TIEMS role in emergency management and disaster response and risk reduction is expressed by the TIEMS mission statement:

TIEMS is a global forum for education, certification and policy in emergency and disaster management. TIEMS is dedicated to developing and bringing the benefits of modern emergency management tools and techniques and best practice to society for a safer world. The goal is to achieve this through exchanging information on the use of innovative methods, technologies and operations to improve society’s ability to avoid, mitigate, respond to and recover from natural and technological disasters.

TIEMS provides a platform for all stakeholders within the global emergency and disaster management community to meet and network, learn about technologies and operational methods, and exchange experience on best practice, and in this way aim to influence policy makers worldwide to improve global cooperation and establish global standards within emergency and disaster management.
List of Contents: (Click on chapter title for direct access to chapter)

Introduction ................................................................. ................................................................. 2
TIEMS Achievements 2015 ................................................................. ................................................................. 3
The TIEMS International Network of Experts ................................................................. ................................................................. 4
TIEMS International Program Committee (IPC) ................................................................. ................................................................. 5
TIEMS International Group of Experts (TIGE) ................................................................. ................................................................. 5
TIEMS 2015 Member Benefits ................................................................. ................................................................. 18
TIEMS 2015 Annual Conference in Rome, Italy ................................................................. ................................................................. 20
TIEMS 2015 Award Winners ................................................................. ................................................................. 23
The Korean Society of Disaster and Security ................................................................. ................................................................. 26
TIEMS Regional Conferences and Workshops in 2015 ................................................................. ................................................................. 28
International Symposium on Emergency Medicine in Guangzhou, China, 27 - 29 March ................................................................. ................................................................. 29
TIEMS First International Workshop in Jeddah, Saudi Arabia, 7 - 9 April ................................................................. ................................................................. 33
TIEMS 2015 Workshop in Split, Croatia, 27 - 28 May ................................................................. ................................................................. 39
TIEMS USA Chapter 2015 Conference in Portland, USA, 23 - 25 June ................................................................. ................................................................. 42
TIEMS China Chapter 2015 Annual Conference in Beijing, 29 - 30 October 2015 ................................................................. ................................................................. 47
Conference of Korean Society of Disaster & Security (KSDS) and TIEMS Korea Chapter ................................................................. ................................................................. 51
International Events Supported and Endorsed by TIEMS in 2015 - 2016 ................................................................. ................................................................. 56
TIEMS Newsletters in 2015 ................................................................. ................................................................. 57
TIEMS Chapters ................................................................. ................................................................. 62
TIEMS International Education, Training and Certification Program ................................................................. ................................................................. 62
TIEMS GENERATE Project Proposal ................................................................. ................................................................. 63
TIEMS on Social Media ................................................................. ................................................................. 75
TIEMS Research and Development Projects ................................................................. ................................................................. 75
EU Projects with TIEMS Participation ................................................................. ................................................................. 76
TIEMS Library Update ................................................................. ................................................................. 79
Weekly Disaster Resilience Internet Links ................................................................. ................................................................. 79
Internship Students are Welcome in TIEMS ................................................................. ................................................................. 79
TIEMS Conferences and Workshops Planned for 2016 ................................................................. ................................................................. 79
TIEMS Web-site Update and Improvement ................................................................. ................................................................. 80
TIEMS Membership ................................................................. ................................................................. 81
TIEMS Economy and Financial Situation ................................................................. ................................................................. 81
TIEMS Members, Officers and Directors ................................................................. ................................................................. 82
TIEMS Secretariat in Brussels ................................................................. ................................................................. 84
TIEMS Asia Secretariat ................................................................. ................................................................. 85
TIEMS Future Plans ................................................................. ................................................................. 85
Introduction

TIEMS supports the UN Secretary General, Ban-Ki Moon’s saying:

“We cannot eliminate disasters, but we can mitigate risks, we can reduce damage, and we can save more lives”

In all TIEMS events and activities:

- International Conferences, Workshops and Exhibitions, focusing on different Emergency Management and Disaster Topics
- Electronic Newsletter with latest News and Articles of Interest and Monthly Messages from TIEMS President
- Research & Development Project Initiatives, Participation and Coordination of RTD Projects
- International Education, Training and Certification Programs (GENERATE)
- Global Young Scientist Network
- Local Chapter Activity to Stimulate Local Initiatives and Build a Global Expert Network where different Cultural Practises are added value
- Task Force Groups

TIEMS has Ban-Ki Moon’s saying in focus, because the world’s risk picture is alarming:

- During 1980-2013, weather-related disasters accounted worldwide for 87% of total disasters, 74% of total losses, and 61% of lives lost
- Climate Change may increase the frequency and consequences of such events
- Between 2010 and 2040 the number of people over 65 in less developed countries is expected to nearly triple
- By 2030, 60% of the world’s population will reside in cities
- 80% of the ten largest cities are at risk of being severely affected by an earthquake, and 60% are vulnerable to storm surge and tsunami waves
- Vulnerability introduced by local conditions such as poverty, government corruption, poorly planned development, and environmental degradation are adding to the risk

The cost of the disasters is increasing:

- In the 10 years since Hurricane Katrina, the world has seen an annual average of 260 major natural disasters, with average annual economic losses of US$ 211 billion, insured losses of US$ 63 billion, and 76,000 lives lost
- In 2014, 72 percent of global disaster losses were caused by extreme weather events
- In 2015 the devastating Nepal earthquake resulted in close to 9000 lives lost alone
- These figures do not include any of the many smaller-scale floods, storms, earthquakes and other localized disasters

The overall picture shows that weather related disasters are the number one disaster, and Asia is the continent most affected by disasters. These figures and conclusions should be very clear indicators of how and where to prioritize activities for Disaster Risk Reduction.
TIEMS Achievements 2015

TIEMS continued its progress very satisfactorily worldwide in 2015. Below are listed main achievements for 2015:

- TIEMS arranged 6 events, with conferences, workshops and training courses
- The TIEMS annual conference took place in Rome, Italy
- Other conferences and workshops took place in Saudi Arabia, China, Croatia and USA
- TIEMS issued four newsletters, three regular newsletters and one special issue with scientific articles from TIEMS 2015 annual conference
- Dialogues were established with new countries for establishing TIEMS chapters
- TIEMS members participated in the EU Research, Technology, and Development (RTD) project ASSET, and the HERACLES EU project was successfully funded and will start up in 2016 with TIEMS as a partner
- TIEMS International Education, Training and Certification Program was further elaborated into the GENERATE (Global Education Network for Emergency Resilience and Training Excellence) proposal
- TIEMS International Group of Experts (TIGE) was established with the members comprising all TIEMS Directors and Officers and Board members of TIEMS Chapters, a total of 68 members from 20 countries
- The TIEMS Library of papers from TIEMS conferences from 1994 to present was updated with conferences and workshops held in 2015
- Plans were developed for TIEMS 2016 conferences and workshops in USA, China, Finland, Korea and Iraq
- The TIEMS web-site was edited, updated and refreshed
- TIEMS activity on Twitter and Facebook increased
- TIEMS issued several awards for excellence in emergency and disaster management during the TIEMS Annual Conference in Rome
- The Terms of Reference for TIEMS Directors, Officers and Secretariat was updated and approved by the TIEMS Board
- New TIEMS Directors were elected to the board and officers responsible for different TIEMS activities were appointed during TIEMS meetings in Rome
- TIEMS endorsed several complimentary international events, and TIEMS President was a keynote speaker at some of these events

TIEMS 2015 achievements are further detailed below.
The TIEMS International Network of Experts

The beauty of TIEMS is its international network of experts and chapters in different countries and regions worldwide. Such a network is very valuable for exchanging expertise and experiences, and it can help ensure that the best solutions for emergency and disaster management will be used to make a safer world.

