



TIEMS 2015 Annual Conference

Co-organized by The Department of Firefighters, Public Rescue and Civil Defense
(Dipartimento dei Vigili del Fuoco, del Soccorso Pubblico e della Difesa Civile)



“Evolving threats and vulnerability landscape: new challenges for the emergency management”

<http://www.tiems-ic.it>

Istituto Superiore Antincendio, Via del Commercio 13, Roma

September 30—October 2, Rome (Italy)

International Scientific Board

- Prof. José Martí
University of British Columbia—Canada
- Dr. Eric Luijff, TNO, The Hague, Netherlands
- Dr. Massimo Mario Simonelli, ISPRA Roma, Italy
- Dr. Stefano Marsella, ISA Roma, Italy
- Mr. K. Harald Drager, TIEMS International
- Prof. Paolo Trucco
Milano Polytechnic, Milan Italy
- Prof. Roberto Mugavero
OSDIFE-CBRNe, Università di Roma Tor Vergata – DIE
- Dr. Barbara Lucini Università Cattolica - Milano
- Prof. David Alexander
University College of London
- Dr. Cristina Alcaraz
University of Malaga

Conference Chair

- Dr. Carmelo Di Mauro, RGS, Milano (Italy)

Topics

- Emergency Management
- Risk Analysis and Preparedness

CALL FOR PAPERS

This year, TIEMS and the Dept. of Firefighters, Public Rescue and Civil Defense are proud to announce the joint organization of the Annual Conference 2015 in Roma. This underlines the fruitful collaboration between the International Emergency Management Society and national Public Authorities which are responsible for the design, the implementation and the management of the Emergency Plans for Civil Defense. Emergency Management (EM), in its modern acceptance, gathers activities embracing much more than “hot” phase of Emergency Scenarios. These focus at enhancing system’s Resilience, at increasing Preparedness of involved Operators, at training Managers, at developing “synthetic” scenarios to improve abilities to design contingency plans. To date, technological advancements are used in “push” and “pull” modes: on the one hand, technology helps designing and realizing new tools for supporting EM needs (top-down approach), on the other hand, they are providing invaluable clues for enabling new services which are prompted to the attention and usefully customized for supporting EM needs (bottom-up approach).

In the 2015 Annual Conference, TIEMS wishes to improve the EM attitude to gather new insights from emerging technologies and new issues, by comparing EM operators with Technologists in new and emerging technological fields. The Conference will be divided into 5 Thematic Sessions (Tracks):

T1M: *Best practices in Civil Protections* (Chair: Dr. Massimo Simonelli, ISPRA Italy).

In this Track, we will solicit Public Authorities and Stakeholders to share best practices in the different EM areas: organizational, technological, “governance”

- ⇒ Invited Speaker: Dr. Fabrizio Curcio (Head, EM Office, Italian Dept. of Civil Protection)
- ⇒ Invited Speaker: Dr. Meet Pouydal Chhetri (President, Nepal Center for Disaster Management)

T1A: *New technologies, use of big data, collaborative approaches to sustain Emergency Management* (Chair: Prof. Roberto Baldoni, University of Roma)

In this Track, we will attempt to introduce the new technological systems (from ICT, SW, IA etc.), the new tools for extracting information useful for risk prediction and management from open big data and the new sources of collaborative (web based) systems enabling new options for enhancing efficiency of emergency management.

- ⇒ Invited Speaker: Prof. Dirk Helbing, ETH Zurich

T2M: *Risk Management of “new” classes of phenomena* (Chair: Dr. Gregorio D’Agostino, ENEA and AIIC, Italy)

Pandemics are new (albeit ancient) critical scenarios which nowadays relate to several domains, from public health to telecommunication systems. Their management requires the development of new systems for reducing and mitigating outbreak effects but also for anticipating the outbreak itself, by increasing vulnerability threshold and improving resilience properties of the possibly wounded systems.

- ⇒ Invited Speaker: Prof. Alessandro Vespignani, Northeastern University, Boston (USA)

T2A: *Preparedness and Resilience enhancement in growing metropolitan areas: are “smart cities” coping with these issues?* (Chair: Dr. Alessandro Coppola, Roma Capitale)

In this Track, we will attempt to show if, aside to efficiency, social inclusion, sustainability, the issue proper of risk and emergency managements are equally considered in “smart city reject” and new urban planning.

- ⇒ Invited Speaker: Dr. Daniel Stevens, Director of Emergency Management at City of Vancouver

Local Organizing Committee:

Dr. Vittorio Rosato, ENEA, Roma (Italy)

Dr. Carmelo Di Mauro, RGS, Milano (Italy)

T3M: *Decision Support Systems for Risk management in the Cold and Hot Phases (Chair: Dr. Sandro Bologna, TIEMS IC)*

In this Track, we will review new concepts and implementations of classical technological systems (prediction tools, DSS etc.), in order to stress their usability and their current use in different contexts.

⇒ Invited Speaker: James Urquhart, Head of Critical Infrastructure Resilience Unit (CIRU) - Scottish Government.

Paper submission details

TIEMS wishes to act as a platform for bringing academic research, industrial and operational needs together. Therefore, industrial contributions and real-world experience reports are explicitly invited. We solicit two types of papers to be published in the main proceeding of the conference: 1) regular papers (up to 14 pages) and 2) practical experience reports and tools (up to 8 pages). In both categories, papers submitted will be reviewed by at least three program committee members. They must not have been previously published or concurrently submitted elsewhere. See the website for further details. Please use the following link to submit your paper:
<https://easychair.org/conferences/?conf=tiems2015ac>

Thematic Workshops and Roundtables

TIEMS wishes to prompt the interest to allow presentation of thematic workshops on selected area of Emergency Management. The Workshop proposer should briefly examine the topic in relation to its relevance on Emergency Management. The Workshop, if accepted, could be hosted within parallel thematic sessions to be run during the first two days (September 30 and October 1) of the Conference.

On September 30 a round table on Nepal Earthquake aftermaths will be held by gathering different national delegations currently involved in Nepal disaster management.

Publication of scientific contributions

All accepted papers will be submitted for publication on International Journal of Disaster Risk Reduction (Elsevier)

Topics

The conference covers all aspects related to Emergency Management, Risk Analysis and Preparedness activities, either for predicting Critical Scenario and for managing hot phases.

Topics include, but are not limited to:

- ◆ monitoring and fault prediction infrastructures,
- ◆ risk reduction and mitigation techniques,
- ◆ cyber-physical threats and vulnerability analysis,
- ◆ model-based and experimental assessment of safety, reliability and security;
- ◆ validation and verification methodologies and tools,
- ◆ human and social aspects in emergency managements,
- ◆ management of complex emergency scenarios and
- ◆ epidemic spreading.

Domains of application are (but not limited to):

- ◆ threats and emergency on Critical Infrastructures,
- ◆ chemical and nuclear emergency management,
- ◆ telecommunications and networks tools for coping with emergency activities and
- ◆ education & training.

Submission Link

<https://easychair.org/conferences/?conf=tiems2015ac>

Thematic workshop submission: MARCH 31, 2015

Abstract submission: MAY 31, 2015

Full paper submission: JUNE 30, 2015

Notification of acceptance: AUGUST 31, 2015

Istituto Superiore Antincendi (ISA School, National Fire Brigade Corp)

Via del Commercio 13
 Roma nearby Ostiense Railways Station

Ten minutes walking from Metro B "Piramide" stations (Bus lines available: n°23, n°769)

Short walk (700 metres) from Ostiense Railway Station

