TIEMS Annual Conference 2015
in Rome, Italy

The International Emergency Management Society

TIEMS continues its international development, and is spreading out its activity more and more worldwide, with members and chapters. New members and chapters add valuable expertise and cultural diversity to the TIEMS international network, which comprises of users, planners, researchers, industry, managers, response personnel, practitioners, social scientists, and other interested parties within emergency and disaster management. This network constitutes a large international multidisciplinary group of experts, with different educational backgrounds and various experiences. Read more about this network and its activities in this newsletter.

Alex Fullick
TIEMS Newsletter Editor

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Lessons Learned and Disaster Preparedness

Lessons learned is very important wisdom to be included in disaster preparedness work, and this is in my opinion the key to more resilient societies worldwide. TIEMS is addressing lessons learned from the Nepal earthquake in our conferences and we continue our increased global focus on disaster preparedness.

TIEMS addressed these issues during our 2015 USA Conference, and it will be a key topic at TIEMS 2015 Annual Conference in Rome. The report from TIEMS 2015 USA Conference and the preliminary program for TIEMS 2015 Annual Conference is included in this newsletter.

TIEMS representative in Nepal, Meen Chhetri, is the keynote speaker in both mentioned conferences and he presents his experience with the Nepal earthquake and his observations on the relief support and assistance by the international organizations in Nepal after the earthquake. He has also shared his experinec in this newsletter.

For example there were 76 search and rescue (S&R) teams from different countries and organizations in Nepal. In total 2242 foreigners were involved in S&R. There were 135 canine dogs for S&R. The international S&R teams saved 16 lives, recovered 178 bodies and provided medical treatment to 1182 injured persons. However, the total number of dead persons after the earthquakes is close to 9 000 persons.

Every life is precious, and the Nepal people and government express their sincere thanks for all support and assistance from the international community, which urge to help when needed. Still it is important to evaluate lessons learned after the Nepal disaster, and strive to achieve a well coordinated and the best way of relief assistance in the future after disasters.

Furthermore, better preparedness is the key to reduce the consequences of disasters, and this needs to be placed even higher on the agenda in the world community, and in my opinion with more focus on forecast - based financing, explained briefly below.

Currently, disaster related programs focus on two areas: post disaster response and reconstruction, and long-term disaster risk reduction (Hyogo Framework of Action).

However, there is a valuable window of time that exists after the issuance of science based early warnings and risk assessments for a vulnerable area. This is before a potential disaster materialize, namely an approach for catalyzing humanitarian actions based on disaster forecasts for vulnerable societies.

More details are found in this Article and this Presentation. The initiative described with pilot applications in Togo and Uganda with technical support from Red Cross and financial support from German Federal Ministry for Economic Cooperation and Development, should in my opinion get increased focus and lifted up to a global scale!
A Global Education Network - GENERATE

The world is increasingly vulnerable to emergencies, because of climate change, population growth and ageing, urbanization, and other factors. Although the immediate effects of disasters and emergencies are often local, this is an international problem. The global economy and our transportation, energy, and information infrastructures connect us and make us interdependent, so the impacts of local disasters ripple far and wide. Disasters and emergencies also become international because the global community recognizes a responsibility to bring its resources to the aid of stricken localities.

The foundation of emergency resilience is knowledge, education, and training, which is available throughout the world at colleges, universities, online resources, international educational initiatives, training facilities and others. In spite of the abundance of these educational and training resources, they are not available to many individuals who could benefit from them, especially in developing nations. And even the developed world would benefit from better access to the knowledge and experience of the global community.

TIEMS is now launching its project «Global Educational Network for Emergency Resilience And Training Excellence (GENERATE)» program. It is an initiative by The International Emergency Management Society (TIEMS), which we are discussing with King Abdul Aziz University and the World Bank for support, and the goal is to create a network of participating organizations and an online resource to improve access to the world’s collective knowledge and experience in emergency management.

To meet this goal, GENERATE will

- Help students find and connect with useful live and online educational resources
- Make increasing amounts of emergency management knowledge available online, especially to vulnerable societies
- Provide a platform to share critical lessons learned from disasters and emergencies.

GENERATE will create a community of emergency management educators, practitioners, and students, that will share knowledge and work together to improve capabilities worldwide. To support this community, GENERATE will develop a software platform which will include:

- An eLearning and Certification platform that will foster, across the international community, a shared, common understanding of emergency management elements, standards, and terminology.
- A directory of educational resources, described within a common framework, including live and online degree programs, courses, workshops, and knowledge bases
- An online portal that will make emergency management educational resources, from established educational institutions and initiatives, broadly available to students worldwide. The core of these educational resources will be developed and provided by a network of GENERATE Centres of Excellence
- An online Communities of Practice network to allow sharing of lessons learned, experiences, and specialized knowledge throughout the global community.

For interest in the GENERATE project initiative, please, contact TIEMS President or Thomas Robertson.
Hello once again good readers! Welcome to the summer 2015 edition of the TIEMS Newsletter.

First all, I’d like to remind everyone about the upcoming 2015 TIEMS Annual Conference in Rome, Italy (September 30th – October 2nd, 2015), 2015. Time seems to creep by rather quick these days so don’t forget to register early. You’ll get to hear from many esteemed individuals in the Emergency and Disaster Management realms and enjoy some world-class Italian hospitality. I know my flight is booked.

Like past editions, we have articles and announcements from around the globe; keeping to our goal of having a global feel to TIEMS. We are very fortunate to have a submission from our own Meen Poudyal Chhetri, who is from Nepal and played a very important role during the April 2015 earthquake that devastated Katmandu, Nepal and the surrounding area. I’m sure you’ll find Meen’s article fascinating. You’ll also find out how busy the Chinese and Indian delegations have been with their extensive updates.

As promised in my last Editor’s Message, I’ve included a short article and few pictures about my February 2015 trip to Christchurch, New Zealand; what I saw and learned and saw of the devastation caused by the earthquake in February 2011. And of course, we have many other announcements and insightful content from contributors from all corners of the globe.

As always, we try to keep all submissions in your voice to truly adhere to the global feel of TIEMS, amending verbiage only where absolutely necessary, otherwise it would all come out sounding like me.

We’re always looking for interesting articles and announcements. If you have something you feel our readers would find of interest, please send it along to my attention.

If you enjoy the newsletter or have an interest in Emergency and Disaster Management, check out the TIEMS website (www.TIEMS.org) for exciting news and events. Become a member and enjoy even more benefits.

In the meantime, we hope you like the latest edition.

Sincerely,

A. Alex Fullick,
MBCI, CBCP, CBRA, v3ITIL

Editor, TIEMS Advisory Board
Email: alex@stone-road.com
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 re-sponsible for the design, the implementation and the management of the Emergency Plans for Civil Defen-se. Emergency Management (EM), in its modern ac-ceptation, gathers activities embracing much more than “hot” phase of Emergency Scenarios. These fo-cus 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, techno-logical 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 provid-ing invaluable clues for enabling new services which are prompted to the attention and usefully custom-ized for supporting EM needs (bottom-up approach).

In the 2015 Annual Conference, TIEMS wishes to im-prove the EM attitude to gather new insights from emerging technologies and new issues, by comparing EM operators with Technologists in new and emerg-ing technological fields. The Conference will be divid-ed 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 tech-nological 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

**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 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.

**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 after-maths 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 Scenarios 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.

International Scientific Board
Prof. José Martí University of British Columbia—Canada
Dr. Eric Luijjf, 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

Conference Co-Chair
Local Organizing Committee:
Dr. Vittorio Rosato, ENEA, Roma (Italy)
Dr. Carmelo Di Mauro, RGS, Milano (Italy)
Location
Istituto Superiore Antin-cendi (ISA School, National Fire Brigade Corp)
Via del Commercio 13 Roma nearby Ostiense Railways Station
Ten minutes walking from Metro B “Piramide” (Bus lines available: n°23, n°769)
Short walk (700 metres) from Ostiense Railway Station

Sponsors

TIEMS Gold Sponsor:

See Company Profile next page!

For interest in becoming a TIEMS Sponsor, see Levels and benefit:

Harmony Company Profile

Founded in 2002, Beijing Harmony Technologies Co., Ltd. is a member of Expert Group for the Emergency Management Office (EMO) of the State Council of China and the Beijing municipal government. The company focuses on the Emergency and Disaster Management project planning and development, as well as the implementation and services in 3D simulation emergency training and drills, safety production monitoring and early-warning systems using Internet of Things (IOT) technology for the emergency sector, facial recognition, and big data analysis. HarmonyTech has successfully provided services of 160 emergency platforms for Chinese governments at all levels in provinces, cities, as well as districts and counties. It has also participated in the formulation and planning of 15 national and provincial-level emergency standards for China central and local EMOs. Up to now, the company has launched 37 independent emergency software products and obtained six patents in the emergency service field. All these have made it a leader in the emergency industry in China.

Company Advantage

Take Part in Formulation of Standards
- Set evaluation indexes for “Smart Emergency Management” in smart city construction in China and take part in the top-level design of national standards in EMDR (Emergency Management and Disaster Reduction)
- Setting up the Emergency think tank comprising 100 experts worldwide in Beijing, China

Qualifications and Honors
- Top 100 Innovation-Driven Pilot Enterprises at the Zhongguancun Science Park, etc.
- Computer System Integration Qualification,
- Software Capability Maturity Model Integration Certificate L3 (CMMI L3), ISO9001: 2008, etc.
- Major New Products for China’s Ministry of Science and Technology,
- National Core Electronic Devices,
- High-end Universal Chips and Basic Software,

Typical products and applications

Monitoring and Warning Systems Using IOT Technology
- Consisting of front-end sensor systems, channels of data transmission, data centers in the IOT sector, and application systems for monitoring and warning
- Mature technological advantage, system integration advantage, and price advantage in safety production surveillance and supervision system using IOT technology

3D Simulation Emergency Training and Drills
- Harmony Technologies possesses technological advantages due to its research on 3D engine, 3D editor, and simulation drilling platforms

Facial Recognition
- Enjoying a broader business scope after technological breakthroughs made by cooperating with European partners
Preliminary Program for TIEMS 2015 Annual Conference in Rome

TIEMS INTERNATIONAL
ITALIAN CONFERENCE 2015
FINAL PROGRAM

Rome, September 30 - October 2 2015
International Emergency Management and Disaster Response
PROGRAM DAY 1 – WEDNESDAY SEPTEMBER 30, 2015

09:30–09:50  | WELCOME OPENINGS

09:50 – 13:00  | Morning Plenary Session
   | Session 1
   | Best practices in Civil protection
   | Chair: Dr. Mario Massimo Simonelli, ISPRRA, Rome (Italy)

09:50–10:30  | Invited Speaker:
   | Dr. Moon P. Chhetri (NCOM, Nepal),
   | "Nepal earthquake aftermath"

10:30–11:10  | Invited Speaker:
   | Ing. Fabrizio Cucin (DPC, Italy),
   | "The Italian Dept. Of Civil Protection (DPC) and its role in the Emergency Management"

11:10–11:40  | COFFEE BREAK

11:40–12:00  | Seoul Ferry Disaster and Emergency Response Management in Korea
   | Dr. Kim, Jae-Kwon
   | (Korean Society of Disaster & Security)

12:00–12:20  | Emergency Management after the Christchurch earthquake
   | Dr John Hamilton
   | (Ministry of Civil (Defence & Emergency Management, New Zealand) video

12:20–12:40  | Lessons Learned from Mass-fatalities Management Research
   | Kalladu Gupta

12:40–13:00  | The European Union Civil Protection Mechanism: challenges and possibilities
   | Claudia Morsut

13:00–14:20  | LUNCH BREAK

TIEMS International Italy Conference, Rome, September 30–October 2 2015

14:20 – 16:00  | Afternoon Plenary Session
   | Session 2
   | New technologies, use of big data, collaborative approaches to sustain Emergency Management
   | Chair: Prof. Roberto Baldoni, University of Roma (Italy)

14:20–15:00  | Invited Speaker:
   | Prof. Dirk Helbing (ETH Zurich, Switzerland),
   | "How to increase systemic resilience in an Information-rich World"

15:00–15:20  | Advanced Procedures for volcanic and Seismic Monitoring: APHOTI-SM, an FP 7 "space" Project
   | S. Stramondo, G. Bignami, S. Corradini and L. Merucci

15:20–15:40  | Information sharing in emergency management: theory and practice
   | Simona Cavallini

15:40–16:00  | Site Location and Information Retrieval for Anti-Terrorist Medical Rescue System Based on GIS
   | Hailin Meng, Jingru Wei and Dongsheng Zhao

16:00–16:20  | COFFEE BREAK

16:20 – 18:00  | Afternoon Plenary Session
   | Session 3
   | Round Table on Nepal
   | Chair: K. Harald Drager, TIEMS International

