eugene Jennex

San Diego State University, United States of America; murphjen@aol.com

06a. Track Social Media and Collaborative Systems (Full Paper)

ID: 202

[The Systems Thinking Approach of Beyond-Line-Of-Sight Command and Control](#)

Darryl Dion Diptee, Scott McKenzie

Naval Postgraduate School, United States of America; ddiptee@gmail.com

13a. Track Inter-Organizational Exercises and Operations (Full Paper)

ID: 204

[Ontological Reasoning as a Tool for Humanitarian Decision Making](#)

Aladdin Shamoug, Radmila Juric

University of Westminster, United Kingdom; a.shamoug@my.westminster.ac.uk

11a. Track Decision Support Methods for Complex Crises (Full Paper)

ID: 205

[Role-based Dynamic Coalitions of Multi-Tasked Rescue Robots](#)

Serge Stinckwich^{1,3}, Noury Bouraqadi², Arnaud Doniec², Tuan Le Van^{1,2,3}

¹IRD, France (French Republic); ²Université de Lille-Nord de France - Ecole des Mines de Douai, Douai, France; ³GREYC, UMR 6072 (CNRS, Université de Caen Basse Normandie), Caen, France.;
Serge.Stinckwich@gmail.com

14a. Track Intelligent Systems (Full Paper)

ID: 206

[Utilizing the Potential of the Affected Population and Prevalent Mobile Technology during Disaster Response: Propositions from the Literature](#)

Lucy Trianawaty Gunawan, Siska Fitrianie, Willem-Paul Brinkman, Mark A. Neerincx

Delft University of Technology, The Netherlands; L.T.Gunawan@tudelft.nl

07a. Track Geographic Information Science and Technology (GIS&T) for Crisis Response and Management (Full Paper)

ID: 207

[Making use of New Media for pan-European Crisis Communication](#)

Susanna Nilsson¹, Joel Brynielsson¹, Magdalena Granlén¹, Charlotte Hellgren¹, Sinna Lindquist¹, Mikael Lundin¹, Maribel Narganes Quijano², Jiri Trnka¹

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06a. Track Social Media and Collaborative Systems (Full Paper)

ID: 208

[Connected Communications: Network Structures of Official Communications in Disaster](#)

Jeannette Sutton¹, Emma Spiro², Britta Johnson¹, Sean Fitzhugh², Matt Greczek¹, Carter Butts²

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06a. Track Social Media and Collaborative Systems (Full Paper)

ID: 209

[Impacting Factors on Human Reactions to Alerts](#)

Sigmund Kluckner¹, Johannes Sautter¹, Matthias Max², Wolf Engelbach¹, Tina Weber²

¹University of Stuttgart, IAT; ²German Red Cross; sigmund.kluckner@iat.uni-stuttgart.de

21a. Special Session Mixed Methods, Community/Practitioner Engaged Research & Translation for the Crisis Context (Full Paper)

ID: 210

[A Review of Common Tasks Supported by Information Communication Technology for Times of Emergency](#)

Hina Aman, Pourang Irani, Hai-Ning Liang

University of Manitoba, Canada; hina.aman@gmail.com

19a. Track Open track (Full Paper)

ID: 211

[Towards Evidence Based Command Post Exercises in Disaster Response](#)

Erich Heumüller, Sebastian Richter, Ulrike Ulrike Lechner

Universität der Bundeswehr München, Germany, Federal Republic of; Ulrike.Lechner@unibw.de

04a. Track Education and Training (Full Paper)

ID: 215

[An architecture for distributed, event-driven systems to collect and analyze data in emergency operations and training exercises](#)

Matthias Moi, Robin Marterer

University of Paderborn - C.I.K., Germany, Federal Republic of; marterer@cik.uni-paderborn.de

15a. Track Event-Driven Techniques and Methods for Crisis Management (Full Paper)

ID: 216

[Developing Realistic Crisis Management Training](#)

Lachlan MacKinnon, Liz Bacon

University of Greenwich, United Kingdom; l.mackinnon@gre.ac.uk

04a. Track Education and Training (Full Paper)

ID: 247

[Community Engagement for Translational Disaster Research: Fostering Public, Private & Responder Group Partnerships](#)