There is a growing interest in TIEMS worldwide, and TIEMS is reaching out to emergency management and disaster stakeholder groups in an increasing number of geographical areas of the world. Since emergency management and disaster response are the responsibility of national and local authorities, TIEMS seeks cooperation with these authorities in all our initiatives and arrangements, and TIEMS global and local events are supported by the local authorities, wherever the events are arranged.

TIEMS’s objective is to create a meeting place for all stakeholders in emergency and disaster management, for an open dialogue and exchange of experience and expertise, taking cultural aspects of emergency and disaster management into account. This is achieved through moving our annual conference around the world, and arranging local workshops and conferences annually in TIEMS chapter areas in cooperation with the authorities, industry and others with an interest in emergency and disaster management. This way the TIEMS international network increases and opens up an international dialogue, and also facilitates exchange of important local knowledge in emergency and disaster management. In order to reach out worldwide, TIEMS is building an international expert network, with local chapters to organize local activities, and to assure that cultural differences are understood and included in TIEMS events, education and research programs, as well as other TIEMS activities.

TIEMS chapters are self-governed entities within the TIEMS framework. Today chapters are established in Be/Ne/Lux, China, Finland, India, Iraq, Italy, Japan, Korea, Middle East and North Africa (MENA), Romania, USA and Nigeria & West Africa (NWA). Dialogue has been opened with experts in other countries, who see the benefit of the TIEMS international expert network of chapters and members, where partnership, education and research in disaster resilience is the focus.

TIEMS chapters play the main role in hosting TIEMS international events, and the TIEMS IUSA Chapter will be the host of TIEMS 2016 annual conference, in San Diego on 13th – 15th September. The event is co-organized with The Department of City of San Diego

**TIEMS International Program Committee (IPC)**

Sandro Bologna is appointed TIEMS new Chair for TIEMS International Program Committee (IPC), and he is recruiting new members to this Committee.

The Terms of Reference for the Chair and Members of the TIEMS International Program Committee asks potential members to:

*“Contribute to maintain and further improve the quality of TIEMS worldwide events with proposed topics to be covered in the events and propose keynote speakers and experts to be contacted for participation in the events”*

That requirement, combined with an evolving risk landscape makes the duty of the TIEMS International Program Committee (IPC) particularly challenging.

Any TIEMS Member that may contribute to, and address these challenges, are warmly invited to become a Member of the TIEMS International Program Committee by sending an email to the TIEMS IPC Chair; **Sandro Bologna: s.bologna@infrastrutturecritiche.it**

**TIEMS International Group of Experts (TIGE)**

TIEMS international network of members and chapters is managed by an international group of volunteers, whom are TIEMS Directors in TIEMS International Board, Officers in TIEMS Advisory Board and members of TIEMS Chapter Boards in 12 countries. They all do an excellent job for TIEMS in maintaining and developing TIEMS worldwide with international and local TIEMS activities.