Finish Day 1
### PROGRAM DAY 2 – THURSDAY OCTOBER 1, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09:00–09:40</td>
<td><strong>Invited Speaker:</strong> Prof. Alessandro Vespignani, Northeastern University, Boston (USA)</td>
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<tr>
<td>09:40 – 13:00</td>
<td><strong>Morning Parallel Sessions</strong>&lt;br&gt;Session 4&lt;br&gt;<em>Risk Management of “new” classes of phenomena - I</em>&lt;br&gt;Chair: Dr. Gregorio D’Agostino, ENEA and AIIC (Italy)</td>
</tr>
<tr>
<td>09:40–10:00</td>
<td>Risks and Vulnerabilities under multi-hazards threats in a protected area of Bucharest  &lt;br&gt;Emil-Sever Georgescu</td>
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<tr>
<td>10:00–10:20</td>
<td>GENERATE: Global Educational Network for Emergency Resilience And Training Excellence  &lt;br&gt;Thomas Robertson</td>
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<tr>
<td>10:20–10:40</td>
<td>How to survive nuclear emergency; structuring local preparedness and further radiation protection based on hands-on measurements.  &lt;br&gt;Yukako Komasa</td>
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<td>10:40–11:00</td>
<td>• Task-based Data Collection  &lt;br&gt;• Data Integration in Disaster Management  &lt;br&gt;Daniel Link</td>
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<td>11:00–11:20</td>
<td><strong>COFFEE BREAK</strong></td>
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<tr>
<td>11:20–11:40</td>
<td>Relationship between vision and reality in public perception of safety structures: the role of seismic simulators  &lt;br&gt;Vasile Meita</td>
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<td>11:40–12:00</td>
<td>Landslide risk: recent developments for the emergency management  &lt;br&gt;Francesco Castelli</td>
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<td>12:00–12:20</td>
<td>EMERCOM web-based system for earthquake loss estimation in emergency mode  &lt;br&gt;Nina Frolova</td>
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<td>12:40–13:00</td>
<td>Public space and seismic risk in Mexico City: a broken relationship?  &lt;br&gt;Milton M. Castillo</td>
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<td>13:00–14:20</td>
<td><strong>LUNCH BREAK</strong></td>
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### Session 5

**Risk Management of “new” classes of phenomena – II**

**Chair:** Prof. David Alexander, University College London (UK)

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>09:00-13:00</td>
<td>Data Driven Criticality Maps of Urban Street Networks</td>
<td>Pierpaolo Mastronardi</td>
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<tr>
<td>10:00-12:40</td>
<td>Crowds in crisis situations: risks and opportunities</td>
<td>Havlik Havlik</td>
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<tr>
<td>10:20-11:00</td>
<td>Demonstrating a Community-based Disaster Risk Reduction Technology Sharing Platform</td>
<td>Young-Tai Lee</td>
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<tr>
<td>10:40-11:00</td>
<td>Emergency Management with Interdependency Modeling in the URAM project</td>
<td>Dario Masucci</td>
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**11:00-11:20**

**COFFEE BREAK**

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>11:40-12:00</td>
<td>Analysis of Energy Consumption by Sensor Nodes during Localization in Emergency Management Sensor Networks</td>
<td>Diyanesh Ramamoorthy</td>
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<tr>
<td>12:00-12:20</td>
<td>Crisis Scorecard: a Systemic Tool for Crisis Management</td>
<td>Jos M. Sarrigi</td>
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<tr>
<td>12:20-12:40</td>
<td>How To Understand Extreme Risk-Beyond Hazard, Vulnerability Assessments</td>
<td>Carl Taylor</td>
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<tr>
<td>12:40-13:00</td>
<td>Analysis of Fire/flashovers originating from burning of agricultural and forestry residue in Portugal</td>
<td>Ricardo Ojeda</td>
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**13:00-14:20**

**LUNCH BREAK**

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### Afternoon Parallel Sessions

**Session 6**

**Preparedness and Resilience enhancement in growing metropolitan areas: are “smart cities” coping with these issues?**

**Chair:** Dr. Alessandro Coppola, Resilience Manager of Roma Capitale (Italy)

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>15:00-15:20</td>
<td>City Reporter for Smart Cities: a crowdsourcing mobile platform of urban asset problems</td>
<td>Roberto Guerri</td>
</tr>
<tr>
<td>15:40-16:00</td>
<td>Intelligence in urban areas: how smart cities and their data can support prevention and preparedness actions to deal with evolving threats</td>
<td>Sonson Park</td>
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**16:00-16:20**

**COFFEE BREAK**

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<tr>
<th>Time</th>
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<tr>
<td>16:40-17:00</td>
<td>Towards the Next Generation Training System for Crisis Management</td>
<td>Ilina Xie</td>
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<td>17:00-17:20</td>
<td>Inter-organizational Lessons Learned, Perspectives and Challenges</td>
<td>Dennis Andersson</td>
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<tr>
<td>17:20-17:40</td>
<td>Resilience of Critical Infrastructures: benefits and challenges from emerging practices and programmes at local level</td>
<td>Boris Petrossie and Paolo Trucchi</td>
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<td>17:40-18:00</td>
<td>Manmade Disasters: Terrorism in Iraq and Implications for Disaster Management</td>
<td>Shahrir Kabea</td>
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<tr>
<td>Time</td>
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<td>15:00 - 16:00</td>
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<td>Afternoon Parallel Sessions</td>
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<td>15:00-15:15</td>
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<td>Supporting Decision Makers in Crisis Management in Interdependent Critical Infrastructures</td>
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<td>15:15-15:30</td>
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<td>Knowledge sharing in police forces: a resource for emergency management</td>
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<td>15:30-14:45</td>
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<td>Development of a Risk Assessment Model for Disaster Management</td>
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<td>15:45-16:00</td>
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<td>Improving Critical Infrastructure Resilience through Scheduling of Firefighting Resources</td>
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<td>16:00-16:20</td>
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<td>COFFEE BREAK</td>
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<td>16:20 - 18:30</td>
<td>8</td>
<td>Afternoon Parallel Sessions</td>
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<tr>
<td>16:20-18:30</td>
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<td>Special Session on DRIVER project</td>
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<td>16:20-18:30</td>
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<td>(Driving Innovation in Crisis Management for European Resilience)</td>
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<td>Chair: Massimo Lanfranco - IRC</td>
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<td>Finish Day 2</td>
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**PROGRAM DAY 3 – FRIDAY OCTOBER 2, 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Chair/Author</th>
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<tbody>
<tr>
<td>09:00-09:40</td>
<td></td>
<td>Invited Speaker:</td>
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<td></td>
<td></td>
<td>Dr. James Urechhart, Scottish Government (Scotland, UK),</td>
<td></td>
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<tr>
<td>09:40-10:00</td>
<td></td>
<td>Invited Speaker:</td>
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<td>Dr. Torben Fell, European Commission (EU), “The EU ENICIP Initiative and its follow up”</td>
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<td>10:00-12:40</td>
<td>9</td>
<td>Morning Parallel Sessions</td>
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<td>10:00-10:15</td>
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<td>The Smart Mature Resilience Project for Resilience Management Guidelines</td>
<td>Josi M. Surriege</td>
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<td>10:15-10:30</td>
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<td>Taxonomy for disaster response: a methodological approach</td>
<td>Snjezana Knezić</td>
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<td>10:30-10:45</td>
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<td>Comprehensive Approach to Complex Emergencies</td>
<td>Lilian K. Stene</td>
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<td>10:45-11:00</td>
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<td>Integrated Open Service Platform for Enhanced Risk and Emergency Management: the PHAROS Solution</td>
<td>Javier M. Chaves</td>
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<td>11:00-11:20</td>
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<td>COFFEE BREAK</td>
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<td>11:20-11:35</td>
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<td>Less is more - Some cautious regarding mindless ICT use in emergency management</td>
<td>Jonas Burrell and Emilie Stroh</td>
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<td>11:35-11:50</td>
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<td>Interactive virtual world models for crisis preparedness – better than the real thing?</td>
<td>Havlik Havlić</td>
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<td>11:50-12:05</td>
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<td>Implementation of the Canadian Emergency Department Triage and Acuity Scale (CTAS) in an Urgent Care Center in Saudi Arabia</td>
<td>Abdullah Arafat</td>
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<td>12:05-12:20</td>
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<td>Assessing the Value of Early Warning Apps for Disaster Cost Reduction - A Framwork to Facilitate Investment Decisions to Protect Private Property</td>
<td>Simone Wurster</td>
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TIEMS International Italy Conference, Rome, September 30-October 2 2015

Session 10
New approaches and methods for Emergency Management - II
Chair: TDD

10:00-12:40

10:00-10:15 Application of I2SIM system of systems simulator for (Inter)dependency analysis in large scenario
Alberto Tofani

10:15-10:30 A Study on Disaster Response Terminologies Mind Map by SN Analysis
Soongkyung Kang

10:30-10:45 Threat modeling for CPS-based critical infrastructure protection
Jang-Jung Ding

10:45-11:00 Strategy research of city infrastructure vulnerability appraisal and slow-down adaptation due to climatic change
Lianhui Wang

11:00-11:20 COFFEE BREAK

11:20-11:35 Developing flood disaster management system using BIM Technology (Case study at Ulsanbawi city, Korea to dealing with reservoir break)
Changsoo Jeong

11:35-11:50 Flood by design: challenges with governance of disaster risk in Uganda, Italy
Massimo Lanfranco

11:50-12:05 Timeliness objective function construction method of pump scheduling in mine water disaster
Jialian Li

12:05-12:20 Study on the method of the hazardous chemical security risk early warning
Quidong Yong

12:20-12:35 Analysis of fatalities originated by burning of agricultural and forestry residue in Portugal
Ricardo Oliveira

12:40-13:00 CONCLUDING REMARKS

Finish Day 3

Presentation of Keynote Speaker Alessandro Vespignani

Name: Alessandro Vespignani
Position: Northeastern University, Boston

Prof. Alessandro Vespignani received his undergraduate degree and Ph.D., both in physics and both from the University of Rome “La Sapienza,” in 1990 and 1994 respectively. He completed his postdoctoral research at New University and Leiden University. Prof. Vespignani worked at the International Center for Theoretical Physics (ICTP) in Trieste and at the University of Paris-Sud in France as a member of the National Council for Scientific Research (CNRS) before moving to Indiana University in 2004. Before joining Northeastern University, Vespignani was AT&T Professor of Informatics and Computing at Indiana University and served as the Director of the Center for Complex Networks and Systems Research and the Associate Director of the Perimeter Technology Institute. Vespignani is elected fellow of the American Physical Society, member of the Academy of Europe, and fellow of the Institute for Quantitative Social Sciences at Harvard University. He is serving in the board/leadership of a variety of professional association and journal and the Institute for Scientific Interchange Foundation. Vespignani has worked in a number of areas of non-equilibrium particle systems, statistical physics and computational sciences, including characterization of non-equilibrium phase transitions, fractal growth and self-organized criticality. Recently, Vespignani’s research activity focused on the interdisciplinary application of statistical and numerical simulation methods in the analysis of epidemic and spreading phenomena and the study of biological, social and technological networks. For several years he has been working on the characterization and modeling of the Internet, the WWW and large-scale information networks. He is now focusing his research activity in modeling the spatial spread of epidemics, including the realistic and data-driven computational modeling of emerging infectious diseases, the resilience of complex networks and the modeling of technological systems. Vespignani has published more than 130 peer-reviewed papers in top-ranked scientific journals, including Nature, Science and PLoS ONE that have accrued more than 50,000 citations according to the Google Scholar database. He is author, together with Romano Pastor-Satorras, of the book Evolution and Structure of the Internet. Together with Alex Deco and Marc Sottossana he has published in 2008 the monograph Dynamic Processes on Complex Networks.
Presentation of Keynote Speaker Dirk Helbing

Dirk Helbing is Professor of Sociology, in particular of Modeling and Simulation, at the Department of Humanities, Social and Political Sciences and an affiliate of the Department of Computer Science at ETH Zurich. He earned a PhD in Physics and was Managing Director of the Institute of Transport & Economics at Dresden University of Technology in Germany. He is internationally known for his work on pedestrian crowds, vehicle traffic, and agent-based models of social systems. Furthermore, he coordinates the Epilogue Initiative (www.epilogue.ch) which focuses on the understanding of techno-socioeconomic systems, using Smart Data. His work is documented by hundreds of scientific articles, keynote lectures and media reports worldwide. Helbing is a member of the German Academy of Sciences "Leopoldina" and of the Leopoldina standing committee for digitalisation. He was an elected member of the World Economic Forum’s Global Agenda Council on Complex Systems. He is also Co-Chairman of the Physics of Socio-Economic Systems Group and the German Physical Society and co-Founder of ETH Zurich’s Data Center. In 2018, he became a board member of the Global Brain Institute in Brussels. Within the ERC Advanced Investigator Grant “Momentum” he works on social simulations based on cognitive agents. His recent publication in Nature discusses global networked risks, and how to respond. With a publication in Science, he further contributed to unravelling the hidden laws of global epidemic spreading. In January 2014, he received an honorary PhD from the TU Delft jointly from the Faculty of Technology, Policy and Management and the Faculty of Civil Engineering and Geosciences.

Presentation of Keynote Speaker James Urquhart

James Urquhart is Head of the Scottish Government Critical Infrastructure Resilience Unit (CIRU), which is part of the wider Resilience Division of Scottish Government. Prior to joining Scottish Government, James enjoyed a 30 year Police career in the North East of Scotland. During his Police Career, James was involved in both operational and departmental policing in various roles across the Grampian Police Area. He rose through the ranks from Constable to Superintendent and has been recognised as a national specialist on Critical National Infrastructure security and resilience within Scotland and indeed across the UK. From 2003 – 2004, as Chief Inspector within the Force Operational Planning Department, James had specific responsibility for counter terrorism protective security at on-shore energy CNI assets and the policing of all offshore oil and gas installations in Scottish Waters.