Syed Ahmed¹, David A. Nelson¹, Paul A. Biedrzycki², Marie G. Sandy³, Shannon Opell¹, Zeno E. Franco¹

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21a. Special Session Mixed Methods, Community/Practitioner Engaged Research & Translation for the Crisis Context (Full Paper)

ID: 254

[GABEK WinRelan – a Qualitative Method for Crisis Research Engaging Crisis Management Personnel](#)

Christine Adler, Mirjam Mona Haus, Lisa Jakob, Lena Erfurt, Marion Krüsmann

LMU, Germany, Federal Republic of; christine.adler@psy.lmu.de

21a. Special Session Mixed Methods, Community/Practitioner Engaged Research & Translation for the Crisis Context (Full Paper)

ID: 261

[Fighting Agro-Terrorism in Cyberspace: Basics in Intention Detection Using Overt Electronic Data Sources](#)

Eli Rohn¹, Gil Erez²

¹Ben Gurion University, Israel, State of; ²The Counter Agro Terrorism Research Center; elirohn@gmail.com

05a. Track Planning and Foresight (Full Paper)

ID: 268

[Strategic Planning and Foresight Methodologies: Institutions and Practice within the Romanian Emergency System](#)

Marian Zulean, Gabriela Prelipcean

University of Bucharest, Romania; mzulean@faa.ro

05a. Track Planning and Foresight (Full Paper)

ID: 306

[Canada's Multi-Agency Situational Awareness System – Keeping it Simple](#)

Jack Pagotto, Darrell O'Donnell

Centre for Security Science, Canada; jack.pagotto@drdc-rddc.gc.ca

13a. Track Inter-Organizational Exercises and Operations (Full Paper)

- List of ISCRAM 2012 Practitioner Papers – Short Papers

ID: 105

[Model “PROLOG” for countermeasures efficacy assessment and its calculation algorithm verification on the base of the Chazhma Bay accident data](#)

Alex Kiselev, Sergey Bogatov

Nuclear Safety Institute (IBRAE), Russian Federation; aak@ibrae.ac.ru

01b. Track Modelling and Simulation - Work in Progress (Short Paper)

ID: 124

[Event-Driven Agility of Crisis Management Collaborative Processes](#)

Anne-Marie Barthe-Delanoë, Frédérick Bénaben, Sabine Carbonnel, Hervé Pingaud

Ecole des Mines d'Albi-Carmaux, France (French Republic); anne-marie.barthe@mines-albi.fr

15b. Track Event-Driven Techniques and Methods for Crisis Management - work in progress (Short Paper)

ID: 218

[STORMI: An Agent-Based Simulation Environment for Evaluating Responses to Major Incidents in the UK](#)

Glenn I. Hawe, Duncan T. Wilson, Graham Coates, Roger S. Crouch

Durham University, United Kingdom; g.i.hawe@durham.ac.uk

14b. Track Intelligent Systems - Work in Progress (Short Paper)

ID: 222

[A Scoping Study of R&D Needs in Emergency Planning in UK Healthcare Systems](#)

Simon French¹, Alan Boyd², Naomi Chambers², Russell King³, Duncan Shaw⁴, Alison Whitehead¹

¹University of Warwick, United Kingdom; ²University of Manchester; ³Royal Free Hampstead NHS Trust;

⁴Wrightington, Wigan and Leigh NHS Foundation Trust; simon.french@warwick.ac.uk

09b. Track Healthcare Crisis Management Systems - Work in Progress (Short Paper)

ID: 223

[Developing a Physics-based Model for Post-Earthquake Ignitions](#)

Selim Serhan Yildiz, Himmet Karaman

Istanbul Technical University, Turkey, Republic of; yildizsel@itu.edu.tr

01b. Track Modelling and Simulation - Work in Progress (Short Paper)

ID: 225

[Monte Carlo And Decision Making Support In Crisis Management](#)

José Miguel Castillo¹, Starr Roxanne Hiltz², Murray Turoff²

¹Tecnalia, Spain, Kingdom of; ²NJIT, USA; jmiguel.castillo@tecnalia.com

01b. Track Modelling and Simulation - Work in Progress (Short Paper)