This group also constitutes a large international multidisciplinary group of experts, with different educational background and various experience in the field of emergency management and disaster response. They represent a unique source of expertise and ideas, which are important assets for research and technology development activities. Below is the complete list of TIEMS International Group of Experts, with names, nationalities (20 countries), affiliations and fields of expertise.
<table>
<thead>
<tr>
<th>TIEMS UNIT</th>
<th>NO</th>
<th>NAME</th>
<th>COUNTRY</th>
<th>POSITION</th>
<th>TIEMS UNIT</th>
<th>FIELDS OF EXPERTISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIEMS Board of Directors</td>
<td>1</td>
<td>K. Harald Drager</td>
<td>Norway</td>
<td>President</td>
<td>Board of Directors</td>
<td>International organizational development, emergency, disaster and risk management and project management</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Guosheng Qu</td>
<td>China</td>
<td>Vice President</td>
<td>Board of Directors</td>
<td>Seismic risk and earthquake disaster assessment and management. Disaster preparedness and capacity buildings for USARs. Earthquake disaster information quick collection, real-time estimation and emergency response. Earthquake disaster on-site coordination and operation, Search and rescue. Multi-hazards risk assessment and management. Project management and research as well as international task force group developments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Vice President</td>
<td>China Chapter Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Country</td>
<td>Position</td>
<td>Board of Directors</td>
<td>Responsibilities</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------</td>
<td>-------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ji (Jack) Zhang</td>
<td>China</td>
<td>Treasurer</td>
<td>Board of Directors</td>
<td>IOT and Big-data applications in risk management and infrastructure protection; 3D simulation online emergency training sys; Risk management and early warning IT solution provider.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ranko Britvic</td>
<td>Croatia</td>
<td>Director International Relations</td>
<td>Board of Directors</td>
<td>Disaster Law, EU projects, Civil Protection Education and Training activities.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Snjezana Knezic</td>
<td>Croatia</td>
<td>Director</td>
<td>TIEMS Proceedings Editor in Chief</td>
<td>Board of Directors</td>
<td>Disaster management (theory and implementation); Consequences of climate change processes; Flood management; Forest fires; Risk assessment; Critical infrastructure (NOT ICT, but transportation, water supply and similar systems); Decision support systems and Information systems design for disaster and emergency management; Some aspects of business continuity related to decision making processes</td>
</tr>
<tr>
<td>7.</td>
<td>Nina Frolova</td>
<td>Russia</td>
<td>Regional Director Europe</td>
<td>Board of Directors</td>
<td>Earthquake loss assessment in emergency mode; Seismic risk assessment taking into account technological accidents; Multi-hazards risk assessment and management</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Jae-Kwon Kim</td>
<td>Korea</td>
<td>Regional Director Asia</td>
<td>Board of Directors</td>
<td>Korea Chapter Board</td>
<td>Disaster analysis &amp; assessment (geotechnical landslide &amp; tunnel, subway, railway), Civil engineering, construction project management and railroad safety, emergency, disaster, hazard and risk management</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Country</td>
<td>Position</td>
<td>Board of Directors/Chapter Board</td>
<td>Responsibilities</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Mohammed Shuaib</td>
<td>Iraq</td>
<td>Regional Director Middle East &amp; Africa, Board Member</td>
<td>Iraq Chapter Board</td>
<td>Epidemiological analysis in disasters and catastrophes, Crisis management, Disability management, Preventive measures before emergency, Administration of medical services in emergencies</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Neil Dufty</td>
<td>Australia</td>
<td>Regional Director Australia, New Zealand &amp; Oceania</td>
<td>Board of Directors</td>
<td>Early Warning System Design, Disaster Education and Engagement, Emergency Communications including Social Media, Evaluation of Disaster Management Performance, Social Resilience-building</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Country</td>
<td>Role</td>
<td>Board Members</td>
<td>Activities</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Sandro Bologna</td>
<td>Italy</td>
<td>Chair of TIEMS International Program Committee</td>
<td>Italy</td>
<td>Critical Infrastructures and Communities Resilience Evaluation and Planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Board Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Board Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Alex Fullick</td>
<td>Canada</td>
<td>TIEMS Scientific Articles Newsletter Editor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Board Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Samantha Ueno</td>
<td>UK</td>
<td>TIEMS Social Media Editor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Board Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Shakir Katea</td>
<td>Iraq</td>
<td>TIEMS Task Force Activity Officer</td>
<td>Iraq</td>
<td>Risk assessment, Incident command, Emergency response</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Board Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Country</td>
<td>Title</td>
<td>TIEMS Chapter</td>
<td>Area of Contribution</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>-----------</td>
<td>------------------</td>
<td>----------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Jean-Paul Monet</td>
<td>France</td>
<td>TIEMS Sponsorship Officer</td>
<td>USA Chapter Board</td>
<td>Incident command, CBRNe, Robotics, Industrial risks, Forest and Bushfires, Disaster aerial support</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Wenlong Yang</td>
<td>China</td>
<td>TIEMS Asia Secretariat Officer</td>
<td>USA Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Kay Goss</td>
<td>USA</td>
<td>President</td>
<td>USA Chapter Board</td>
<td>Emergency management planning, training, higher education, standards, accreditations, certifications, and technologies</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Brent Woodworth</td>
<td>USA</td>
<td>Vice President</td>
<td>USA Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Connie White</td>
<td>USA</td>
<td>Secretary</td>
<td>USA Chapter Board</td>
<td>Crisis communications, social media, decision support and education</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>James Hagen</td>
<td>USA</td>
<td>Board Member</td>
<td>USA Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Tom Stahr</td>
<td>USA</td>
<td>Board Member</td>
<td>USA Chapter Board</td>
<td>Incident Command, Emergency Response, Demolition, Demolition for Forensic Investigations, Risk Management</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Alyssa Carrier</td>
<td>USA</td>
<td>Board Member</td>
<td>USA Chapter Board</td>
<td>Hazard Mitigation, Disaster Recovery, FEMA Programs</td>
<td></td>
</tr>
<tr>
<td>TIEMS</td>
<td>Number</td>
<td>Name</td>
<td>Country</td>
<td>Position</td>
<td>Chapter Board</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------</td>
<td>------------------</td>
<td>---------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>26</td>
<td>Ayman Fadil</td>
<td>Saudi Arabia</td>
<td>President</td>
<td>Middle East &amp; North Africa Chapter Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Disasters Risk Management, Economics of Disasters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Naii Momani</td>
<td>Jordan</td>
<td>Board Member</td>
<td>Middle East &amp; North Africa Chapter Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Disasters Risk Management, Earthquakes Consequences Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Mohamad Zhagal</td>
<td>Jordan</td>
<td>Board Member</td>
<td>Middle East &amp; North Africa Chapter Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Information, Communication and Technology of Disasters Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Hassan Taibah</td>
<td>Saudi Arabia</td>
<td>Board Member</td>
<td>Middle East &amp; North Africa Chapter Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Crowd management, risk communication, social vulnerability</td>
<td></td>
</tr>
<tr>
<td>Iraq Chapter Board</td>
<td>30</td>
<td>Ayad Jasim Matar</td>
<td>Iraq</td>
<td>Board Member</td>
<td>Iraq Chapter Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Risk assessment, Incident command, Emergency response training</td>
<td></td>
</tr>
<tr>
<td>Nigeria &amp; West Africa</td>
<td>31</td>
<td>Ismail Sani</td>
<td>Nigeria</td>
<td>Board Member</td>
<td>Nigeria &amp; West Africa Chapter Board</td>
<td></td>
</tr>
<tr>
<td>Chapter Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy Chapter Board</td>
<td>32</td>
<td>Simona Cavallini</td>
<td>Italy</td>
<td>President</td>
<td>Italy Chapter Board</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Country</th>
<th>Position</th>
<th>Chapter</th>
<th>Board</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Alessandro Lazari</td>
<td>Italy</td>
<td>Secretary</td>
<td>Italy</td>
<td>Chapter Board</td>
<td>Policy and strategy on Critical Infrastructure Protection and Resilience</td>
</tr>
<tr>
<td>34</td>
<td>Vittorio Rosato</td>
<td>Italy</td>
<td>Board Member</td>
<td>Italy</td>
<td>Chapter Board</td>
<td>Risk Analysis of Critical Infrastructures. Simulation models of Critical Infrastructures</td>
</tr>
<tr>
<td>35</td>
<td>Paolo Trucco</td>
<td>Italy</td>
<td>Board Member</td>
<td>Italy</td>
<td>Chapter Board</td>
<td>Industrial Risk Analysis and Management, Network Enabled Operations, Resilience engineering</td>
</tr>
<tr>
<td>36</td>
<td>Stela Petrescu</td>
<td>Romania</td>
<td>Board Member</td>
<td>Romania</td>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Adrian Boukalov</td>
<td>Finland</td>
<td>Board Member</td>
<td>Finland</td>
<td>Chapter Board</td>
<td>ICT</td>
</tr>
<tr>
<td>38</td>
<td>Lauri Halme</td>
<td>Finland</td>
<td>President</td>
<td>Finland</td>
<td>Chapter Board</td>
<td>Specialist Lecturer: Transmission Lines and Electromagnetic Screening. International Standardization</td>
</tr>
<tr>
<td>39</td>
<td>Carmelo Di Mauro</td>
<td>BeNeLux</td>
<td>Coordinator for re-establish a chapter board</td>
<td>BeNeLux</td>
<td>Chapter Board</td>
<td>Risk Management Strategies, Resilience and Communication</td>
</tr>
<tr>
<td>TIEMS India Chapter Board</td>
<td>40.</td>
<td>Kailash Gupta</td>
<td>India</td>
<td>Managing Trustee</td>
<td>India Chapter</td>
<td>Disaster research, including quick response research; mass-fatality management; strategic management and institutional building; response and preparedness; crisis participatory governance; amateur radio communications</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----</td>
<td>---------------</td>
<td>-------</td>
<td>------------------</td>
<td>---------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>41.</td>
<td>Gaurav Natani</td>
<td>India</td>
<td>Trustee</td>
<td>India Chapter</td>
<td>Insurance planning for disaster risk reduction and management; Risk communication via social media</td>
</tr>
<tr>
<td></td>
<td>42.</td>
<td>Neelay Srivastava</td>
<td>India</td>
<td>Secretary</td>
<td>India Chapter</td>
<td>Geoinformatics Applications, ICT, DM Planning, Hazards Mapping (Flood, landslide, chemical disaster), Risk and damage/loss assessment, Earthquake Risk Reduction</td>
</tr>
<tr>
<td>TIEMS Korea Chapter Board</td>
<td>43.</td>
<td>Young Jai Lee, Jihyeob Ryu</td>
<td>Korea</td>
<td>Board Member</td>
<td>Korea Chapter Board</td>
<td>Disaster management, Business Continuity, Risk-Based Decision making</td>
</tr>
<tr>
<td></td>
<td>44.</td>
<td></td>
<td>Korea</td>
<td>Board Member</td>
<td>Korea Chapter Board</td>
<td>Early warning system design in landslide and debris flow. Disaster management. Risk assessment and management. Emergency management planning, training, education</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Country</td>
<td>Position</td>
<td>Chapter Board</td>
<td>Contributions</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>---------</td>
<td>-------------------</td>
<td>---------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Changsam Jeong</td>
<td>Korea</td>
<td>Board Member</td>
<td>Korea Chapter Board</td>
<td>Hydrology, Meteorology, Hazards Mapping (Flood), Frequency analysis, Optimization</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Dongkeun Yoon</td>
<td>Korea</td>
<td>Board Member</td>
<td>Korea Chapter Board</td>
<td>Disaster management, Disaster planning and policy, Risk assessment, Vulnerability assessment, Flood mitigation measures, Big-data application in hazard and risk analysis, Hazard mapping</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Heekyung Park</td>
<td>Korea</td>
<td>Board Member</td>
<td>Korea Chapter Board</td>
<td>Urban infrastructure &amp; Disaster management, Community Resilience, Policy &amp; Strategy decision support modelling, Integrated Disaster Management</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Namyong Park</td>
<td>Korea</td>
<td>Secretary</td>
<td>Korea Chapter Board</td>
<td>Emergency, disaster, risk management, crisis communication and decision support</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Shan Chunchang</td>
<td>China</td>
<td>President</td>
<td>China Chapter Board</td>
<td>National policy making in emergency management, emergency system and response plan making and fulfilment.</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Ning Chunlin</td>
<td>China</td>
<td>Secretary</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Xiang Yao</td>
<td>China</td>
<td>Deputy Secretary</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Country</td>
<td>Position</td>
<td>Affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------</td>
<td>---------</td>
<td>-------------------</td>
<td>--------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>Hui Ding</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>Tiemin Liu</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>Jiaqi Ji</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>Jing Li</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>Bin Yang</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>Weimin Gui</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>Huadong Guo</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>Lan Xue</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>Qiang Zhang</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>Chunlin Liu</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Xiaoning Zhang</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Country</td>
<td>Title</td>
<td>Chapter or Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>---------</td>
<td>------------------------------</td>
<td>-----------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Guanghui Yin</td>
<td>China</td>
<td>Board Member</td>
<td>China Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>Haruo Hayashi</td>
<td>Japan</td>
<td>President</td>
<td>Japan Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>Norio Maki</td>
<td>Japan</td>
<td>Secretary</td>
<td>Japan Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Yukio Fujinawa</td>
<td>Japan</td>
<td>Board Member</td>
<td>Japan Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Earthquake disaster information: earthquake early warning and earthquake prediction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>Keiko Tamura</td>
<td>Japan</td>
<td>Board Member</td>
<td>Japan Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tanaka Mikuniya</td>
<td>Japan</td>
<td>Board Member</td>
<td>Japan Chapter Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>TIEMS Secretariat</td>
<td></td>
<td>Main Contact for TIEMS</td>
<td>TIEMS Secretariat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>International Group of Experts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As a member of TIEMS, you are part of an international community of leaders and practitioners in emergency management, with diverse backgrounds in engineering, science, government, academics, military, and industry - working together to make the world a safer place. Membership affords unique opportunities to