In 2004, James was promoted to Superintendent and Head of the Force Operational Planning Department. In this role, James had responsibility for overseeing Counter Terrorism Protective Security, Critical National Infrastructure Resilience, the policing of all Offshore Oil and Gas Installations in Scottish Waters, Royalty and VIP Protection and Force Emergency Planning. Throughout the period 2003 – 2009, within the Force Operational Planning Department, James was responsible for all aspects of multi-agency planning and response around the numerous Energy CNI assets in Grampian. He was engaged at local, Scottish and UK Government levels in terms of strategic planning and policy development in relation to these sites – in 2007, this involved overseeing the deployment of armed policing at two of these sites – this was a complex operation, which has operated successfully for the past 5 years. In May 2009, James was appointed by Scottish Government and invited to take on the role of Scottish CNI Programme Manager, in order to deliver a strategy for CNI in Scotland and to build a partnership and a performance framework to ensure delivery of the strategy.

He is now leading the development of national strategy and policy concerning Critical National Infrastructure (CNI) in Scotland. This involves the development of the first ever CNI Strategy in the UK (‘Pleasure and Resilience: A Strategic Framework for CNI in Scotland’), the creation of national and local CNI partnerships and the development of a performance framework to coordinate multi-agency and multi-level CNI activity to enhance the security and resilience of CNI in Scotland. In December 2012, James was appointed as Head of the Scottish Government Critical Infrastructure Resilience Unit (CIRU). He leads a small team of eight specialists, who are responsible for the delivery of an ambitious programme of critical infrastructure resilience (CIR) across all of the Critical Sectors in Scotland. James is also a key member of the emerging CIR International Network (CIRINTNET), with Scotland, Holland and Italy currently leading on the development of local and regional CIR approaches in Europe (Project SCARICA).

James is a Graduate of Aberdeen University, where he studied Law (1993). He is also a Graduate of the North Atlantic Leadership in Critical Terrorist Programmes (NALICTP) (2005).
Presentation of Keynote Speaker Meen Poudyal Chhetri

Name: Meen Poudyal Chhetri
Position: Nepal Center for Disaster Management (NCDM)

Dr. Meen Poudyal Chhetri is the President of Nepal Center for Disaster Management (NCDM), Chairman of Peer Review Committee of The International Emergency Management Society (TIEMS), Vice-Chairman of Himalaya Conservation Group Nepal and Vice-Chairman of Nepal Association of Humphrey Fellows. He is also the Adjunct Professor at the Queensland University of Technology, Brisbane, Australia from 1 March 2009. He served as the Director of the Department of Disaster Management of the Government of Nepal from 2001 to 2003. In 2004 he worked as the Deputy Regional Administrator in Nepal. From 1995 to 1996, he was the Chief District Officer and Chairman of District Disaster Relief Committee in Surkhet district of Nepal. Dr. Chhetri also held positions of Under Secretary, Investigation Officer and Special Officer in various government agencies of Nepal. He is also the member of the Commission for the Investigation of Abuse of Authority, Ministry of Finance, Ministry of Agriculture and Ministry of Education. He was the member of the Steering Committee of the Disaster Management Bill and Disaster Management Policy of Nepal in 2007.


Dr. Chhetri authored two books namely, "Mitigation and Management of Floods in Nepal" and "Analysis of Nondesire Agriculture." He has published a number of articles in national and international journals.

Dr. Chhetri completed Post Doctorate (Post Doc.) Research Study on "Disaster Risk Reduction: Policy Implications for Nepal, Australia and Beyond" from the Queensland University of Technology (QUT), Brisbane, Australia in 2011 where he also attended the Pandemic Disaster Preparedness Training Course from August 24 to November 30, 2008.

Dr. Chhetri earned his doctorate degree in Economics from the University of Vienna, Austria in 1995. He also holds an MA and LLb degree. He carried out Drug Abuse Research Study at the Johns Hopkins University, Baltimore, U.S.A from 2002 to 2003.

Dr. Chhetri worked as the consultant and resource person in a number of projects and programs related to disaster risk reduction in Nepal. He has significantly contributed in formulating and implementing disaster management policy and legislation in Nepal.

Presentation of Keynote Speaker Kim Jae-Kwon

Name: Kim Jae-Kwon
Position: President of TIEMS Korean Chapter and Chairman of Korean Society of Disaster & Security

Dr. Kim Jae-Kwon is currently a Chairman of the Korean Society of Disaster & Security and President of TIEMS Korean Chapter. Before Dr. Kim joined as CEO of Yongin Rapid Transit Co., Ltd., he worked for Doosan Engineering & Construction as vice president, Samsung C&T (Engineering & Construction Group) as executive director, and Daewoo Construction as general manager in Korea. He received his Ph.D. and Masters degree in civil engineering from Yonsei University. Dr. Kim serves as vice president, executive director, and chairman of various professional committees such as the Korean Professional Engineer Association, the Korean Arbitrators Association, and the Korean Society of Civil Engineers.
Presentation of Keynote Speaker Daniel Stevens

Name: Daniel Stevens
Position: Director of Emergency Management, City of Vancouver

Daniel Stevens is the Director of Emergency Management for the City of Vancouver and has contributed to emergency management at the City since 2006. He has worked on a wide range of initiatives, including development of emergency plans, hazard risk assessments, emergency operations centre redesign, and emergency management information system implementation. While at the City, he has also been involved in the development of volunteer programs, public education campaigns, and special event public safety planning.

Mr. Stevens has held senior positions in the Vancouver Emergency Operations Centre during large planned events and emergencies, such as the 2010 Winter Olympic Games, the 2011 Stanley Cup riot, chemical fires and the most recently represented the City of Vancouver in Unified Command for the MV Marathikos oil spill (2015). In 2011, Daniel was deployed to Christchurch, New Zealand in support of the February 22, 2011 earthquake where he assisted the development of business continuity programs in the emergency operations centre.

Before joining the City of Vancouver, Daniel consulted for various public and private sector clients on emergency management related projects. He has also volunteered in the emergency management field in a number of capacities, including as a board member of the British Columbia Association of Emergency Management.

Daniel holds an Honours Bachelor of Arts degree (Geography) from the University of Toronto and a Master of Science degree (Geography, Geographic Information Systems) from Simon Fraser University in Vancouver.
The EU Project ASSET Progress Report

TIEMS is a partner in the EU project ASSET. ASSET is a 48 months project, which aims to:

1) Forge a partnership with complementary perspectives, knowledge and experiences to address effectively scientific and societal challenges raised by pandemics and associated crisis management
2) Explore and map SiS-related issues in global pandemics
3) Define and test a participatory and inclusive strategy to succeed
4) Identify necessary resources to make sustainable the action after the project completion.

ASSET combines public health, vaccine and epidemiological research, social and political sciences, law and ethics, gender studies, science communication and media, in order to develop an integrated, transdisciplinary strategy, which will take place at different stages of the research cycle, combining local, regional and national levels.

The project’s first newsletter can be found at:

http://asset-scienceinsociety.eu/outputs/newsletters/asset-research-and-innovation-newsletter-issue-1

More detailed information on ASSET progress and results can be found at ASSET web-site:

http://asset-scienceinsociety.eu/
TIEMS China Update

By Dr Guosheng Qu,
Vice-President of TIEMS and Deputy General Team Leader of CISAR

Forum on Petroleum - Chemical Safety Working and Emergency Management of China

From 8-9, Jan. 2015, the Forum on Petroleum - Chemical Safety Working and Emergency Management of China was held in 8-9, Jan, Hotel Temple of Heaven Beijing in Beijing. About 160 experts and participants participate the Forum.

The Forum is held by TIEMS, China Petroleum Engineering Construction Association, and China Petroleum and Chemical Industry Union. The main topics are concerning with the hazards and risks of working safety, oil and gas pipes exploration and disasters analysis, equipment and logistic supports for working safety rescue teams and planning and preparedness, split oil in the sea and hazard, emergency industry planning and strategy development in China and high tech used in petroleum -chemical safety working and emergency management.

WU Zongzhi, Director of China Academy of Working Safety
Mr. Guosheng Qu, vice-president of The International Emergency Management Society (TIEMS) and deputy general team leader of China International Search & Rescue (CISAR)

PANG Guanglian, General Secretary, China Petroleum and Chemical Industry Union
“2015 International Symposium on Emergency Medicine” has been successfully held in Guangzhou, China
Supported by The International Emergency Management Society, The United Nations Development Programme and Health and Family Planning Commission of Guangdong Province, “2015 International Symposium on Emergency Medicine” has been successfully held in Guangzhou, China, from March 27th-29th, 2015. Both of The International Emergency Management Society Emergency Medical Committee and Guangdong Medical Association were the Sponsors of this conference; Emergency (Disaster) Medical Branch of Guangdong Medical Association and Guangdong No.2 Provincial People’s Hospital (Guangdong Provincial Emergency Hospital were the organizers. Over 200 guests attended the conference who comes from different countries or areas including China, America, England, Germany, Italy, Israel, Taiwan, etc.

The purpose of this conference is to establish a high-class international exchange platform for emergency medicine management system; to share multi-national successful experience on emergency medicine and to search new ways and methods of talents cultivation and academic research cooperation for emergency medicine. The symposium has been respectively addressed by Prof. Wenjie Wang, deputy director of Emergency Response Office of National Health and Family Planning Commission of the People’s Republic of China; Ms. Fang Yang, assistant country director of United Nations Development Programme; Prof. Guosheng Qu, vice-president of The International Emergency Management Society (TIEMS) and deputy general team leader of China International Search & Rescue; Mr. Jiaqi Ji, director of Emergency Management Office of the People’s Government of Guangdong Province; Mr. Hong Zhu, director of the Bureau of Cadres Health, Health and Family Planning Commission of Guangdong Province and vice-president of Guangdong Medical Association.

Mrs. Ran Chen, director of TEMC, explain that the International Emergency Management Society Emergency Medical Committee (TEMC) mainly focus on fully exerting the advantages of international resources diversification on the platform of TIEMS, thus to support and serve with the member countries on technical exchanges, personnel training, emergency response capacity building in the field of medicine, etc. In addition, TEMC also help them to share the achievement and experience in the development of emergency medicine, so that push the healthy development of international emergency medicine field. We believe that more emergency medical experts and famous medical institutions will be attracted to participate in the platform through this symposium and relative cooperation will be promoted, in the fields of scientific research, talent cultivation, discipline construction and so on.

The International Emergency Management Society Emergency Medical Committee Certificate for 11 new members. Come from different countries or areas, such as China, the United States, Canada, Britain, Germany, Italy, Israel, Taiwan, 19 speakers respectively had their speeches and exchange in the conference, with the topics of emergency management and experience on medical rescue, emergency medical education & training, the health emergency information construction, emergency rescue work progressing worldwide and so on. The conference arranged site visit in Guangdong Provincial Emergency Hospital as well. The guests exchanged actively based on the issues of emergency medical discipline construction and construction & progressing of network hospital.
Address by Mr. Jiaqi Ji, director of Office of Emergency Management, the People’s Government of Guangdong Province

Address by Ms. Fang Yang, assistant country director, United Nations Development Programme
Address by Mr. Wenjie Wang, Vice-director of Emergency Response Office, National Health and Family Planning Commission of the People’s Republic of China

Address by Mr. Guosheng Qu, vice-president of The International Emergency Management Society (TIEMS) and deputy general team leader of China International Search & Rescue
Address by Mrs. Ran Chen, director of The International Emergency Management Society
Emergency Medical Committee

Address by Mr. Hong Zhu, director of the Bureau of Cadres Health, Health and Family Planning Commission of Guangdong Province and vice-president of Guangdong Medical Association
The site of 2015 International Symposium on Emergency Medicine

2015 Chengdu International Disaster Reduction and Emergency Preparedness Conference and International Technology Expo

The second Chengdu International Disaster Reduction and Emergency Preparedness Conference and International Technology Expo hold in 15-17, April, 2015 in Chengdu. The main sessions involved in community based disaster reduction and CERT training program by FEMA, disaster risks and development of emergency industry in China, emergency responses after natural and man made disasters, new SAR developments in transportation (road and highway, bridges and channel), dams and other infrastructure by earthquake, landslides, flooding, and other disasters.

About 120 participants come from FEMA, and domestic of China (Chengdu, Shaanxi, Beijing, Hubei, Guangdong, Jiangsu, Zhejiang, and other provinces and cities) participate the conference.

The exhibition involve software and hardware devices manufacturers of disaster prevention and mitigation, emergency preparedness, monitoring and early warning, emergency response, emergency relief, post-disaster resettlement and reconstruction of various aspects of disaster response.
CHANG Xiaoyang, Director of Chengdu Emergency Management Office in Opening Ceremony of the Conference

Mr. Guosheng Qu, vice-president of The International Emergency Management Society (TIEMS) and deputy general team leader of China International Search & Rescue in Opening Ceremony of the Conference
The site and the participants of Conference

Ms. Kimbly, Project manager, International Department of FEMA
Delegation from FEMA

Pilot Project by Asia Foundation and FEMA with Chinese parts
YANG Wenlong, Office Director of Asia and Pacific of TIEMS, Deputy Director of Digital Disaster Reduction and Emergency Management Research Center, Peking University

TIEMS Onsite Coordination Meeting for NGO’s Platform of Ms 8.1 Earthquake, Nepal

In 3, May, 2015, during the SAR mission of Nepal Ms8.1 Earthquake, TIEMS vice president QU Guosheng, and TIEMS board member, Meet Pouydal Chhetri et organized a meeting on Onsite Coordination Meeting for NGO’s Platform of Ms 8.1 Earthquake. There are about 10 participants from Nepal, China, India, Bangladesh, and others. IAEM, Asia director, Mr. Vector Bai, Prof. GU Linsheng (Sichuan University), President of TIEMS India Chapter, Mr. Kailash Gupta, et al, participated the meeting in Base of CISAR in Kathmandu.