ID: 227

[When Online is Off: Public Communications Following the February 2011 Christchurch, NZ Earthquake](#)

Jeannette Sutton

University of Colorado Colorado Springs, United States of America; jsutton2@uccs.edu

19b. Track Open track - Work in Progress (Short Paper)

ID: 229

[Simulation of wireless, self-organising and agent-based dynamic communication scenarios](#)

Volkmar Schau¹, Stefan Hellfritsch¹, Sebastian Scharf¹, Gerald Eichler³, Christian Erfurth², Wilhelm Rossak¹

¹Friedrich Schiller University Jena, Germany, Federal Republic of; ²University of Applied Sciences Jena, Germany, Federal Republic of; ³Deutsche Telekom AG, Telekom Innovation Laboratories, Germany; volkmar.schau@uni-jena.de

12b. Track Wireless Connectivity Management - Work in Progress (Short Paper)

ID: 232

[Operational Asset Distribution with a Multitouch Table](#)

Stas S Krupenia, Cécilia Aguero

Thales Research and Technology - Netherlands, Netherlands, Kingdom of the; stas.krupenia@d-cis.nl

02b. Track Human Experiences in the Design of Crisis Response and Management Services and Systems – Work in Progress (Short Paper)

ID: 234

[The value of Different Modalities to Support Command and Control Situation Awareness](#)

Stas S Krupenia¹, Cécilia Aguero², Kees C.H.M. Nieuwenhuis¹

¹Thales Research and Technology - Netherlands, Netherlands, Kingdom of the; ²Thales Raytheon Systems, Massy, France; cecilia.aguero@thalesraytheon-fr.com

03b. Track Command and Control Studies - Work in progress (Short Paper)

ID: 235

[Characterizing Disaster Resistance and Recovery using Outlier Detection](#)

Christopher W. Zobel¹, Steven A. Melnyk², Stanley E. Griffis², John R. Macdonald²

¹Virginia Tech, United States of America; ²Michigan State University, United States of America; czobel@vt.edu

01b. Track Modelling and Simulation - Work in Progress (Short Paper)

ID: 236

["Badge-Primed" Decision Making](#)

Jill Lynn Drury, Amanda Anganes, Heather Byrne, Maria Cleo Casipe, Roger Dejean, Simone Hill, Tristan Lewis, Jesse Lucas, Eric McCann

University of Massachusetts Lowell; jldrury@mitre.org

11b. Track Decision Support Methods for Complex Crises - Work in Progress (Short Paper)

ID: 238

[Serious Gaming in Training for Crisis Response](#)

Simone De Kleermaeker, Loana Arentz

Deltares, Netherlands, Kingdom of the; Simone.DeKleermaeker@Deltares.nl

04b. Track Education and Training - Work in Progress (Short Paper)

ID: 239

[Risk Analysis for Critical Systems with Reliability Block Diagrams](#)

Kim Weyns, Martin Höst

Lund University, Sweden, Kingdom of; kim.weyns@cs.lth.se

05b. Track Planning and Foresight - Work in Progress (Short Paper)

ID: 240

[An Initial Usability Evaluation of the Secure Situation Awareness System](#)

Jason Nurse¹, Sadie Creese¹, Michael Goldsmith¹, Rachel Craddock², Glyn Jones²

¹University of Oxford, United Kingdom; ²Thales Research and Technology (UK) Limited;
Jason.Nurse@cs.ox.ac.uk

02b. Track Human Experiences in the Design of Crisis Response and Management Services and Systems –
Work in Progress (Short Paper)

ID: 241

[Workflows and Decision Tables for Flexible Early Warning Systems](#)

Felix Riedel, Fernando Chaves

Fraunhofer-Institute of Optronics, System Technologies and Image Exploitation (IOSB);
felix.riedel@iosb.fraunhofer.de

17b. Track Early Warning and Expert Systems for Disaster Management - Work in Progress (Short Paper)

ID: 242

[Integration of Uncertainty into Emergency Procedures of Water Boards](#)

Karolina Wojciechowska, Hanneke Vreugdenhil

HKV consultants, Netherlands, Kingdom of the; vreugdenhil@hkv.nl

15b. Track Event-Driven Techniques and Methods for Crisis Management - work in progress (Short Paper)