**Learn, Serve, and Network.**

**Learn**

*From the multi-disciplinary, multi-national TIEMS community, and through special TIEMS programs*

**Serve**

*By helping TIEMS in its mission to reduce the impacts of disasters and emergencies worldwide*

**Network**

*With local and international colleagues to develop valued personal and professional relationships, and enhanced opportunities*
Learn

From the multi-disciplinary, multi-national TIEMS community, and through special TIEMS programs:

- Tap the experience, wisdom, and perspective of the global emergency management community, better preparing you for your work and potential collaborations
- Better understand technologies, regulations, organizations, and industries that are important to your work through the TIEMS multidisciplinary network
- Access the TIEMS International Education and Training Programs in Emergency and Disaster Management
- Obtain the TIEMS QIEDM Certification in International Emergency and Disaster Management
- Access the TIEMS electronic library with all papers from TIEMS conferences from 1994 to present
- Benefit from the TIEMS Student Support Program
- Receive preferential rates for TIEMS conferences and workshops worldwide, and for professional emergency and disaster management journals

Serve

By helping TIEMS in its mission to reduce the impacts of disasters and emergencies worldwide:

- Participate in TIEMS international conferences and workshops to exchange knowledge and engage in discussions of global issues and solutions
- Participate as a member of a TIEMS Task Force Groups
- Become part of the TIEMS Pool of International Experts
- Participate in a TIEMS Research, Technology, and Development projects
- Become an elected TIEMS Director or appointed TIEMS Officer in TIEMS International or in a TIEMS local chapter
Network

With local and international colleagues to develop valued personal and professional relationships, and enhanced opportunities:

- Get better acquainted with the people and organizations concerned with emergency management in your local area from academia, government, and industry
- Be welcomed into an international community with common purpose, that recognizes our interconnectedness and shared destiny as a global community
- Gain multi-cultural appreciation by making friends with and learning directly from people from all over the world
- Develop a network of professional colleagues that will open new opportunities for fulfilling work and collaboration

TIEMS 2015 Annual Conference in Rome, Italy

The International Emergency Management Society Annual Conference, Roma September 30- October 2, 2015

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

The local hosts from TIEMS Italy Chapter:

Carmelo Di Mauro
Carmelo is an environmental Engineer with more than twenty years experience in the applied science, in particular in the field of risk-based decision-making processes.

e-mail: carmelo.di-mauro@jrc.it

Vittorio Rosato
Head of the Laboratory for the Analysis and Protection of Critical Infrastructures at ENEA Casaccia Research Centre in Roma.

e-mail: vittorio.rosato@enea.it
Nowadays, communities rely on services provided by technological infrastructures. These are modern “lifeline systems” physically tying together urban areas, communities, and neighborhoods, and facilitating the growth of local, regional, and national economies. These (inter)dependent systems work together to provide essential services to modern societies which are thus strictly dependent on the capability of exploiting the capacities provided by such technological resources and assets. The use of infrastructures contributes furthermore to reshape and improve relationships between communities, government, private sectors, non-profit communities and citizens. For that reason, citizens are more and more directly involved in supporting public services and infrastructure systems (e.g. transportation, energy, education, health and care, etc.) for example through so-called open data, living labs and tech hubs. These future developments will further improve the sustainability of our societies.

On the other side, crises due to natural (or anthropic) related events might seriously endanger these infrastructures and weaken the fruitful feedbacks they supply. Disaster are thus dramatic events which, other than producing casualties, break the connections between citizens and between citizen and the community, thus producing relevant social damages.