The main topics are how to establish a coordination and disaster rescue, relief and reconstruction platform for NGO’s after the catastrophe of the earthquake of Nepal. It is suggested there are need to establish Sahana for Nepal Gov. and NGOs.

And during the meeting, many participants make a call that TIEMS should play a important role in the emergency SAR, as well as the relief and reconstruction for Nepal.
Workshop of The International Emergency Rescue Equipment Center (IEREC) in Hangzhou

30, May, 2015, A High Level Workshop was hold in The International Emergency Rescue Equipment Center (IEREC), Hangzhou. There are about 300 participants participate the Workshop and the new exhibition halls.

The International Emergency Rescue Equipment Center (IEREC) in Hangzhou was founded by Xianheng International Limited Company, and guided by TIEMS and Digital Disaster Reduction and Emergency Management Research Center, Peking University, in 20th, Nov. 2014.
Workshop of the International Emergency Rescue Equipment Center (IEREC) in Hangzhou

Exhibition of the International Emergency Rescue Equipment Center (IEREC) in Hangzhou

The main tasks of IEREC are:
1. IEREC will be the comprehensive base for emergency and rescue product research, equipment exhibition, technique spread, practice of disaster scenario, solutions on on-site disaster emergency and rescue, training and exercise, and awareness transmission of disaster preparedness and reduction.

2. IEREC will accumulate many emergency industry companies and institutions to display and supply whole of the emergency and rescue high-tech equipments and products for the users and will have the training, exercise and practice programs on emergency management, SAR, and new techniques (products and technology, including disaster emergency preparedness, risk assessment, disaster monitoring and early warning technology, disaster scenario simulation and contingency plan compiled technology, disaster response and decision-making technology, on-site search and rescue equipments (life detectors, rescue tools, robots, audio and video rescue monitoring equipment), emergency medical care and technique supports technology, logistic support equipments and technology for USAR teams, UXV (UAV, UGV, USV, UUV etc), emergency engineering equipments for disaster recovery and relief, remote sensing technology, high-rise building escape devices, household emergency equipments, equipments for the public emergency response and SAR as well as self response and rescue, emergency communication network system, and ICS and EOC related equipments, training and exercise equipments etc.).

3. IEREC will service for the emergency response of electric power supply and rail way and express highway; earthquake, geological, meteorological, oceanic, agriculture, and forest disasters response and SAR, flooding, fire-fighters, civil air defence and supply the whole solutions of disaster preparedness, monitoring, response and SAR, and disaster recovery, so to enhance the resilience of the disaster SAR.
Set up of a global think tank for disaster mitigation in Beijing

[TIEMS China Chapter, Beijing, China, May, 2015] The third UN World Conference on Disaster Risk Reduction was held in Sendai, Japan from March 14 to 18, 2015. Li Liguo, Minister of the Ministry of Civil Affairs of the People’s Republic of China, and delegates from 187 countries worldwide attended the meeting, where the “Global Disaster Reduction Framework 2015-2030” was approved. As the world’s first important agreement dealing with disaster reduction and emergency management after 2015, the document sets seven goals and four priority action projects for disaster mitigation. The new document puts emphasis on the mitigation of the negative influence of disaster risks, long-term and constant attention to people’s health and livelihood, as well as following up on a regular basis. A total of 2,800 government representatives worldwide participated in the gathering. More than 6,500 delegates discussed and passed the “Global Disaster Reduction Framework 2015-2030.”

Seven disaster reduction goals over the next 15 years were set: greatly decreasing the mortality rate of disasters worldwide; sharply reducing the number of the people affected by disasters; cutting economic losses related to global GDP; reducing losses of key infrastructure and interference on basic services induced by disasters, including healthcare and education facilities; increasing the number of strategies for countries and locals prior to 2020; boosting international cooperation; and increasing opportunities for multi-disaster warning systems, disaster alleviation, and assessment. The four priority action programs focus on learning about disaster risks, strengthening the governance on disaster reduction, and controlling disaster risks; investing in disaster reduction to enhance restorability; enhancing disaster preparations to roll out effective countermeasures; and stepping up efforts on restoration, recuperation, and reconstruction.

“The reduction of disaster risks and strengthening emergency management marks not only a wise business investment, but also the one that will save lives,” United Nations Secretary-General Ban Ki-moon said at the third UN World Conference on Disaster Risk Reduction.
In an effort to respond to the “Global Disaster Reduction Framework 2015-2030” approved at the third UN World Conference on Disaster Risk Reduction, actively implement the State Council’s “Guidance on Accelerating the Development of Emergency Industry in China” (No.63 Document (2014) issued by the General Office of the State Council of China), as well as execute the strategy of “Strengthening International Communication and Cooperation,” Zhang Ji, Treasurer of TIEMS, Vice President of TIEMS China Chapter, and Board Chairman of Harmony Technologies, Prof. Zhang Qiang, Vice President of TIEMS China Chapter, and Vice President of the School of Social Development and Public Policy (SSDPP), Beijing Normal University, and Yang Fang, Assistant Country Director of the United Nations Development Programme (UNDP China), met with Lu Jiang, Director of the Division of International Cooperation and Exchange of the Administrative Committee of Zhongguancun Science Park, on May 22, 2015. They conducted in-depth discussions on boosting cooperation and communication in the global emergency industry via multiple levels, channels and approaches.

Zhang Ji (3rd R), Vice President of TIEMS China Chapter, Director-general of ZIAEM, Zhang Qiang (1st R), a professor at TIEMS, Yang Fang (2nd R), Assistant Country Director of UNDP China, Lu Jiang (1st L), Director of the Division of International Cooperation and Exchange of the Administrative Committee of Zhongguancun Science Park, conducted in-depth discussions regarding project cooperation and communication.

All parties agree that TIEMS China Chapter and the Zhongguancun Industry Alliance Emergency Management (ZIAEM) should highlight the internationalized strategy of “bringing in and going global” according to the seven goals and four priority action programs that the United Nations set for the disaster reduction between 2015 and 2030 based on the “No.63 Document (2014) issued by the General Office of the State Council” and “One Belt and One Road” strategy proposed by the Chinese government. They also should give full play to the advantages of diversified international resources using corporation platforms for scientific and technological innovation in Zhongguancun region in a bid to head the members of the alliance to strengthen the cooperation on policy research, standard establishment, technical communication and introduction of international talents in the disaster prevention and reduction as well as emergency management sectors. “The ZIAEM should
leveraging resources, openness, multi-participation regarding disaster prevention and emergency for the communication and cooperation among international organizations, Chinese colleges and universities, as well as Administrative Committee of Zhongguancun Science Park and enterprises,” Lu Jiang said. “UNDP’s global disaster reduction think tank program will be firstly carried out in Zhongguancun region, Beijing, with a purpose of further implementing the principle of South-South cooperation in the new age by eyeing on the strategic development in Asia and Europe,” Yang Fang said.
I promised in the Spring 2015 TIEMS newsletter that I’d write a brief article of my experience in Christchurch, New Zealand in February 2015. It’s no secret that in February of 2011, Christchurch was hit by a devastating earthquake, destroying the city. From what I saw, media reports did not due the level of carnage and damage justice; there was so much more.

This city was the closest you could get to London, UK without actually being anywhere near the British capital. You can feel it when you’re there…and even experience it by “Punting on the Avon”. Which I did… I thought I was staying downtown for a few days and the ride to the hotel had me believing that we were going in the wrong direction or that the taxi driver was taking me for an extended trip to drive up charges. What I encountered floored me.

The downtown core was a wasteland in many respects. Huge blocks of land and barren streetscapes are everywhere. In many instances, just the foundations of older buildings are left full of drainage water. In some spots, old store fronts are boarded up, over which “Starbucks” hangs precariously from rusted hinges.

I didn’t think I was in the right part of the city but then when I decided to walk out onto my hotel balcony I could see the amount of devastation; the number of destroyed buildings and vacant lots – made flat by bulldozers, really struck me hard. I’d see the odd media newscast back in Canada that showed the old church falling down and some crack in other buildings but never did I imagine that these could be ‘selected’ images and not the true picture. You can see from one of my pictures the large swaths of land that now sits vacant and one time used to house office buildings, shops and fine eateries.

Yet, when I started to walk about the downtown and wander my way from block to block I found something just amazing; how the city was building itself backup and how the people continued to move forward. I was struck by the amazing parks and small shops that had started to open up all over. Even knew hotels and office blocks were starting to reach to the sky again, though as I found out, due to new building regulations and standards post-earthquake, they won’t be as high as they once were. Speaking to shopkeepers and restaurateurs was inspiring. Each had a story; an experience, to share.

More shops are springing up, the tourists are slowly returning (like me) and there’s even a fantastic little mall downtown made up of old shipping containers. While I was there, a new rail system that was in the final days of testing and was to open 2 days after I left of Brisbane. It was also just as some games for the Rugby World Cup were starting, to the people of Christchurch – and New Zealand in general – were in a great mood.

As I walked along the beach and climbed the surrounding mountains, I’m struck by the beauty of this city and how the people were able to pick themselves up after such a terrible earthquake, smile and rebuild their lives. Truly inspiring and I can’t wait to visit again!
Fig 1: Blocks of downtown lay barren but some buildings are beginning to rise from the rubble.

Fig 2: The ruins of a historic church downtown.
Fig 3: Notice the bend in the steel beam of this bridge? Wow…
Comparative Review of Social Media Analysis Tools for Preparedness Now Available

London, Washington DC, 3 August 2015.

Trilateral Research’s report on a Comparative Review of Social Media Analysis Tools (SMAT) for Preparedness was released today. The report presents the findings of research, funded by the Global Disaster Preparedness Center, and designed to support the Red Cross Red Crescent (RCRC) network and other humanitarian actors in their selection and use of SMAT for disaster preparedness and disaster risk reduction (DRR).

The report, based on research undertaken by Trilateral between March and June 2015, examines how SMAT are a valuable tool not only for disaster response, but also for DRR and disaster preparedness efforts as they allow for community engagement and the ability to ‘listen to’ conversations on social media. The report examines 31 SMAT that can contribute to the disaster preparedness work of humanitarian actors in a variety of ways, such as: evaluating and improving the quality of preparedness messages; increasing the reach of preparedness messages; scheduling preparedness messages to increase their relevance, and managing the organisation’s reputation. The comparative review also outlines barriers that influence the selection and use of SMAT by RCRC actors, related to the user (e.g., limited financial resources and time) and the tool (e.g., cost, difficult to use). Recommendations on how these barriers can be overcome are provided and brought to life through four use cases that provide solutions to the complexity of selecting a suitable tool to analyse social media data.

General recommendations and strategic advice on how to prepare for the use of social media and SMAT within DRR and preparedness activities are highlighted in the report, in addition to specific recommendations on the variety of purposes that SMAT can be used for and future considerations and next steps in the use of SMAT for preparedness and DRR.

The report is based on desk-based research and primary research with RCRC actors, researchers, and SMAT developers.

Karin Metz, Global Disaster Preparedness Center, said:
“The comparative study of social media analysis tools for preparedness conducted by Trilateral significantly increased our understanding of the opportunities and challenges in deploying such technology for preparedness and risk reduction purposes. It provides concrete information and guidance that allows the Global Disaster Preparedness Center and the wider humanitarian...
community to successfully develop strategies for the integration of social media and analysis to support communities be better prepared and cope with disasters.”

**Kush Wadhwa, Senior Partner at Trilateral, said:**
“Working with the Global Disaster Preparedness Center on this project has been a rewarding experience for Trilateral. We have built upon our existing expertise and research on the application of social media analytics for crisis management while at the same time we are supporting our client and the RCRC network to use these tools more effectively for preparedness and disaster risk reduction.”

To view a copy of the report please visit: [http://goo.gl/NpRpG6](http://goo.gl/NpRpG6)

**Trilateral Research** is a London based research and advisory company bringing together strategy, technology and policy. It specialises in research and the provision of strategic, policy and regulatory advice on new technologies, privacy, trust, risk and security issues. If you would like to get in touch with Trilateral about this and related research in this area, please e-mail Hayley Watson: hayley.watson@trilateralresearch.com

**The Global Disaster Preparedness Center** is an international resource center of the Red Cross/Red Crescent network focused on increasing disaster preparedness through the development of knowledge, innovation and best practices that are widely shared with networks of actors involved in disaster preparedness work. To learn more about the work of the Global Disaster Preparedness Center, please contact Karin Metz: karin.metz2@redcross.org

**Keywords: Disaster preparedness, disaster risk reduction, social media data, social media analysis tools, humanitarian work**
TIEMS Board Member Profile – Jaroslav Pejcoch

As you may have noticed over the past few issues, we’re profiling members of the TEIMS board; finding out who they are, how they became involved with TIEMS and giving us some insights on their passion for Emergency and Disaster Management.

In this issue we’re profiling Jaroslav Pejcoch, who is our Secretary and Chair of the Advisory Board.