ID: 244

[Formalization of crisis response coordination from a public inquiry report](#)

David Passenier, Julienka Mollee, Jeroen Wolbers, Kees Boersma, Peter Groenewegen

VU University Amsterdam, Netherlands, Kingdom of the; J.J.Wolbers@vu.nl

08b. Track Research Methods - Work in Progress (Short Paper)

ID: 245

[Ontology-driven Multimodal Interface Design for an Emergency Response Application](#)

Elena Tsiporkova¹, Tom Tourwé¹, Nicolás González-Deleito¹, Anna Hristoskova²

¹Sirris, Belgium; ²IBBT, Belgium; elena.tsiporkova@sirris.be

19b. Track Open track - Work in Progress (Short Paper)

ID: 248

[Collaboration awareness – a necessity in crisis response coordination](#)

Willem Treurniet¹, Kim van Buul - Besseling¹, Jeroen J. Wolbers²

¹TNO, the Netherlands; ²VU University, Amsterdam, the Netherlands; willem.treurniet@tno.nl

03b. Track Command and Control Studies - Work in progress (Short Paper)

ID: 249

[Multilingual Analysis of Twitter News in Support of Mass Emergency Events](#)

Andrea Zielinski, Ulrich Bügel

Fraunhofer, Germany, Federal Republic of; andrea.zielinski@iosb.fraunhofer.de

06b. Track Social Media and Collaborative Systems - Work in Progress (Short Paper)

ID: 250

[On Improving Emergency Preparedness and Management with Delphi](#)

Kimmo Laakso

Ahma insinöörity Oy and University of Turku, Finland Futures Research Centre; kimmo.laakso@utu.fi

05b. Track Planning and Foresight - Work in Progress (Short Paper)

ID: 251

[Geographical Information System Supporting Data Gathering and Fast Decision Making in Emergencies Situations](#)

Tiago Badre Marino, Bruno Santos Nascimento, Marcos R. S. Borges

Universidade Federal do Rio de Janeiro, Brazil, Federative Republic of; matbsn@gmail.com

07b. Track Geographic Information Science and Technology (GIS&T) for Crisis Response and Management - Work in Progress (Short Paper)

ID: 252

[Describing a Pipeline Emergency Response Communications System Using Situational Awareness Informational Requirements and an Informational Flow Analyses](#)

Norman Groner, Charles Jennings

John Jay College of Criminal Justice, City University of New, United States of America;
ngroner@jjay.cuny.edu

19b. Track Open track - Work in Progress (Short Paper)

ID: 253

[Ontology-based Modeling of Emergency Incidents and Crisis Management](#)

Huizhang Shen², Jingwen Hu², Jidi Zhao^{1,2}

¹East China Normal University, China, People's Republic of; ²¹. Department of Management Information Systems, Shanghai Jiao Tong University; judyzhao33@gmail.com

14b. Track Intelligent Systems - Work in Progress (Short Paper)

ID: 258

[eSEC Portal as a Tool for Improvement of Security Focused Studies](#)

Jozef Ristvej, Katarina Kampova, Tomas Lovecek

University of Zilina, Slovak Republic; Jozef.Ristvej@fsi.uniza.sk

04b. Track Education and Training - Work in Progress (Short Paper)

ID: 260

[Generic self-learning decision support system for large-scale disasters](#)

Stella Moehrle

Karlsruhe Institute of Technology (KIT), Germany, Federal Republic of; stella.moehrle@kit.edu

11b. Track Decision Support Methods for Complex Crises - Work in Progress (Short Paper)

ID: 262

[Instructor Tools for Virtual Training Systems](#)

Joris Nicholas Field¹, Amy Rankin², Magnus Morin³, Arjan Lemmers¹

¹NLR, the Netherlands; ²Linköping University, Sweden; ³VSL Systems, Sweden; joris.field@nlr.nl

18b. Track Serious Games for Crisis Management - Work in Progress (Short Paper)

ID: 263

[MIRROR: Improving coordination in multidisciplinary crisis management teams](#)

Lisette de Koning, Mirjam Huis in 't Veld, Kim van Buul, Kees van Dongen, Dianne van Hemert, Rosie Paulissen