The TIEMS Conference, organized by the TIEMS Chapter Italy and hosted by the Istituto Superiore Antincendio (i.e. Italian Firefight Academia) has been aimed at investigating what are the new challenges in the field of risk and disaster management (also in relation to infrastructure integrity and service continuity) to face old and new type of threats by bring together leading researchers, practitioners and industries from all areas of emergency management to take advantage of the presented methodologies and practical applications. In particular the Conference aimed at evaluating gaps and the constraints that need to be overcome to improve the response capacities of first responders and the resilience of communities exposed to several type of hazards and threats.

The Conference covered all aspects related to Emergency Management, Risk Analysis and Preparedness activities, either for predicting Critical Scenario or for managing hot phases. Presentation included aspects like:

- risk reduction and mitigation techniques,
- cyber-physical threats and vulnerability analysis,
- model-based and experimental assessment of safety, reliability and security;
- human and social aspects in emergency managements,
- management of complex emergency scenarios and epidemic spreading.

With more than 250 registered participants and 67 oral presentations, the organizer’s expectations were overcome. The broad variety of topics is also reflected in the topics covered by keynote speeches and the related thematic sessions:
• Dr. Meen P. Chhetri (NCDM, Nepal) - “Nepal earthquake aftermaths”;
• Ing. M Dolce (General Director of Italian Department of Civil Protection, Italy), “The Italian Dept. of Civil Protection (DPC) and its role in the Emergency Management”;
• Dr. Kim, Jae-Kwon (Korean Society of Disaster & Security), “Sewol Ferry Disaster and Emergency Response Management in Korea”;
• prof. John Hamilton (Kestrel Group, New Zealand), “Emergency Management after the Christchurch earthquake” (video interview by dr. Sonia Giovinazzi, University of Canterbury in Christchurch, NZ);
• Prof. Dirk Helbing (ETH Zurich, Switzerland), “How to Increase Systemic Resilience in an Information Rich World”;
• Dr. Nicola Perra (University of London-Greenwich Business School), “Modelling and Forecast of epidemic events”
• Dr. Daniel Stevens, (Director of Emergency Management at City of Vancouver - Canada) “Emergency Management and Resilience in the metropolitan area of Vancouver”;
• Dr. David Bamaung, (Scottish Government, Scotland, UK), “Critical Infrastructure Resilience and Public Private Collaboration”; 

Besides many invited and contributed talks, the conference participants especially enjoyed a vivid roundtable discussion titled “Lesson Learnt from the Nepal Earthquake event: what still are the main challenges to improve the disaster management and the role of emerging technologies” with the main contribution of

• Prof. Dr. Meen B. Poudyal Chhetri – President, Nepal Centre for Disaster Management
• Dr. Guosheng Qu, Dep. General Team Leader of CISAR, China
• Dr. Kailash Gupta - Honorary Managing Trustee, TIEMS India Chapter
• Jaroslav Pejcoch, T-SOFT (Crisis management, Interoperability, Security), Czech Republic
• Prof. Carl W. Taylor, Fraser Institute for Health and Risks Analytics, Princeton
• Ing. Mauro Dolce, Italian Civil Protection, Italy

Due to the proximity of the Conference to the tremendous disaster hitting Nepal on April 25, 2015, the Conference has focused the first day around that event, by hosting a number of relations documenting the event (which produced over 8.000 casualties and more than 21.000 injured) and its aftermaths. An extensive report has been provided by prof. Meen Chhetri, President of the Nepal Center for Disaster Management through a clear exposition of the facts and the management actions of several international groups called to collaborate. A similar focus has been also provided on another recent disaster occurred in New Zealand in 2009 (Christchurch earthquake) provided by the keynote of prof. John Hamilton, former Director of New Zealand Civil Protection that, through a video interview recorded by dr. Sonia Giovinazzi of the University of Canterbury (NZ) has recalled the major problems arising in the Christchurch earthquake and the following lesson learnt incorporated into the NZ Disaster Management protocols.
The Conference also hosted a special workshop co-organized by Dennis Andersson (FOI), Josine van de Ven (TNO), Maciej Szulejewski (ITTI) on “Pan EU lesson sharing crisis management: DRIVER Project” which aimed to identify what types of methods and tools can support the lesson sharing process European Member states and how such lessons can be transferred to other organisations.

Large emphasis and interest has been triggered by prof. Helbing’s keynote on the revolutionary project of providing the planet of a “nervous system” made by open and shared data collected by mobile devices which could contribute to build a digital democracy, also providing invaluable support to Emergency Management.

The main outcome of the Conference was that many approaches in the disaster risk management area are still mainly sector-specific. The concept of resilience is becoming a key reference in disaster risk management, acknowledging that arising awareness of experts and as well as laypeople that all social assets can be protected. The conference discussions also identified the strengthening of infrastructures as an important field for disaster risk reduction. Although the respective research is valuable in order to learn more about the system characteristics and potential disaster risk reduction measures, it remains often vague how society is or could be affected by their failure. In order to reduce societal effects, a broader perspective needs to be carefully evaluated since the CIs impact on the functioning of many societies are not yet fully understood. This aspect will increase its importance in the future when communities will become more “Smart” i.e. they will heavily rely on ICT technologies and other advance infrastructure services. If from one side the future development will link networks supporting and positively feeding off each other, from the other one such inter-dependency may be prone to failures that can be propagate through a number of systems and that may results in a more severe impact for the communities. In other terms, future communities will count on more efficient services but at the same time may become more vulnerable due to complexity of interconnection of sophisticated infrastructure and services. This implies the need to develop new approaches and strategies to cope with hazards and disasters.

The all TIEMS Chapter Italy would like to thank again all participants and speakers that contributed to make this event a success.

**TIEMS 2015 Award Winners**

TIEMS believes that one way to improve disaster preparedness and reduce the consequences of disasters, is to recognize and stimulate those who do excellent work within emergency and disaster management. Also, stimulating and encouraging young people to participate in this work and engage themselves in emergency and disaster management is important for the recruitment of young talents into this field. These are the motivations behind TIEMS Awards and Student Support. Today the following awards and student support are given within TIEMS:
1. Best Paper Awards at TIEMS Annual Conferences from the TIEMS Korea Chapter  
2. Best Student Paper Awards at TIEMS Annual Conferences from TIEMS China Chapter 
3. Best Paper Awards at TIEMS Annual Conference from TIEMS Japan Chapter 
4. TIEMS President Outstanding Achievement Award 
5. TIEMS Rohrmann Student Scholarship Fund 
6. Best exhibition at TIEMS annual conference

1) TIEMS Korea Chapter's President, Young-Jai Lee, announced during the TIEMS annual conference in Croatia in 2007, that the TIEMS Korea Chapter will give a monetary best paper award to the three best papers presented at the TIEMS annual conferences in the future, starting with 2008 TIEMS annual conference in Prague.

2) The TIEMS China Chapter Vice President, Guosheng Qu, announced prior to the 2011 TIEMS annual conference, that the TIEMS China Chapter will give monetary best student paper awards to the three best student papers presented at the TIEMS annual conferences in the future, starting with the 2011 TIEMS annual conference in Bucharest.

3) The TIEMS Japan Chapter Secretary, Norio Maki, announced prior to the 2013 TIEMS annual conference, that the TIEMS Japan Chapter will give monetary best paper awards to the best student papers presented at the TIEMS annual conferences in the future, starting with the 2013 TIEMS annual conference in Velaux, France.