1. How did you become involved with TIEMS?

In the year 2002 (is it really so long time away?) our company started an EU-funded research project MEDSI, which was about interoperability of crisis management and decision support systems. We have been working in this area for years and we found an excellent partner - The Fraunhofer institute from Germany and other 10 partners from Spain, Portugal, Slovenia, Turkey and Israel to constitute a project lead by Telefónica. We succeeded to get the financing and there was a Fraunhofer conference in Magdeburg, where I met a very interesting person - a Norwegian knight Harald Drager. For me, the Norway was a country I have never been, the country of Vikings and trolls and Harald, who was talking on behalf of TIEMS was a bit of a revelation. His straightforward statements, clear positions and obviously a good image of TIEMS lured me to listen to his not binding offer to join. I decided in seconds. I put emphasis to intuition. And it told me YES, NO DOUBTS.

So, very soon, I become a member of TIEMS, member of TIEMS Board and some years later I organized the successful TIEMS conference in Prague. My involvement with TIEMS was very natural as I am dedicated to think about the same subjects as TIEMS is looking after.

2. Can you tell us a bit about yourself?

I was born in Pilsen (the mother-city of beers) and lived in a nearby village. My studies ended up in Prague technical university as en electronic engineer. I fallen in love with computers and software and after graduation continued in the large research institute, building complex systems for integrated circuits design.
After the political relief in 1989 I found with my friend the private company T-SOFT (www.tsoft.cz), which was oriented to security and crisis management and produced a lot of interesting software solutions for government, critical infrastructure and other large institutions.

I have also a parallel life - music. (In fact, before joining the research institute I was deciding the career either research or music. I decided for technology and research and the music remained my hobby). I am an active piano player, enjoying any kind of a good music. I also compose music for fairy tales released on CDs. My partner and co-owner of T-SOFT Michal Vanecek is a writer - he writes fairy tales and the results we give out to children, especially to those with some serious decease to help to fight it. For this we have a foundation that organizes those things.

I have three sons and one daughter and four grandchildren up to now. As a Norwegian knight Harald dazzled me more than ten years ago, my second son surprised me as he married a Norwegian girl, so I had finally to travel to this beautiful country to see my granddaughters...

Besides music, my passion is also photography, mountain tracking and bike tours. The only limitation I have is a time. I would need at least 30 hours per day.

3. What achievement in Emergency Management / Disaster Management are you most proud of?

Thanks to T-SOFT I was present at several interesting and important projects dealing mainly with the decision support and preparedness at the country level or at the top management level of important organizations. We tried all the time to bring an innovative solution to this area and push the matter forward, which sometimes brought the business to our company, sometimes to our competition, but each time it improved the ability to cope with crises.

To name some of the most interesting ones …

- Countrywide system ARGIS for management of national and civil resources to enable effective crisis planning
- System for education of crisis managers developed together with the Military university in the Czech Republic
- MONIS for monitoring of critical infrastructure
- TEREX – model for industrial disasters and terrorist attacks
- RESPO – methods and tools for mitigating of the Blackout consequences
- PRACTIS – tools for preparation and execution of exercises

Especially the last two activities in the power security area we see as promising for the future. As an example I described the Prague Blackout Exercise during the last TIEMS annual meeting in Niigata, Japan.

4. In your opinion, how has Emergency Management / Disaster Management changed over the years?

I see the great change over last 20 years due to the technology, especially the information and communication tools.

We are able to permanently monitor our planet in many ways, we have still more accurate and fast models to predict weather, floods, earthquakes and tsunamis and we have also internet and warning...
networks to distribute the information to citizens. Our abilities in logistics improved, so it is possible to bring the help very fast to any place on the Earth. The will of states to help affected countries also increased. The Internet and social networks interconnect the affected area with the rest of the world, which helps in funding of humanitarian aid and recruiting volunteers.

But, unfortunately, this progress brings some new threats as well. There was no threat of the Cyber war 20 years ago; now, we have to treat it as one of the potential causes of large disasters. Connected with the importance of power and water supply and global problems in those areas, terrorism etc. we may have face more to the man-caused disasters in the future.

5. How would you like to see Emergency Response/Disaster Management evolve in the coming years?

We have a great potential in technology as I said before. Nevertheless, time after time we may see quite inadequate utilization of it at the scene of disasters. The reasons are various – politics, mafias, competition, incompetency. The energy invested is then wasted or used non-efficiently.

I am sure that the technologies will be bringing more and more power to mitigate the risks and to effectively act in the consequence management. In the natural disaster area there is a clear way to have automatic reaction to the situation, which have not yet happened – just based on the monitoring and modeling. There are for example systems which enable right after the earthquake to estimate the damage and casualties at a specific place and activate the response teams to start engines and go to help. Such integrated approach will be evolving further, utilizing new technologies as “internet of things” and big data processing.

But it is not enough – the real challenge for the management of countries is to be able to effectively utilize those technologies and to be able to receive or provide massive help. Again – the key in this will be played by correct information.

6. What advice do you have for individuals just entering the Disaster Management field?

Disaster Management or Crisis Management is an excellent multidisciplinary area for any kind of activity. From research to real help at the scene.

Regardless of your profession and career, there is useful anytime to listen to experienced colleagues, to read case studies and – most important – to engage yourself in any activity related to crisis management. You will find it interesting and useful.

7. Any final thoughts?

During several dozens years working in the IT and Crisis Management areas, I saw several important changes in the understanding of a variety of phenomena.

For me, personally, the most important change in my opinion was the realization, that the “perfect, comprehensive, large, fast, advanced, integrated, interactive, interoperable, user-friendly, graphic, solution-oriented, open, cloudy, …” etc. information systems are nice to have, nice to build, but the key element in crisis management is somewhere else. It is in people.

People are the most valuable part of any system and especially the crisis management one. No detailed crisis plan, no airplane full of meals and bandages will manage the situation when the disaster strikes.
That means there is worth to invest to people in crisis management. Not only in special rescue teams, but also for the management of countries and organizations in order to deal with risks. Any education is good, but the best method for that is exercising. Not necessarily with shovels, sandbags and field hospitals, but at the table, discussing the possible scenarios. I believe TIEMS education activity will go this direction.

So, where I see the future challenge? It is in the preparation of top managers and countries leaders to the effective and efficient performance in crisis situations. To bring those people together, to supply them necessary information and scenarios and let them play the game of possible crisis. The personal experience and know-how they get during the exercise is far more valuable than any formal documents or certificates.

Thanks for taking the time to talk with us, Jaroslav!
More than 200 participants gathered in King AbdulAziz University for TIEMS first Workshop in TIEMS MENA Chapter.

Announcement of TIEMS first workshop in TIEMS MENA Chapter at and in cooperation with King Abdul Aziz University in Jeddah, Saudi Arabia, and in cooperation with Prince Megren who is chair of Crisis and Emergency Management at the university.

The program comprised Saudi Arabia and international speakers. The papers at the workshop will be published in a special issue of IJEM after the workshop. The event was an excellent network arena for meeting and networking with Saudi Arabia officials and international experts within emergency management and civil protection.
Report from TIEMS 2015 Workshop in Split, Croatia

Offshore Oil & Gas Harvesting: Benefits, Threats and Challenges

The workshop took place in Split, Croatia, 27 - 28 May 2015 with more than 100 participants.

On 27 and 28 May 2015, the Faculty of Economics of the University in Split hosted a two-day international workshop entitled 'Oil & Gas Harvesting: Benefits, Threats and Challenges'. The workshop was organized by The International Emergency Management Society (TIEMS), the University in Split, the National Rescue and Protection Directorate (DUZS) and the Croatian Hydrocarbons Agency and has gathered more than twenty national and international lecturing scientists and experts.

TIEMS President, K. Harald Drager, opened the workshop, and the following lecturers held their presentations: Mirko Zelić (Croatian Academy of Sciences and Arts), prof. Igor Dekanić, DSc (Faculty of Mining, Geology and Petroleum Engineering Zagreb), prof. Neven Šerić, DSc (Faculty of Economics, Split), Barbara Dorić (Croatian Hydrocarbons Agency), Dubravka Lulić–Krivić, DSc (Ministry of Maritime Affairs, Traffic and Infrastructure), Giedo Van pellicom (Belgium), Alen Grabner (Seadrill, Norway), Magne Ogmedal (Petroleum Safety Authoroty, Norway), Marian Cimrat (European Maritime Safety Agency), Paul Foley (Oil Spill Response Ltd.), William Wolf (PMU EMRC), prof.dr.sc. prof. Marina Bitti, Dsc (Faculty of Philosophy, Rijeka), Admiral Romano Grandi (SNS Italy), Darko Domović (Oil Spill Education Centre), Astrid Zekić (DLS, Rijeka), Martin Bilić (DUZS), Jelena Kurtović (RERA Split Dalmatia County), prof. Marko Perković, DSc (Maritime Faculty, Ljubljana), Mira Morović, DSc (Institute of Oceanography and Fisheries), Dijana Klarić (The Croatian Meteorological and Hydrological Service).

The workshop, which was open for the public, and the discussions following each of the workshop sessions have produced the following conclusions:

1. The University and experts should be actively involved in the government project on exploration and exploitation of hydrocarbons with the aim to find best solutions for Croatia in compliance with its interests.
2. Regarding the regulatory framework, Croatia is following best European and global practices. However, there is a lack of trust in the state and in the capability of the system to timely respond to potential risks.
3. Croatian institutions, both at national and local level, are not prepared and do not dispose of all the means and equipment and human capacities needed to adhere to and monitor the adherence to the highest global standards guaranteeing the safety of the Adriatic, which is a prerequisite for the start of any activity.
4. The Republic of Croatia has positive experiences and incident-free tradition in exploring and exploiting hydrocarbons. In order to reduce the risk from incidents to a minimum, it is crucial to implement the latest global practices.
5. A successful realization of this project would ensure a significant economic benefit for Croatia accompanied by the development of various economic activities.
6. The project must not endanger environment, human lives or any other economic activity, and must above all develop in synergy with tourism which is a source of income for a great number of Croatian citizens.
7. Besides control and safety measures and equipment belonging to the oil companies, the state has to dispose of its own means and equipment in order to ensure the shortest response time in case of an incident.
8. Withdrawal from the project does not imply the safety of the Adriatic since Albania, Montenegro and Italy are also active in the exploration and exploitation of the hydrocarbons. For this reason, monitoring and adherence to the highest standards in the whole of the Adriatic is of vital importance for its safety.
9. The workshop has also resulted in the idea to set up a volunteer education programme that would provide training of volunteers to respond to and mitigate the consequences in case of worst scenario taking place.

Croatian Minister of Economy, Ivan Vrdoljak, Opened the Workshop

Former Director Magne Ogedal of Petroleum Safety Authority in Norway (left)

An engaged audience listening and debating
TIEMS USA 2015 Conference
Emergency Management in an Interconnected World

The conference was held June 23 -25, 2015 at Portland State University, who generously provided our meeting room and access to great event staff. All in attendance agreed the conference was a great success – excellent presentations, lots of discussion, and a great opportunity to learn and network. As expected, Portland provided beautiful summer days and nights as a backdrop to our meetings and social events. (See TIEMS USA 2015 Conference Final Program)

The conference attendees came from Brazil, Indonesia, France, Nepal, New Zealand, Norway, and of course the United States, from California, Illinois, Indiana, Florida, Georgia, and Maryland, as well as locals from Oregon and Washington in the Pacific Northwest. It was remarkable to see how different perspectives and common goals led to presentations and discussions that engaged everyone.

The conference was opened by conference organizer and TIEMS Director for North America Tom Robertson, who reiterated the conference theme – how interconnectedness and interdependence make disaster resilience an inherently international problem – and opportunity. TIEMS President Harald Drager led off Tuesday morning’s presentations, discussing TIEMS worldwide operations, and in particular two approaches to improve global resilience: using scientific projections to guide preparedness funding, and the TIEMS Global Educational Network for Emergency Resilience And Training Excellence (GENERATE).

For the second presentation of the morning we were honored to have Meen Chhetri provide a penetrating account of the recent earthquakes in Nepal, and an analysis of the challenges preparing for and responding to such disasters, given the multi-organizational and multi-national stakeholders involved. Disasters like this one in Nepal provide important lessons in both local and international response.
The Pacific Northwest can learn from Nepal: as Matt Cutts from the U.S. Army Corps of Engineers told us, in the next presentation, there is a 37% chance of a magnitude 8 or larger earthquake within the next 50 years, along the Cascadia subduction zone, which runs from northern California to northern Vancouver Island in Canada. Matt’s talk further discussed the need for infrastructure investments, and the economic, political, and social challenges of deciding how to make these investments, which echoed Meen’s discussion of similar challenges in Nepal.

The last presentation of the morning by Jim Hagen was a very interesting discussion of multiple aspects of using small unmanned aerial vehicles in emergency management. He described types of vehicles, how they can be and are used in emergency management, as well as natural and man-made barriers to their use. These drones are becoming so popular they have spawned university degree programs in Unmanned Aerial Systems.

Tuesday’s afternoon session began with three presentations dealing with global aspects of disease outbreaks. Carl Taylor enlightened and entertained us by describing “Seven Certainties” associated with disease outbreak in his talk “The Problem of Bugs, barriers, and Borders”. Tom Robertson spoke to governance during disease outbreaks, emphasizing the paradigm shift from a paternal point of view to a more modern stance of self-reliance. Jim Hagen next presented a comprehensive overview of how we respond to pandemics as individuals, local communities, pharmaceutical providers, governments, and as international collaborators.