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04b. Track Education and Training - Work in Progress (Short Paper)

ID: 264

[Developing a Framework For a Social Vulnerability and Consequence-Based Post-Disaster Behavior Analysis Methodology](#)

H. Can Unen

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19b. Track Open track - Work in Progress (Short Paper)

ID: 265

[A concept for inter-organizational crisis management exercises](#)

Carin Rencrantz, Niclas Karlsson

Swedish civil contingencies agency, Sweden; rolf.olsson@msb.se

13b. Track Inter-Organizational Exercises and Operations - Work in Progress (Short Paper)

ID: 266

[Dynamic Planning of Fire and Rescue Services](#)

Anna Gustafsson¹, Tobias Andersson Granberg²

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01b. Track Modelling and Simulation - Work in Progress (Short Paper)

ID: 270

[Real-time Support for Exercise Managers' Situation Assessment and Decision Making](#)

Rita Kovordanyi¹, Jelle Pelfrene², Amy Rankin¹, Rudolf Schreiner³, Johan Jenvald⁴, Magnus Morin⁴, Henrik Eriksson¹

¹Linköping University, Sweden, Kingdom of; ²Space Applications Services, Belgium; ³Object Security, United Kingdom; ⁴VSL Systems AB, Sweden, Kingdom of; rita.kovordanyi@liu.se

15b. Track Event-Driven Techniques and Methods for Crisis Management - work in progress (Short Paper)

ID: 271

[Business Not As Usual: Civil-Military Interaction from an e-Business Perspective](#)

Dick M. Ooms

Netherlands Defence Academy, Netherlands, Kingdom of the; dm.ooms.02@nlda.nl

13b. Track Inter-Organizational Exercises and Operations - Work in Progress (Short Paper)

ID: 272

["Safety Villages": an educational game for raising children's awareness of risks](#)

Telmo Zarraonandia, Mario Rafael Ruíz Vargas, Paloma Díaz, Ignacio Aedo

Universidad Carlos III de Madrid, Spain, Kingdom of; pdp@inf.uc3m.es

18b. Track Serious Games for Crisis Management - Work in Progress (Short Paper)

ID: 273

[Instructor's Tasks in Crisis Management Training](#)

Amy Rankin¹, Joris Field², Rita Kovordanyi¹, Henrik Eriksson¹

¹Linköping University, Sweden; ²Nationaal Lucht- en Ruimtevaartlaboratorium, Netherlands; amy.rankin@liu.se

02b. Track Human Experiences in the Design of Crisis Response and Management Services and Systems – Work in Progress (Short Paper)

ID: 275

[Social Media in Command & Control: An extended framework](#)

Peter Arnout Jongejan, Timothy John Grant

Netherlands Defence Academy, Netherlands, Kingdom of the; pa.jongejan.01@nlda.nl

06b. Track Social Media and Collaborative Systems - Work in Progress (Short Paper)

ID: 276

[Incidone: A Task-Oriented Incident Coordination Tool](#)

Bas Lijnse^{1,2}, Jan Martin Jansen², Rinus Plasmeijer¹

¹Radboud University Nijmegen; ²Netherlands Defense Academy; b.lijnse@cs.ru.nl

14b. Track Intelligent Systems - Work in Progress (Short Paper)

ID: 277

[The other city – Designing a serious game for crisis training in close protection](#)

Heide Lukosch, Theo van Ruijven, Alexander Verbraeck

Delft University of Technology, Netherlands, Kingdom of the; t.w.j.vanruijven@tudelft.nl

18b. Track Serious Games for Crisis Management - Work in Progress (Short Paper)

ID: 279

[Technological adaptation in crisis response: A proposition of metrics](#)

Anouck. V Adrot¹, Wei Zhou², Yannick Meiller², Sylvain Bureau², Selwyn Piramuthu³

¹ITEM, France (French Republic); ²ESCP Europe; ³University of Florida; anouck.adrot@it-sudparis.eu

19b. Track Open track - Work in Progress (Short Paper)

ID: 282

[Crisis Management Systems in Germany – a Status Report about the functions and developments of private and public crisis management systems in Germany](#)