4) The TIEMS President announced a new award at the TIEMS 2011 annual conference in Bucharest, the TIEMS President’s Outstanding Achievement Award, to be issued each year in the future. The first 2010 Award was given to Jack Zhang, for his commitment and achievement with the arrangement of the TIEMS 2010 annual conference in Beijing.

5) Bernd Rohrmann, Australia, contacted the TIEMS President during the TIEMS annual conference in Croatia in 2007, with a financial donation to establish the TIEMS Rohrmann Student Scholarship Fund, which is to help and support students to participate in TIEMS events. This Fund is supporting two students each year to participate in the TIEMS annual conference, as long as the Fund has sufficient financial means.

6) This award was established in 2013 by the TIEMS Board of Directors.
The TIEMS awards for 2015 were granted as shown below, and TIEMS would like to take the opportunity to congratulate the winners of the Paper Awards bestowed during the recent annual conference in Rome, Italy.

**TIEMS 2015 Best Student Paper Award**

*EMERGENCY MANAGEMENT WITH INTERDEPENDENCY MODELING IN THE URANIUM PROJECT*

S. Panzieri, C. Palazzo and D. Masucci

**TIEMS 2015 Best Academic Paper Award**

*INTER-ORGANISATIONAL LESSONS LEARNED: PERSPECTIVES AND CHALLENGES*

Dennis Andersson and Pär Eriksson

**TIEMS 2015 Best Practitioner Paper Award**

*INTEGRATED OPEN SERVICE PLATFORM FOR ENHANCED RISK AND EMERGENCY MANAGEMENT: THE PHAROS SOLUTION*

Javier Mulero Chaves, Ulrich Raape, Miguel Mendes, Thomas Ladoire, Spyros Pantazis, Holger Podolski, Oriol Vilalta, Wim van Setten and Roberta Campo

**TIEMS President’s Outstanding Achievement Award - 2014**

Thomas V. Robertson
The Korean Society of Disaster and Security

Status of the Organization

Purpose of Establishment
The Korean Society of Disaster and Security (KSDS) promotes the academic and technological development in the areas of disaster and safety. The purpose of the organization is to secure the social safety continuity through protection of people from disaster.

KSDS enhances stability and convenience of national infrastructure by establishing the Disaster Prevention and Safety Standards in the public and private sectors.

Legal Basis of Establishment
Civil Law code section 32 (Establishment and Permission of Non-profit Organization) scholarship, religion, charity, handcrafts and other non-profit purposed private organization or foundation can be granted a permit by a competent authority to claim itself a corporate body.

Competent Authority: Ministry of Public Safety and Security

Establishment Date: January 26th, 2007

Characteristic of the Organization
In order to protect civil life and property from disasters, the organization was founded under the name of the Korean Society of Disaster Management Standards.

In January 2007, it academically integrates with natural, social, cultural sciences to define and spread disaster management standards domestically and internationally for the purpose of disaster resilience.

Since October in 2009, we joined the International Emergency Management Society (TIEMS) as a Korea Chapter and participated in symposiums around the globe, mainly about various disasters in global society.

On September 30th 2013, the organization has been renamed as the Korean Society of Disaster and Security. We currently lead academic research activities on disaster management, disaster resilience, and risk management with experts in disaster prevention and safety fields. We have participated in disaster prevention and safety forums for twenty times, and held the Hazard Safety Training Education Forum every year.
since November 2014. By conducting academic research and consultation of setting agenda needed for disaster resilience, risk management, and disaster management, we are supporting the Ministry of Public Safety and Security about their agenda settings.

In the case of social issues such as the sinking of Sewol ferry in April 2014, we seek ways of coordinating public and private sector to encourage social consensus through disaster prevention and safety forums. When various forms of disaster, risk, and hazard occur, we open forum, special seminar, and workshop about improving law and system to devise a method for tackling down issues with industrial experts.

The organization conducts academic research activities in the field of natural disaster and social disaster including fire, maritime, and social safety and cooperates with other organizations such as the Ministry of Public Safety and Security, Korean Agency for Technology and Standards. We dedicate to society by proposing the importance of agenda setting for disaster resilience, risk management, risk management manual, and restoration system. We ensure civil life and property by increasing awareness about public safety through broadcasting.

**Status of Members**

Members:
Approximately 450 members (Main sectors of members: natural, social disaster, landslide, slope hazard, damage from storm and flood, prevention of tsunami, the ground, special disaster, disaster prevention business, BCM, earthquake, fire, gas, social safety, and other field related to disaster)

Status of board members:
60 members (Chairman: 1, Vice-chairman: 7, Personnel of general affairs: 2, Head of research institute: 1, Advisor: 2, members of board of director: 47)

**Main Businesses**

1. Establishment of the disaster prevention and safety standards and development of terminologies in the public and private sectors.
2. Research and investigation on the development of disasters, hazards, and safety technologies.
3. Publication of journals, research papers, and books regarding disaster prevention and safety management.
4. Holding research conferences, lectures, workshops, and exhibitions about disaster prevention and safety management.
5. Conducting consignment research, consultation, and academic evaluation programs regarding disaster prevention and safety management.
6. Exchange and attendance on domestic and international academic conferences.
7. The introduction of ISO disaster prevention and safety management standards.
8. Establishment and operation of the disaster prevention and safety management research institute.
9. Establishment and operation of the education and training center for disaster prevention and safety management.
10. Businesses for achieving the goal of the organization.

Major Activities

- TIEMS (The International Emergency Management Society) Korea Chapter (Korean Head Quarter)
- Emergency response and risk management research society
- Holding symposiums and publishing collection of dissertation for every year.

For interest, contact Dr. Jaekwon Kim at kor3s@daum.net
TIEMS Korea Chapter Web-site: http://www.dssms.org

TIEMS Regional Conferences and Workshops in 2015

TIEMS is a decentralized organization where the momentum of the organization comes from chapter activity, according to the slogan “Think Globally and Act Locally”. The central organization with its secretariat in Brussels supports and stimulates the chapters to establish chapter activity and arrange at least a workshop or regional annual conference every year.

During 2015, 6 TIEMS regional conference and workshops were arranged:

1. International Symposium on Emergency Medicine in Guangzhou, China, 27 - 29 March
2. TIEMS First International Workshop in Jeddah, Saudi Arabia, 7 - 9 April
3. TIEMS 2015 Workshop in Split, Croatia, 27 - 28 May
4. TIEMS USA Chapter 2015 Conference in Portland, USA, 23 - 25 June
5. TIEMS China Chapter 2015 Annual Conference in Qingdao, China, 29 – 30 October
6. Conference of Korean Society of Disaster & Security (KSDS) and TIEMS Korea Chapter

Brief reports and pictures from the events are found in the following.

**International Symposium on Emergency Medicine in Guangzhou, China, 27 - 29 March**

Supported by The International Emergency Management Society, The United Nations Development Program and the Health and Family Planning Commission of Guangdong Province, the 2015 *International Symposium on Emergency Medicine* was successfully arranged 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 who came from different countries or areas including China, America, England, Germany, Italy, Israel, Taiwan, etc. attended the conference.