Joseph Pollack next discussed how learning theory applies to making organizations that deal with emergencies learning organizations. He further discussed live and virtual training tools that can be integrated to allow organizations to get the most from their training exercises. Andre LeDuc described an impressive example of how organizations can learn from each other – the Disaster Resilient Universities Network, which over the last 10 years has grown to 1250 worldwide members, each member a university sharing information and experience concerning the multi-faceted challenges of managing emergencies in university communities.

Tuesday’s activities concluded with conference attendees enjoying food and drink and a beautiful summer evening on Nel Canto’s outdoor patio, getting to know one another and discussing interests. We continued to learn about each another Wednesday morning, going around the room, each of us telling about ourselves and our interests. We were a very interesting and diverse group – responders, government officials, technologists, academics, students, consultants, NGOs – from far away.
The first presentations on Wednesday morning dealt with cybersecurity, a significant issue in today’s interconnected world. **Megan Levy** provided an excellent overview of the elements of cybersecurity, and the importance to dealing with cyber threats of collaboration within and across organizations, and the need for every stakeholder to play their role. **Jack Whitsitt** provided a creative illumination of the multiple contexts that shape various stakeholder’s attitudes and behaviors around cybersecurity, and the complexities that make cybersecurity extremely challenging.

The last paper of the morning, presented by **Vaninha Vieira**, described an international project to develop a system that would exploit modern hand-held devices to support crowd-sourcing and crisis management during a crisis. While the technical feasibility of this approach seems clear, the comprehensive project is going beyond technical architecture to address critical considerations such as crowd source reliability, fusion and analysis of collected data, usability for different types of emergency responders, and commercialization for wide dissemination.

During Wednesday’s lunch we had a special treat, as **Amy Baker** and **Jane Wolfe** of Ready Set Go! Emergency Training led us through some experiential games that brought home the challenges of decision making and cooperation during stressful situations such as emergencies. After lunch, **Mary Tyszkiewcz** presented examples of how this sort of experiential training can be used to enhance the ability of small groups to respond to emergencies, performing on-the-spot rescues and innovative problem solving, and developing the relationships needed for effective collaboration and well-being.

**Timothy Stevens** and **Will Myer** next discussed risks of emergencies in terms of health insecurity, and the special vulnerabilities and educational needs brought about by changing demographics, flood vulnerabilities, and correlations between health problems and poverty. They also discussed how coalitions of health organizations can improve resilience to hospital surge, often a consequence of large scale emergencies. Climate-related disasters are important drivers of hospital surge, and the next speaker, **Linda Kiltz**, provided an overview and led a discussion on how climate change is affecting critical infrastructure and emergency management, encouraging each participant to consider how their organizations and communities can productively move forward in the face of these threats.
Doug Buman, pinch hitting for Tom Stahr of the National Demolition Association (NDA), a key conference sponsor (thanks, NDA!) spoke about the barriers that prevent qualified demolition companies from being used to recover from a disaster. Local regulations and practices related to licensure, use of local contractors, wages, and liability often result in post-disaster demolition being carried out by non-qualified companies. This is an industry-wide problem, and the NDA is working to educate communities and decision makers and reform regulations that ultimately increase costs and hazards associated with post-disaster demolition.

In the next presentation, John Valencia and Mike Scott presented the results of a project undertaken by the San Diego Urban area to develop a standard approach to digital mapping, making it easier for organizations in their region to share situational information. Although digital mapping is routinely used in every region, this capability is performed using a variety of software packages, making collaboration more difficult.

Finally, we ended the day with a presentation by Lorraine Churchill, who described the daunting challenges of emergency preparations for the 2014 G20 Brisbane Summit. While there were of course complexities inherent in this large, media-intensive event, Lorraine emphasized the particular communication challenges brought about by New Zealand’s cultural diversity, and differences various stakeholders perceive value.

Wednesday evening afforded conference attendees an opportunity to enjoy another beautiful Portland summer evening. Some of us enjoyed a relaxing dinner cruise along the Willamette River on the Portland Spirit!

Thursday, the last day of the conference, opened with a presentation by Ellis Stanley, on the key ingredient to resilience – people and their relationships. His insightful model for effective emergency management is founded on principles, which provide a communication framework promoting open and cooperative relationships among individuals and agencies. His leadership model orients each leader to his or her context, promoting effective engagement and collaboration within one’s own organizations, and with other organizations or “silos”.

In the next presentation Listya Kusumawati discussed an exciting initiative to improve emergency management in Indonesia. Emergency management in Indonesia is particularly challenging – it is sometimes referred to as a “nature’s laboratory for natural disasters”, and its 250 million people share 1300 islands and 300 ethnicities. Listya and her colleagues are making great strides in unifying and improving emergency response in Indonesia, by creating One Map – synchronizing and harmonizing a geospatial picture across
Indonesia, and One Data – standardizing data collection, analysis, and depiction.

For the next presentation, we were pleased to have Myra T. Lee, former Oregon Emergency Management Director, provide a valuable historical perspective on the evolution of emergency management as a profession and as state and national agencies. Her work in the field allowed her to share with us insights into the forces that shape agency and profession, even today. The paper sessions were concluded by Tom Robertson’s presentation of the Global Educational Network for Emergency Resilience and Training Excellence (GENERATE) initiative, which seeks to make emergency management knowledge, education, and certification more accessible around the world.

The conference wrapped up with a bus tour to Johnston Ridge Observatory (JRO) at Mount St. Helens, the site of a major volcanic eruption in 1980. Through excellent lectures by JRO staff, and some realistic movie depictions of the eruption, we learned details of the surprising and devastating event, which started off with a massive landslide, followed by a lateral blast of gas and debris, then lava flows, huge slurry flows from melted glaciers, and finally volcanic ash dispersed so high in the atmosphere that in two weeks it had circumnavigated the globe!

The TIEMS USA 2015 conference was an excellent follow-up to last year’s establishment of the TIEMS USA Chapter, and a prelude to the TIEMS 2016 Annual Conference, which will be held in the USA. TIEMS wishes to thank conference sponsors, Portland State University and The National Demolition Association, the conference organizers, and especially the speakers and other attendees who made this event such an interesting and enriching opportunity to explore the challenges and opportunities for emergency management in our interconnected world.
The Nepal Earthquake of 2015

1. Background

An earthquake disaster is the most terrifying disaster in Nepal but Nepal is no limited to just earthquakes; there are also disasters such as floods, landslides, fires, avalanches, windstorms, hailstorms, lightning, glacier lake outburst floods, epidemics, droughts and so on. There have been many occurrences of earthquake disasters in Nepal that have caused heavy casualty losses and physical property damages, adversely affecting the overall development of the country. Nepal's proximity to earthquake hazards is mainly due to her young and fragile geology. Haphazard and unplanned settlements and poor construction practice are the other reasons that have made her highly vulnerable to earthquake impacts. Nepal may have encountered many earthquakes throughout history, it has the record for the greatest loss of life dating back to the 12th century. Since then Nepal has encountered 16 major earthquakes, including the recent devastating earthquake of 25 April 2015.

A 7.8 magnitude earthquake struck Nepal on 25 April 2015 (11:56am local time). The epicenter was in Barpak Village of Gorkha district which is 81 km northwest from Kathmandu (the capital city). The earthquake was followed by a number of aftershocks throughout Nepal, with one shock reaching a magnitude of 6.7 on 26 April at 12:54 am local time. In addition to a number of human casualties, Centuries-old buildings were destroyed at more than five different UNESCO World Heritage sites in the Kathmandu valley. This earthquake was the largest to hit Nepal since the 1988 Nepal earthquake and the Nepal–Bihar earthquake of 1934. This earthquake also affected some parts of India, Bangladesh, and the Tibet Autonomous Region of China. Tremors were also felt in Bhutan and Pakistan.
On 12 May 2015 at 12:50 local time another strong earthquake measuring 7.3 magnitude struck. The epicenter was 76 km northeast of Kathmandu. This area was already affected by the 25 April quake. The initial quake was followed by several aftershocks including a 5.6 magnitude. This quake toppled already weakened buildings, triggered a series of landslides, which further hampered relief efforts. This quake alone killed more than 100 people.

Another interesting phenomenon is that the movement of the tectonic plates, which triggered the massive earthquake on April 25, caused the altitude of the Kathmandu Valley to increase by 80 centimeters, according to the Department of Survey of the Government of Nepal.

There were 346 aftershocks that had a local magnitude of 4.0 or greater and were recorded right up to 6 July 2015 - many more are expected.
2. Particulars of the Earthquake

Details of the earthquake are given below in Figure 1 and 2.

**Figure 1**

<table>
<thead>
<tr>
<th><strong>2015 Nepal earthquake</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: 25 April 2015</td>
</tr>
<tr>
<td>Origin time: 11:56:26 NST</td>
</tr>
<tr>
<td>Magnitude: 7.8M$<em>{w}$ or 8.1 M$</em>{s}$</td>
</tr>
<tr>
<td>Depth: 15.0 km (9.3 mi)</td>
</tr>
<tr>
<td>Epicenter: 28.147°N 84.708°E Coordinates: 28.147°N 84.708°E</td>
</tr>
<tr>
<td>Type: Thrust</td>
</tr>
</tbody>
</table>

Avalanche in Mt. Everest where dozens of people died

![Avalanche in Mt. Everest where dozens of people died](image-url)
Areas affected

- Nepal, India, China, Bangladesh

Total damage

≈$5 billion (about 25% of GDP)[3]

Max. intensity

IX (Violent)[1]

Aftershocks

7.3Mw on 12 May at 12:51[4]
6.7Mw on 26 April at 12:54[5]
No. of aftershocks (≥4ML) = 329 (as of 24 June 2015)[6]

Casualties

8,856 dead in Nepal (officially) and 9,017 in total[7][8] 17,932 injured (officially)[7]


Figure 2

Source: USGS
Until now, this devastating earthquake caused over 8,856 deaths and over 17,932 injuries, flattened hundreds of thousands of homes, and disrupted community lives. Summary table of the losses is given below:

3. Losses due to the Earthquake (As of 6 July 2015):

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons dead</td>
<td>8,856</td>
</tr>
<tr>
<td>Missing</td>
<td>267</td>
</tr>
<tr>
<td>Injured</td>
<td>17,932</td>
</tr>
<tr>
<td>Affected Families</td>
<td>11,24,358</td>
</tr>
<tr>
<td>Displaced Families</td>
<td>6,51,675</td>
</tr>
<tr>
<td>Houses Damaged (Fully)</td>
<td>5,43,034</td>
</tr>
<tr>
<td>Houses Damaged (Partially)</td>
<td>3,10,208</td>
</tr>
<tr>
<td>Nos. of Affected Districts</td>
<td>14</td>
</tr>
<tr>
<td>Nos. of Affected Municipalities</td>
<td>71</td>
</tr>
<tr>
<td>Nos. of Affected VDCs</td>
<td>1120</td>
</tr>
</tbody>
</table>

Source: Nepal Red Cross Society

4. Scale of the Earthquake

Source: USGS
5. Damage Pattern

Mostly, old infrastructures were collapsed and/or severely damaged. Some buildings which seemed quite stable were also damaged because of the poor quality of construction materials, poor construction supervision and a lack of any supervision. Outside the Kathmandu valley, particularly in rural areas, the homes are built of mud and mortar, which easily collapsed in the earthquake. The damage pattern of the earthquake is as following:

A preliminary estimate indicates that more than 80% of homes in the 14 most affected districts were severely damaged, creating huge mounds of rubble and debris impeding life-saving operations and access to affected areas. More than 25 hospitals and more than 900 smaller facilities, predominantly village health posts which supply basic medicines and other routine services in remote communities outside the Kathmandu valley, were completely or partially damaged in the earthquake. Since the 25 April disaster, at least 2.8 million people have been displaced because their homes have been destroyed or the fear that their homes may not be safe enough to reside in should another strong aftershock occur. Many are still living in open fields in tents.

The Post-Disaster Needs Assessment (PDNA) carried out by the government estimates that $6.7 billion will be needed for reconstruction and rehabilitation. The government has already set up a National Reconstruction Fund of $2 billion for post-earthquake reconstruction and rehabilitation works.

6. Problems Associated with the Great Earthquake

The response work was highly criticized. A key complaint was of a slow and inadequate relief effort, which failed to reach in due time, many of the affected people of remote, rural and hilly areas. It was mainly due to the lack of a strong road network and transport resources, especially helicopters, and a serious bottleneck at the airport. Major delays were also caused by bureaucratic procedures and even bitter mutual accusations - both in public and private—over who was to blame and who should be in control of resources.

Thousands of people in the affected districts still lack even the most rudimentary shelters and even those who have received tarps are suffering. The monsoon season has begun and the affected people are in a difficult situation. Tarps and tents will not be able to withstand the monsoon downpour. While local governments have been working day and night to provide relief supplies to
people in the affected districts, they have found it very difficult to procure adequate supplies from the center.