Christian Neuhaus, Daniela Giebel, Sabine Färfers, Mario Hannappel

Institute for Media Research - University of Siegen Germany, Federal Republic of; neuhaus@ifm.uni-siegen.de

03b. Track Command and Control Studies - Work in progress (Short Paper)

ID: 283

[Enriching Disaster Control Management based on Human-Centered Design](#)

Holger Fischer, Florian Klompaker

University of Paderborn, C-LAB, Germany; holger.fischer@c-lab.de

02b. Track Human Experiences in the Design of Crisis Response and Management Services and Systems – Work in Progress (Short Paper)

ID: 286

[Collaborative foresight as a means to face future risks - An innovative platform conception](#)

Christoph Ulrich Markmann, Heiko A. von der Gracht, Jonas Keller, Rixa Kröhl

EBS Business School, Germany, Federal Republic of; christoph.markmann@ebs.edu

05b. Track Planning and Foresight - Work in Progress (Short Paper)

ID: 287

[Estimating the Value of Casualty Health Information to Optimization-Based Decision Support in Response to Major Incidents](#)

Duncan T. Wilson, Glenn I. Hawe, Graham Coates, Roger S. Crouch

Durham University, United Kingdom; d.t.wilson@durham.ac.uk

11b. Track Decision Support Methods for Complex Crises - Work in Progress (Short Paper)

ID: 288

[A Taxonomy of Market Mechanisms for Information Sharing in Crisis Response Coalitions](#)

Tim Grant, Arien van der Wal

Netherlands Defence Academy, Netherlands, Kingdom of the; aj.vd.wal@nlda.nl

03b. Track Command and Control Studies - Work in progress (Short Paper)

ID: 289

[The Impact and Opportunities for Wireless Communications in Chinese Disaster Planning and Management](#)

Dilek Ozcelan¹, Michael R Bartolacci²

¹Sakarya University, Turkey; ²Penn State University - Berks, United States of America; mbartolacc@aol.com

12b. Track Wireless Connectivity Management - Work in Progress (Short Paper)

ID: 296

[Towards a Context-Aware Multi-Party Emergency Coordination System Framework](#)

Steven Clifton Way, Yufei Yuan

McMaster University, Canada; steveway@mcmaster.ca

11b. Track Decision Support Methods for Complex Crises - Work in Progress (Short Paper)

ID: 298

[Mapping Libyan Health Facilities - A Collaboration Between Crisis Mappers and the World Health Organization](#)

Jennifer Lisa Chan¹, Robert Colombo², Altaf Musani²

¹Harvard Humanitarian Initiative/Northwestern University, United States of America; ²World Health Organization, Mediterranean Centre; jlc763@gmail.com

10b. Track Humanitarian Challenges - Work in Progress (Short Paper)

ID: 299

[When the Tsunami Comes to Town – Improving Evacuation Modeling by Integrating High-resolution Population Exposure](#)

Sergio C. Freire¹, Christoph Aubrecht², Stephanie Wegscheider³

¹e-GEO, Geography and Regional Planning Research Centre, Portugal; ²AIT Austrian Institute of Technology GmbH; ³German Aerospace Center (DLR), German Remote Sensing Data Center (DFD); sreire@fcsh.unl.pt

07b. Track Geographic Information Science and Technology (GIS&T) for Crisis Response and Management - Work in Progress (Short Paper)

ID: 301

[Qualitative Methods & Community Engagement in Crisis Management Research](#)

Helena Puig Larrauri, Margunn Indreboe Alshaikh

UNDP Sudan, Sudan, Republic of; helena.puig@undp.org

21b. Special Session Mixed Methods, Community/Practitioner Engaged Research & Translation for the Crisis Context - Work in Progress (Short Paper)

ID: 302

[X24 Mexico](#)

Murray Eugene Jennex, George Bressler, Eric Frost

San Diego State University, United States of America; murphjen@aol.com

19b. Track Open track - Work in Progress (Short Paper)

ID: 303

[Challenge Patient Dispatching in Mass Casualty Incidents](#)

Anton Donner¹, Thomas Greiner-Mai², Christine Adler³

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09b. Track Healthcare Crisis Management Systems - Work in Progress (Short Paper)

ID: 307

[Multidisciplinary Challenges in an Integrated Emergency Management Approach](#)