The purpose of this conference was 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 was 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 Program, Prof. Guosheng Qu, Vice-President of The International Emergency Management Society (TIEMS) and Deputy Chief Captain of China International Search & Rescue Team, 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 the Vice-President of Guangdong Medical Association.
Mrs. Ran Chen, director of TEMC, explained 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 to 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 was given to 11 new members. Participants came from different countries or areas, such as China, the United States, Canada, Britain, Germany, Italy, Israel, Taiwan, etc. 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 Provinical 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 Program

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 chief captain of China International Search & Rescue Team
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
TIEMS First International Workshop in Jeddah, Saudi Arabia, 7 - 9 April

More than 200 participants gathered in King AbdulAziz University for TIEMS first Workshop in TIEMS MENA Chapter. 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 was also an important cultural exchange within TIEMS.

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.
## Program Day 1 – Tuesday 7th April 2015

### TRAINING WORKSHOPS

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Speaker</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>0930 – 1030</td>
<td>Morning Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1030 – 1300</td>
<td>Training Workshop on Principles of Health Risk Preparedness - The Strengths and Weaknesses of Hazard, Vulnerability Analysis, and Surge Capacity Management</td>
<td>CARL W. TAYLOR Founding Partner of Fraser Institute for Health Risk</td>
<td>USA</td>
</tr>
<tr>
<td>1300 – 1430</td>
<td>Lunch Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1430 – 1700</td>
<td>Training Workshop on Use of Pacific Disaster Centre’s DisasterAWARE Application (web-based), Detailing Resources Related to Natural Hazards and Infectious Diseases</td>
<td>CHRIS CHIESA Deputy Executive Director Pacific Disaster Centre</td>
<td>USA</td>
</tr>
<tr>
<td>1700 – 2100</td>
<td>Welcome Dinner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Finish Day 1

## Program Day 2 – Wednesday 8th April 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Speaker</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900 - 1000</td>
<td>Welcome and Opening Crises Management in Mega Events: Study Case of Hajj</td>
<td>Saudi Arabia Officials and University Representatives K. HARALD DRAGER President of The International Emergency Management Society - TIEMS</td>
<td>Saudi Arabia Norway</td>
</tr>
<tr>
<td>1000 - 1030</td>
<td>TIEMS – An International NGO Network Focusing on how to Establish More Disaster Resilient Societies Worldwide</td>
<td>K. HARALD DRAGER President of The International Emergency Management Society - TIEMS</td>
<td>Norway</td>
</tr>
<tr>
<td>1030 – 1100</td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker</td>
<td>Country</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>1100 – 1300</td>
<td>Parallel to main Workshop Training Workshop on Command, Control and Coordination Mechanism or Incident Management System</td>
<td>MEEN BAHADUR POUDYAL CHHETRI (President of Nepal Centre for Disaster Management (NCDM) Adjunct Professor Queensland University of Technology (QUT), Brisbane, Australia)</td>
<td>Nepal</td>
</tr>
<tr>
<td>1100 - 1130</td>
<td>Disaster Risk Management trends in the Gulf Cooperation Council (GCC) countries, with special emphasis on the Kingdom of Saudi Arabia</td>
<td>ANDREA ZANON (World Bank Regional Coordinator for Risk Management in Middle East and North Africa)</td>
<td>Italy</td>
</tr>
<tr>
<td>1130 - 1200</td>
<td>Disaster Management: Capacity Building for Disaster Preparedness</td>
<td>MARTIN THOMSEN (Lieutenant Colonel of Ministry of Defence, Danish Emergency Management Agency Chairman of the Board of Sahana Software Foundation)</td>
<td>Denmark</td>
</tr>
<tr>
<td>1200 - 1230</td>
<td>Pacific Disaster Center – Applying Information, Science and Technology for Hazard and Risk Monitoring and Early Warning</td>
<td>CHRIS CHIESA (Deputy Executive Director Pacific Disaster Centre)</td>
<td>USA</td>
</tr>
<tr>
<td>1230 - 1300</td>
<td>Analysis on the Recent Earthquake Catastrophes in China and Capacity Buildings of Disaster Preparedness in Developing Countries</td>
<td>GUOSHENG QU (Professor &amp; Deputy Director of S&amp;T Committee of the National Earthquake Response Support Service (NERSS) in China Deputy General Team Leader of China International Search and Rescue Team (CISAR) Director of Digital Disaster Mitigation and Emergency Management Research Centre, Peking University Vice President of TIEMS)</td>
<td>China</td>
</tr>
<tr>
<td>1300 – 1430</td>
<td>Lunch Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1430 - 1500</td>
<td>Academic Perspectives of Crises Management in</td>
<td>NAILL MOMANI</td>
<td>Jordan</td>
</tr>
<tr>
<td>Time</td>
<td>Session Title</td>
<td>Speaker(s)</td>
<td>Location</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
</tbody>
</table>
| 1500 - 1520 | Public Warning - A step-by-step Approach to a Multi-Channel Solution | Morten Gustavsen  
Vice President  
Unified Messaging Systems AS | Norway     |
| 1520 - 1540 | GIS-based Assessment for Critical Infrastructure Resiliency During Emergencies in the City of Jeddah, Saudi Arabia | Rifaat M. Abdalla and Salim M. Alharbi  
Department of Hydrographic Surveying, Faculty of Maritime Studies, King Abdulaziz University, Jeddah | Saudi Arabia |
| 1540 - 1600 | Volunteering in Saudi Arabia                                   | Fahed Al MuRSHED  
Volunteering Department Director, Saudi Civil Defence | Saudi Arabia |
| 1600 - 1620 | Improving the Emergency & Disaster Operations Using the IOC/GIS Smart Platform | Hassan Dennaoui  
Khatib & Alami, Beitut, Lebanon  
Salim Amoura  
IBM Riyadh, Kingdom of Saudi Arabia | Lebanon & Saudi Arabia |
| 1620 – 1640 | Emergency Volunteering in KSA: Current and Future Trend        | Naill Momani  
& Mohamad Alzaghal  
EBCCM | Jordan     |
| 1640 – 1700 | King Abdulaziz University Hospital (Kauh) Management of Flood Disaster | HASSAN A SIMBAWA  
MD consultant in emergency medicine, university hospital, Faculty of Medicine, King Abdulaziz University | Saudi Arabia |
| 1700-1720  | Saudi Red Crescent Role in Disasters Management                | Bandar Abdullah Baraheem Makk  
Red Crescent Director | Saudi Arabia |
| 1720 – 1800 | Coffee Break with QUESTIONS & ANSWERS & DISCUSSION             |                                                                            |            |
| 1900 – 2200 | Social Event                                                    |                                                                            |            |
## Program Day 3 – Thursday 9th April 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Speaker</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900 - 0930</td>
<td>European Union Civil Protection System and UN Disaster Management System Focusing on Emergency Response and Preparedness Activities</td>
<td><strong>DUSAN ZUPKA</strong>&lt;br&gt;Coordinator, Disaster Risk Management, University of Geneva, Switzerland and International UN/EU Expert in Crisis/Disaster Management</td>
<td>Slovakia</td>
</tr>
<tr>
<td>0930 - 1000</td>
<td>Use of Virtual Simulation for Emergency Preparedness</td>
<td><strong>THOMAS ROBERTSON</strong>&lt;br&gt;Principal of Thinking Teams&lt;br&gt;TIEMS Regional Director for North America</td>
<td>USA</td>
</tr>
<tr>
<td>1000 - 1030</td>
<td>Analysis, Improvement and Design of Field Hospital – The FFH Project</td>
<td><strong>GILLES DUSSERRE</strong>&lt;br&gt;Head of Risk Institute – Technical University of Ales (member of French Mines-Telecom Network) Ecole des Mines d’Alès</td>
<td>France</td>
</tr>
<tr>
<td>1030 – 1100</td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Title</td>
<td>Presenter(s)</td>
<td>Location</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>1100 - 1125</td>
<td>Interoperable Information and Communication Technology Infrastructure for Emergency Management in Kingdom of Saudi Arabia</td>
<td>Naill Momani &amp; Mohamad Alzagha EBCCM</td>
<td>Jordan</td>
</tr>
<tr>
<td>1150 – 1215</td>
<td>Investigation of Online International Learning and Certification to Improve Disaster Resilience in Kingdom of Saudi Arabia</td>
<td>Tom Robertson TIEMS Regional Director for North America K. Harald Drager TIEMS President</td>
<td>USA &amp; Norway</td>
</tr>
<tr>
<td>1215 - 1235</td>
<td>Strengthening Public Health Response: Development of an Effective Medical Surge Capacity Management Approach in the Kingdom of Saudi</td>
<td>CARL W. TAYLOR Founding Partner of Fraser Institute for Health Risk</td>
<td>USA</td>
</tr>
<tr>
<td>1235 – 1400</td>
<td>Lunch Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400 – 1530</td>
<td>Round Table Discussion of Research and Development Project Proposals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker/Institution</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1530 - 1600</td>
<td>Mass Casualty Management - Disasters Dealing with Mass Gathering such as Al Haj -Pilgrimage</td>
<td>MEEN BAHADUR POUYAL CHHETRI President of Nepal Centre for Disaster Management (NCDM) Adjunct Professor Queensland University of Technology (QUT), Brisbane, Australia</td>
<td></td>
</tr>
<tr>
<td>1600 - 1630</td>
<td>Bugs, Barriers and Borders – Challenges and Solutions to Health Risk Preparedness</td>
<td>CARL W. TAYLOR Founding Partner of Fraser Institute for Health Risk</td>
<td></td>
</tr>
<tr>
<td>1630 – 1700</td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1700 - 1800</td>
<td>QUESTION &amp; ANSWERS &amp; DISCUSSION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900 – 2200</td>
<td>Social Event</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finish of Workshop</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TIEMS 2015 Workshop in Split, Croatia, 27 - 28 May**