7. International Cooperation and Disputes

On 26 April 2015, the Government of Nepal declared an emergency in the worst affected districts and made a request for international humanitarian support. For any government, it would be difficult to cope with such a huge disaster. Therefore, international assistance is pertinent for response and rehabilitation efforts for victims and the rebuilding of structures. It is more difficult in Nepal due to some of its inaccessible landscape and difficult terrain. Unfortunately, it risks adding a man-made calamity to a devastating natural disaster. During the course of search and rescue efforts, an American helicopter crashed near the Nepal-China border resulting in the sad demise of five American soldiers, two Nepali soldiers and five disaster victims.

Actually, relations between the Nepal government and the international community were not conducive for some time. However, it did improve as time passed. There was the problem of mutual trust. Actually, the donor communities didn’t fully trust the government; questioning its ability to deliver services while the government wasn’t happy because the donor communities want to spend the assistance money through their agents. The Nepalese government wants any assistance to be collected into the Prime Minister Relief Aid Fund and then channel to the affected areas. In other words, the government wants to adopt a one door policy.

Earthquake victims have repeatedly complained that the rice distributed in relief was “substandard and inedible”. The rice was distributed in various districts by the World Food Programme (WFP) through Nepal Red Cross Society (NRCS).

8. Set Back to the Development Process

This mega disaster will have a long-term effect on Nepal’s economy and development efforts for several years. The agriculture, industry, tourism and service sectors have been badly affected. This is a major set-back. It will take many years to revive. If the government will be efficient, effective and honest then the recovery will be fast. If not, it will take a long time and will pass through the similar situation as Haiti has faced since its own earthquake in 2010. This is high time for Nepal to learn a lesson from Haiti. Nepal must not repeat the mistakes done by the Haitian government after the 10 January 2010 earthquake.

9. Generous Aid Pledges Delight Nepal

There was a donor community meeting on 25 June 2015 in Kathmandu, Nepal. The highest-profile international donor conference ever held in the country amassed more than 300 delegates from 56 nations, development partners and the donor community. In a major boost to Nepal’s reconstruction and recovery efforts, development partners and the donor community have pledged $4.4 billion in aid during the International Conference on Nepal’s Reconstruction (2015). This has come as a huge relief to the reconstruction and recovery bid and brought cheers to the government. As a matter of fact, this amount has been beyond the expectation of the government.
10. Gaps and Challenges

It has been realized that in the past the government did not pay due attention to Disaster Risk Reduction (DRR). DRR has not been a priority for the government. The government was found too weak in preparedness at all levels. Inadequate legal instruments and poor implementation of existing legislations have also been identified as a factor for losses and damages. The government was never serious in DRR. Not only the government, but also the NGO and INGO sectors, which were entangled with mounds of paper work (preparation of reports etc.) and discussions (seminars, workshops, interactions, meetings, visits etc.). Overall, less emphasis was given to actual hardware considerations.

Resource constraints and managerial weaknesses were always there. A weak database and an absence of modern technology were other reasons for poor disaster management in Nepal.

11. Lessons Learned

It is still early to assess the total impact of the Nepal Earthquake. However, the biggest lesson Nepal learned is that the threat of earthquakes will never end. The best way to survive is to build earthquake resistant infrastructures. There should be no COMPROMISE in building earthquake resistant infrastructures. There is NO CHOICE indeed. This is a high time for Build Back Better (BBB). The nightmare and traumatic situation caused by the disaster, is still there and may remain for a prolonged time.

12. The Way Forward and Conclusions

As the impacts will forever affect landscape, people, society, and livelihoods in Nepal – there is no choice but to adapt to disasters. Living not only with earthquakes, but also with many other disasters in daily life. Yet, the Nepalese and their neighbors and friends all over the globe, have to reconcile themselves to the fact that tens of kilometers beneath where they live, the Indian and Eurasian plates will continue their tussle again and again. In that journey, they must build on the fundamental strengths they possess—social capital and community resilience. Despite a weak government and post-conflict political instability, the presence of community-based institutions at sub-national levels maintain a social cohesion and play a constructive role in managing services like drinking water, electricity, forest, and even developing infrastructure such as trail bridges. As the Nepalese move forward, they must allow competing visions, strategies, institutional cultures, resources, and perspectives to be expressed and articulated as democratic deliberation.

The fact is that tremendous challenges lie ahead for the government, semi-government, and private organizations to collectively work towards addressing the urgent needs of the nation and its people who have been severely affected by this natural calamity.

Of course, the government of Nepal should be at the forefront of any effort to rebuild Nepal responsibly and prepare the country for future earthquakes. To rebuild Nepal, the government should call on experts inside and outside the country to engage in interdisciplinary collaboration. Non-governmental organizations, the private sector, experts, intellectuals and the media can contribute in the rebuilding and disaster-preparation efforts and working collaboratively and effectively. To successfully rebuild Nepal, the government will surely need a huge amount of funds.
For the past 15 years, various disasters in the United States, both natural and manmade, have forced the emergency management sphere to evolve and expand. The broad scope of disasters that have occurred in recent years have made it clear that emergency preparedness is vital and often overlooked. As a result, various healthcare coalitions have formed to help manage and prepare our communities for the worst. These coalitions forming around the United States serve as a vital link between public and private entities to ensure adequate preparations, operating procedures and clear communication plans exist in moments of crisis.

By definition, a health care coalition is a group of healthcare organizations, public safety and public health partners that join forces for the common cause of making their communities safer, healthier and more resilient. From the 1999 West Nile outbreak, Amerithrax, the horrific terrorist attacks of 9/11, the devastation caused by Hurricane Katrina in 2005, to the most recent Ebola outbreak, our nation’s health care system is increasingly being tested and new innovative solutions to emergency preparedness are critical to meeting these emerging threats.

The approach to emergency preparedness and management in the last decade has transitioned from a public policy debate to a top priority on the national action agenda. In the aftermath of the September 11th attacks and the anthrax threats, healthcare systems focused their efforts delivering coordinated and effective care to victims of terrorism. However, Hurricane Katrina further exposed a health care infrastructure unable to manage an incident of that type and magnitude, prompting a closer examination of our nation’s state of preparedness. Thought leaders in the field focused on strengthening preparedness around the capability side and broaden their scope beyond bioterrorism towards a more all hazards approach. It was no longer enough to strengthen the capabilities of just the individual hospital we needed to build and strengthen health care coalitions as an integral component for community-wide planning for healthcare resiliency. Encouraged by the Assistant Secretary for Preparedness and Response at the U.S. Department of Health and Human Services with funding from the National Hospital and Public Health Preparedness Programs, it has become a national priority to promote the growth of healthcare coalitions and ensure that communities have the tools, training, facilities, organization and leadership to meet today’s challenges.

In 2012, the Northern Virginia Hospital Alliance and the Northwest Healthcare Resource Network based in Seattle and the MESH based in Indianapolis, IN joined to form the National Healthcare Coalition Resource Center (NHCRC). The NHCRC is a technical assistance resource for the more than 496 healthcare coalitions nationwide and an opportunity to meet and share best practices across the country.

“For Coalitions, By Coalitions,” is the watchword of the National Healthcare Coalition Resource Center (NHCRC, www.healthcarecoalitions.org). The three organizations facilitate collaboration among healthcare organizations, public health authorities and partners via an annual meeting,
monthly webinars and facilitating technical assistance on a daily basis.

The 4th National Healthcare Coalition Preparedness Conference will take place December 1-3, 2015 at the Sheraton San Diego Hotel in San Diego, CA. It brings together professionals in the fields of healthcare, public health, emergency medical services and emergency management nationwide to share best practices and learn about the implementation of healthcare coalitions and coalition activities in our communities. This year’s event will showcase training models, plans, tools, and other resources that advance the development of healthcare coalitions and promote effective coalition work in preparedness and response. The conference has grown every year since the first meeting in 2012, and we’re expecting over 800 attendees this December. The 2015 conference is being co-sponsored this year with the Veterans Emergency Management Evaluation Center (VEMEC) of the U.S. Department of Veterans Affairs and the California Association of Health Facilities.

Please join us in San Diego. Become an integral partner in our mission and a vital presence in the conversation that is transforming the effectiveness and preparedness of emergency management all over the country.

To register, for more information on the conference or our great sponsorship opportunities, please visit the conference website at http://healthcarecoalitions.org/ or call (800) 255-6524.

We look forward to welcoming you in San Diego.
IIIRR 2015 - Call for Papers
11th International Conference of the International Institute for Infrastructure Resilience and Reconstruction (I3R2)

Complex Disasters and Disaster Risk Management
August 27 - 29, 2015, Seoul, Korea
http://i3r2.uos.ac.kr/

The International Institute for Infrastructure Resilience and Reconstruction (IIIRR) is a multi-university international consortium which provides overall leadership in research, education, planning, design and implementation for natural disaster related mitigation, resilience enhancement, and reconstruction projects. The IIIRR group of interdisciplinary experts includes those who serve as the facilitators for social development, industrial and economic growth as well as environmental preservation through infrastructure development. Innovative and socially responsible projects inspired via internal synergies of the IIIRR will lead to rapid development and improved quality of life. By providing stewardship in infrastructural rebuilding efforts, the IIIRR also creates a common platform for discussion and collaboration among diverse entities such as government, the corporate sector, NGOs and universities, each having specific but diverse goals and priorities.

The 11th International Conference of The International Institute for Infrastructure Resilience and Reconstruction (I3R2) will be held in University of Seoul, from August 27 to 29. The theme of the conference is “Complex Disasters and Disaster Risk Management”. The main focus therefore is to identify, understand and respond complex disasters and recover the built environment. Speakers will provide a dynamic and topical platform and discuss a vast range of subject including emergency management, public safety, security, resilience and business continuity among others. In particular, the special sessions of Disaster Risk Management featuring high level speakers from Committee on Disaster Risk Management of the World Federation of Engineering Organizations (WFEO-CDRM), World Bank Disaster Management Specialists, and the TIEMS (The International Emergency Management Society) will give an insight in order to reduce the effects of disasters and recover the built environment rapidly and efficiently. Note that the President of The International Emergency Management Society (TIEMS), Mr K. Harald Drager will deliver a keynote speech on Forecast based Financing of Humanitarian Aid, and present an International Education, Training and Certification in the special session organized by the TIEMS.

This conference will cover issues, policies, technologies and system implementations of Disaster related areas. Topics of interest include but are not limited to the following subject categories:
- Hazard mitigation, emergency response and recovery planning
- Database and data models development
- Physical infrastructure – transportation
- Physical infrastructure – construction, materials and methods
- Integrated project management
- Environmental design of social, physical and economic infrastructure
- Disaster Resilience

**Paper Submission**
All papers should be original works, and will be subject to grading reviews in the first stage by the scientific committee. In the second stage, some selected papers will be subject to peer review. They would be published in either Scopus index journals or on-line edited book in a famous press. The confirmed journals for the selected papers are the International Journal of Disaster Resilience in the Built Environment (ISSN: 1759-5908) by Emerald Group Publishing Limited, indexed Scopus, and International Journal of Urban Sciences (ISSN: 1226-5934(Print), 2161-6779 (Online)) by Taylor & Francis Group, indexed. In addition, some selected papers will be published in the Procedia – Social and Behavioral Sciences, Elsevier (http://www.journals.elsevier.com/procedia-social-and-behavioral-sciences/).

**Important Dates**
- Revised Full Papers due by July 18, 2015.
- Special Invited Papers due by July 18, 2015 (This special paper submission is possible without abstract submission but it should be subject to peer reviews after conference for publications)

**Registration:**
- Early Registration: after July 1 and until July 31, 2015
  - Standard US$400, Student US$200
- Standard Registration: after August 1, 2015 and on-site registration.
  - Standard US$600, Student US$400

Please kindly help circulate this Call for Papers to your colleagues whom may be interested and we look forward to seeing you at I3R2 in Seoul.

Yours sincerely,
Professor. Seungjae Lee
Co-Chairman.
Department of Transportation Engineering
The University of Seoul.

Research Professor. Jooyoung Kim
Conference Manager.
Institute of Urban Sciences Integrated Urban Research Center
The University of Seoul.

I3R2 2015(http://i3r2.uos.ac.kr/)
PSCE will hold its 2nd conference of 2015 on **9-10 December** and it will be hosted by The University of Oxford, Centre for Cyber Security. Speakers will update on the decisions of WRC’15 taken in November with regard to the harmonisation of spectrum for public safety. Further key topics will discuss the status of critical broadband technologies, potential deployments of broadband with a view looking forward to understand how the advent of 5G may play a part in future interoperable broadband.

Fore more information, please contact secretariat@psc-europe.eu.
India TIEMS Chapter Update
By Kailish Gupta, kailashgupta@my.unt.edu

Update 1:

The International Emergency Management Society – India Chapter applied for registration on September 17, 2014, under the Rajasthan Public Trust Act, 1959. TIEMS – India Chapter was registered on April 9, 2015, with registration number: 30 Jaipur 2015. In India, for any financial transaction through banking channels, an application has to be made to The Income Tax Department of the Government of India for a Permanent Account Number. TIEMS – India Chapter applied and has been allotted Permanent Account Number: AACTT4729P. Subsequently, a bank account in the name of The International Emergency Management Society – India Chapter has been opened with the ICICI Bank, Bani Park Branch, Jaipur with account number: 674605600312 and IFSC Code: ICIC0006746 (for those who want to donate online). Readers are welcome to visit the TIEMS – India Chapter website www.tiems-India.org.in. The TIEMS – India Chapter founding team consists of:

Managing Trustee: Dr. Kailash Gupta, Visiting Faculty, Indian Institute of Management, Ahmedabad
Trustee: Gaurav Natani, Location Head (Key Relationship Group), ICICI Lombard GIC Ltd., Jaipur
Secretary: Neelay Srivastava, GIS Officer, Academy of Management Studies, Jaipur
Relationship Manager: Priyank Jindal, Specialist- Capacity Building, National Cyclone Risk Mitigation Project, National Institute of Disaster Management, New Delhi
Managing Committee Member: Phool Chand Choudhary, Deputy Controller, Civil Defence, Jaipur
Disasters are increasing in intensity and number and may even become worse due to climate change, living in the coastal (sea and river) areas, and haphazard urbanization. Disasters cause deaths and disabilities, affect people, disrupt businesses and gains of long-term development in a short time. World Bank has estimated that on an average direct losses from disasters go up to two percent of Indian GDP and 12% of Indian government revenue every year. United Nations Office for Coordination of Humanitarian Affairs asserts that seven dollars in disaster response are saved by investing each dollar in disaster preparedness.