Jose J. Gonzalez¹, Ole-Christoffer Granmo¹, Björn Erik Munkvold¹, Frank Yong Li¹, Julie Dugdale²

¹University of Agder, Norway, Kingdom of; ²Domaine Universitaire de Saint-Martin d'Hères; josejg@uia.no
The University of Agder, Norway, has recently founded a Centre for Communication and Information Systems

05b. Track Planning and Foresight - Work in Progress (Short Paper)

ID: 309

[ALARM: A Modular IT Solution to Support and Evaluate Mass Casualty Incident \(MCI\) Management](#)

Robert Lawatscheck¹, Stephan Düsterwald², Carsten Wirth³, Torsten Schröder²

¹Charité Universitätsmedizin Berlin, Germany, Federal Republic of; ²Klinik für Anästhesiologie mit Schwerpunkt operative Intensivmedizin Charité - Universitätsmedizin Berlin; ³Technische Universität Berlin, DAI-Labor; robert.lawatscheck@charite.de

09b. Track Healthcare Crisis Management Systems - Work in Progress (Short Paper)

ID: 310

[Capturing communities' perceptions of risk through the eyes of their citizens: using mobile VGI networks to map tsunami risk awareness](#)

Nick Hedley

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05b. Track Planning and Foresight - Work in Progress (Short Paper)

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ID: 178

[An Approach Based on Environment Attributes for Representation of Disaster Cases](#)

Chao Huang, Shifei Shen, Quanyi Huang

Tsinghua University, China, People's Republic of; huang-c04@mails.tsinghua.edu.cn

88. Poster Session

ID: 243

[Capturing the Task Model of Experts in Emergency Response using SYnRGY.](#)

Jean-François Gagnon¹, François Couderc², Martin Rivest², Sébastien Tremblay¹

¹Université Laval, Canada; ²Thales Canada Inc.; jean-francois.gagnon.22@ulaval.ca

88. Poster Session

ID: 246

[A multiteam international simulation of joint operations in crisis response](#)

Sebastien Tremblay¹, Rego Granlund², Peter Berggren³, Marie-Eve Jobidon⁴, Martin Holmberg⁵, Paddy Turner⁶

¹Université Laval, Canada; ²Santa Anna Research Institute, Sweden; ³FOI, Linköping, Sweden; ⁴Defence R&D Canada, Toronto, Canada; ⁵FHS, Stockholm, Sweden; ⁶Cranfield University, Defence Academy of the UK; sebastien.tremblay@psy.ulaval.ca

88. Poster Session

ID: 256

[Strategic Interactions in Disaster Preparedness and Relief in the Face of Man-Made and Natural Disasters](#)

Jun Zhuang, John Coles, Peiqiu Guan, Fei He, Xiaojun Shan

University at Buffalo, United States of America; jzhuang@buffalo.edu

88. Poster Session

ID: 259

[Systematic Method of Risk Assessment in Industrial Processes](#)

Katarina Zanicka Holla, Jozef Ristvej, Ladislav Simak

University of Zilina, Slovak Republic; Jozef.Ristvej@fsi.uniza.sk

88. Poster Session

ID: 269

[Intelligent Decision Support for Emergency Responses](#)

Ali Khalili-Araghi¹, Brian Fisher¹, Uwe Glässer², Piper Jackson², Hamed Yaghoubi Shahir²

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88. Poster Session

ID: 278

[Automated GLIDE Number Resource Consolidation for Rapid Disaster Location Identification](#)

Beau Bouchard^{1,2}, Brian Tomaszewski^{1,2}

¹Rochester Institute of Technology, United States of America; ²National Science Foundation (NSF) Science Master's Program "Decision Support Technologies for Environmental Forecasting and Emergency Response" (NSF DGE-1011458); bnb2011@rit.edu

88. Poster Session

ID: 285

[CR-Site: An Infrastructure Siting Tool for Crisis Response](#)

Ehren G. Hill, Frank Hardisty

Pennsylvania State University, United States of America; egh125@psu.edu

88. Poster Session

ID: 290

[Information Security in Crisis Management Systems](#)

Ummul Khair Israt Ara, Dr. Fang Chen

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88. Poster Session

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