For disaster preparedness and mitigation, apart from response and recovery, we need professionals educated in disaster management. Education in this context means participation in long-term education programs. In future more disaster managers in government, business and industry, and non-profit will come to the job with education in disaster management. The Workshop will explore the opportunities and challenges involved in education in disaster management globally in general and particularly in India. The focus of the Workshop is on:

- Education opportunities in disaster management at certificate, bachelors, masters, and doctoral level
- History and growth of disaster management education
- Distance and online courses
- Quality considerations and accreditation
- Research in disaster management
- Opportunities in disaster management as a career
- Challenges of employment

First Call for Papers
The TIEMS - India Chapter jointly with Disaster Mitigation and Management Center, Malaviya National Institute of Technology (deemed university), Jaipur will organize a one day Workshop during the week August 13 – 19, 2015. This is the first call of papers to block your calendar. The details of Workshop, abstract, and paper submission will be available on the TIEMS – India Chapter website www.tiems-india.org.in.

**Who Should Attend?**
The Workshop will provide an opportunity to bring together policy makers, disaster management administrators, education administrators, researchers, academicians, corporate social responsibility executives, business continuity professionals, non-profit representatives, students, parents, and others who are interested in disaster management to learn about the opportunities and challenges of education in disaster management, peer-learning, and networking to make India and the world disaster resilient.

**The International Emergency Management Society – India Chapter**
TIEMS started in 1993 is registered in Brussels, Belgium as an international, independent, and not-for-profit NGO. TIEMS is an organization of disaster and emergency management professionals (www.tiem.info). TIEMS has international network of experts that is valuable for exchanging expertise and experience, and can ensure that culturally appropriate best solutions for disaster management would be used. TIEMS has 12 Chapters in different countries and regions worldwide. Please see information on TIEMS – India Chapter in this Newsletter elsewhere and visit www.tiems-india.org.in.

**Disaster Mitigation and Management Center**
Malaviya National Institute of Technology, Jaipur
Disaster Mitigation and Management Center (DMMC) of the Malaviya National Institute of Technology (MNIT) is working towards disaster mitigation and management, as the name suggests. It is establishing an earthquake research laboratory. DMMC conducts workshops, conferences, seminars on disaster management. MNIT has a Masters in Technology program in Disaster Assessment and Mitigation. Two students of this program were trained in field research by the TIEMS – India in 2014 following Rana Plaza collapse in Saver, Bangladesh.

MNIT is one of the National Institutes of Technology (NIT) established by Ministry of Human Resource Development, Government of India (GOI). Earlier, the Institute, known as Malaviva Regional Engineering College, Jaipur was established in 1963 as a joint venture of the GOI and the Government of Rajasthan. Later in 2002, the college was given the status of NIT, and on 15 August 2007, proclaimed institute of national importance through an Act of Parliament. The Institute celebrated 50 years of teaching and excellence by organising nearly 800 events in its Golden Jubilee year. At present, in addition to the research, consultancy and developmental activities, the Institute offers UG (B. Tech.) and PG level courses (M.Tech./ M.Sc./ MBA & Ph.D.) to about 4500 students in almost all leading fields of engineering, technology, management and sciences.

**Workshop Venue**
The Workshop will be held in the MNIT campus spreads over 325 acres of lush green area in the prime location of Jaipur city.
Jaipur

Jaipur is the first planned city of India established in 1727, with roads and streets cutting at right angles. It is the capital of Rajasthan, largest state in India. According to 2011, census Jaipur had 3 million population. Jaipur with Delhi and Agra (famous for Taj Mahal - 240 km) forms the golden tourist triangle. Jaipur is rich in culture, architecture, and two UNESCO designated heritage sites. Jaipur is known as Pink City, because the old downtown painted pink can grip any visitor with admiration. With splendid fortresses, majestic palaces, tranquil temples and beautiful havelis; Jaipur turns out to be an ideal tourist destination. Other than these captivating attractions, Jaipur displays exquisite handicrafts and spectacular jewellery. These intricate works of art add life and colour to this Pink City's uniqueness. It a bustling city and a business centre with all the trappings of a modern metropolis, including a metro, but yet flavoured strongly with an age-old charm that never fails to surprise a traveller. Jaipur is the apt blend of heritage, palaces, culture and art and the flamboyance of this place can be experienced only by visiting it.

How to Reach Jaipur
Jaipur is well connected by air, rail and road, with some international flights directly to and from Jaipur. Jaipur is 260 km from Delhi. There are number of daily flights, trains, and buses between Delhi and Jaipur, apart from availability of taxi services. It is well connected with other cities of India.

How to Reach the Venue
MNIT Jaipur is situated on Jawaharlal Lal Nehru Marg about 5 km from Jaipur International Airport and is about 9 km from Jaipur Railway Junction, and 10 km from Central Bus Stand (Sindhi Camp).
Climate
In August the weather is pleasant that allows one to explore more of this place without getting scorched in the seething heat of frozen in cold. The average maximum temperature during the Workshop time is 32.4 (90.3 F) and minimum 24.7 C (76.5 F).

Contact
Dr. Kailash Gupta
Honorary Managing Trustee
The International Emergency Management Society - India Chapter
C 56 Opp. TPS, Shastri Nagar, Jaipur 302 016, India
kailashgupta@my.unt.edu
Tel.: +91 (941)404 - 7890, +91 (141) 228 - 1888, +1 (408) 543 – 9451
www.tiems-india.org.in

Update 3:

TIEMS – India Chapter Responds to Neighbouring Nepal Earthquake

Dr. Kailash Gupta, Honorary Managing Trustee, TIEMS – India Chapter felt April 25, 2015, Nepal earthquake shaking in Jaipur, India. He immediately realized it was huge and may cause widespread death and destruction. He monitored the breaking news on the media and left Jaipur a day after earthquake for Nepal. He was in Nepal for 19 days and returned on May 15 to participate in the Sphere India Disaster Preparedness Workshop. He responded to the catastrophe in many areas and was part of a relief team. He participated in number of UN Cluster Meetings and was with Indian National Disaster Response Force teams also. He was particularly deployed by Ministry of Health and Population, Government of Nepal for disaster response. He worked with Forensic Department of the Tribhuvan University Teaching Hospital, Kathmandu for mass-fatalities management.

Dr. Kailash Gupta with Prof. Pramod Shristha, Prof. of Forensic, Institute of Medical Sciences, Thribhuvan University, Kathmandu, April 30, 2015
A view of Foreign Medical Teams Cluster Meeting at Ministry of Health and Population, Kathmandu, May 14, 2015. Dr. Gupta is on extreme left

Distribution of Relief Material at Badalgaun village, Ward No. 6, Kavrepalanchwok district, May 8, 2015
Update 4:

**TIEMS - India Chapter Invited by National Institute of Disaster Management, New Delhi to Share Experiences of Nepal Earthquake in the Training Program on Earthquake Risk Mitigation and Management, May 18-22, 2015**

National Institute of Disaster Management, Ministry of Home Affairs, Government of India, New Delhi invited Dr. Kailash Gupta, Honorary Managing Trustee, TIEMS – India Chapter to share his 19 days Nepal earthquake response and relief experience with the participants of the one-week Training Program on Earthquake Risk Mitigation and Management, May 18-22, 2015, New Delhi. In the half-day interactive morning session on May 22 Dr. Gupta shared his experiences with photographs and video clips.

Update 5:

**TIEMS - India Chapter Part of Sphere India Workshop on Nepal Earthquake Experience Sharing, June 25, 2015, New Delhi**

Sphere India is a national coalition of about 44 humanitarian agencies in India, including Government of India and UN agencies. Sphere India facilitates inter agency coordination, training and capacity building, information and knowledge management and common advocacy through a collaborative process for quality and accountability in humanitarian action in India.

In the aftermath of Nepal earthquake coordination process was started by Sphere India bringing key stakeholders together. For the first time, mobile application technology i.e. WatsApp was used as a knowledge sharing platform. Sphere India organized a Nepal Learning Workshop on 25th June 2015 in New Delhi for cross learning and sharing of experience/ challenges faced by humanitarian actors in the initial phase of earthquake response for improving the future response in supporting the life of an affected population in Nepal and India.

Sphere India invited TIEMS – India Chapter to share experience of response to Nepal Earthquake. Dr. Gupta made a presentation on “Mass-fatalities Management after 2015 Nepal Earthquake” with photographs and advocated for research on use of unidentified human remains for organ transplant. He announced and invited the participants for the Workshop on Education in Disaster Management: Opportunities & Challenges, March 2016, Jaipur.

Update 6:

**TIEMS - India Chapter Meeting with Two Members of the Indian National Disaster Management Authority, New Delhi, May 22, 2015**

Dr. Kailash Gupta met Mr. Kamal Kishore and Lt Gen N C Marwah, (Retired), both Members of the Indian National Disaster Management Authority (NDMA), Ministry of Home Affairs, Government of India, New Delhi on May 22, 2015. He informed them about the TIEMS and establishment of India Chapter. Dr. Gupta explained the role of TIEMS in making India disaster resilient and sought the partnership of NDMA. Both the Members showed interest in supporting TIEMS – India Chapter activities and asked to send written specific proposals for consideration. TIEMS – India Chapter with Disaster Mitigation and Management Center, Malaviya National
Institute of Technology, Jaipur will prepare a proposal for support of the Workshop on Education in Disaster Management: Opportunities & Challenges, August 2016, Jaipur and send to NDMA.

Update 7:

**TIEMS - India Chapter Presents a Paper at the 1st Indian Institute of Management Ahmedabad International Conference on Advances in Healthcare Management Services, June 6-7, 2015**

Indian Institute of Management, Ahmedabad organized 1st International Conference on Advances in Healthcare Management Services, June 6-7, 2015. The conference was dedicated to advances in healthcare management services and brought together leading academic scientists, researchers, practitioners, healthcare administrators, care providers and policy makers to share cutting-edge research experiences, bring new ideas, debate issues and address latest developments in the domain of healthcare management. The conference’s focus was on:

- Developing insights into the techniques, opportunities, novel strategies and analytical methods for dealing with different challenges in the healthcare system.
- Sharing of research based knowledge related to healthcare management, healthcare services, healthcare quality, healthcare analytics and informatics.
- Case studies and innovative applications on the related fields.

Prof. Kailash Gupta, Honorary Managing Trustee, TIEMS – India Chapter, who is also Visiting Faculty at the Indian Institute of Management, Ahmedabad presented a paper based on his doctoral dissertation at the University of North Texas. The title of his paper is Seeking Information after the 2010 Haiti Earthquake: A Case Study in Mass-fatality Management. The paper could be seen in the Abstract Booklet on pages 61 – 64 freely downloadable from http://www.iimahd.ernet.in/ICAHMS/ICAHMS_ABSTRACT_BOOKLET.pdf.

Update 8:

**TIEMS - India Chapter participates in Indian Institute of Management Ahmedabad Colloquium on Sustainable India: Actions Needed Today – Ensuring a good quality of life for our grandchildren, April 12, 2015**
Indian Institute of Management, Ahmedabad organized a Colloquium on Sustainable India: Actions Needed Today – Ensuring a good quality of life for our grandchildren on April 12, 2015. The OVERALL THEME is India-Futures, with emphasis on WHAT DO WE DO NOW to ensure that INDIA becomes and remains SUSTAINABLE. The objective was thinking about the future of India and reminiscing about the past of IIMA. The date happened to coincide with 80th birthday of Prof. J. G. Krishnayya, who was faculty member at IIMA in late sixties and early seventies. Participation in the Colloquium was by invitation to those who were his students that time, Kailash Gupta being one of them, and selected few.
Next TIEMS Newsletter

The next TIEMS Newsletter is planned for October 2015.

TIEMS issues its electronic newsletter quarterly, and it is distributed to more than 36000 experts worldwide, with articles on global emergency and disaster management events and activities, TIEMS news, etc.

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Contact TIEMS Secretariat at r.miskuf@squaris.com or fax: +32 2 286 80 39.

TIEMS Editors are:

1. Snjezana Knezic (Proceedings), Croatia, snjezana.knezic@gradst.hr
2. Alex Fullick, (Newsletter), Canada, alex@stone-road.com
3. Samantha Ueno (Social Media), UK/Japan, samantha.ueno@gmail.com

Issue no. 25 is planned for October 2015 and contributions are welcome. Please, contact one of the editors or TIEMS Secretariat if you have news, an article of interest or like to list coming events of interest for the global emergency and disaster community or like to advertise in this issue.