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 Ognedal (Petroleum Safety Authoroty, Norway), Marian Cirnat (European Maritime Safety Agency), Paul Foley (Oil Spill Response Ltd.), William Wolf (PMU EMRC), prof.dr.sc. prof. Marina Biti, 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 Ognedal of Petroleum Safety Authority in Norway (left)

An engaged audience listening and debating
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 K. 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: Brazil, Indonesia, France, Nepal, New Zealand, Norway; not so far away: California, Florida, Georgia, Maryland, Illinois, Indiana; as well as from the local Pacific Northwest.

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 Tyszkiwcz 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.

**TIEMS China Chapter 2015 Annual Conference in Beijing, 29 -30 October 2015**

The 6th Annual Conference of The International Emergency Management Society (TIEMS) China Chapter was successfully held in Beijing, China, October 29 - 30, 2015.

To implement the “Opinion of the General Office of the State Council of China on Accelerating the Development of Emergency Industry” issued on December 24, 2014, and to promote the emergency products, technologies and services from exchanges and cooperation, the TIEMS China Chapter in conjunction with the China Ministry of Industry Information Technology(MIIT) held Emergency Industry Development Conference 2015 and the Sixth Annual Conference of The International Emergency Management Society (TIEMS) China Chapter in Beijing Riverside Hotel on October 29th -30th, 2015.

The theme of the Conference is "Developing the emergency industry, Improving the capability of emergency management, Serving economy and society". Mr. Li Xiaodong, Director of Emergency Management Office of the State Council of China, Mr. Feng Fei, Vice Minister of the China Ministry of Industry Information Technology(MIIT), Mr. Zhu Yan, Deputy Secretary General of General Office of the People’s Government of Beijing Municipality, Mr. Shan Chunchang, President of TIEMS China Chapter, and Ministry of Civil Affairs Disaster Reduction Center, Ministry of Land and Resources, National Bureau of Statistics, the State intellectual Property Office, General Protection and Crisis Management of French, EU-China Project Office in China, the German International Cooperation Agency, the European Commission Humanitarian Aid and Crisis Response Department, the Greek Civil Protection
agency, as well as Beijing, Shanghai, Chongqing, Shaanxi, Hebei, Shanxi, Jiangsu, Inner Mongolia and other provinces and relevant departments and relevant guests, a total of more than 800 participants attended the Conference.

The annual Conference is made up of 1) TIEMS pre-conference training on October 27th and 28th; 2) plenary session lectures; 3) round-table forum; 4) exhibition of emergency products and services.

The Opening session of the Sixth Annual Conference of TIEMS China Chapter

Mr. Jack Zhang(right), the Treasurer of TIEMS International and VP of TIEMS China Chapter, with Mr. Gui Weimin(left), Secretary General of the Shaanxi Provincial People’s Congress, and Prof. Shan Chunchang, President of TIEMS China Chapter

Mr. Feng Fei, Vice Minister of the Ministry of Industry Information Technology (MIIT) made an opening speech in the conference. Mr. Feng said that the development of emergency industry is a major measure to protect public safety and promote steady economic growth. China must weave a public safety net, develop high-end emergency products and services, and cultivate emergency industry to a new standard with effort. Developing Emergency
industry should focus on strengthening international exchanges, actively promoting and advocating emergency industrial cooperation in "the Silk Road Economic Belt and the 21st-Century Maritime Silk Road", while shriving to consolidate the foundation of emergency industry, and formulate product catalogue of China emergency industry.

Mr. Feng Fei, Vice Minister of the Ministry of Industry Information Technology (MIIT) made opening speech in the TIEMS China Chapter 2015 annual conference

Prof. Shan Chunchang, President of TIEMS China Chapter made a keynote speech entitled "Thinking of Public Safety and Emergency Management in China". He analysed China's public security situation from two aspects: the development trend of domestic and foreign public safety and emergency management, the practice and thinking from the practice.

Mr. Qu Guosheng, VP of TIEMS International and TIEMS China Chapter, made also a keynote speech entitled "the Forefront of Development of International Emergency Management " . Professor Qu highlighted on the relevant circumstances and enlightenment in the 22nd Annual Conference of TIEMS 2015 in Rome, Italy.
Mr. Jack Zhang, Treasurer of TIEMS International and VP of TIEMS China Chapter, Chairman of Beijing Harmony Technologies Co. Ltd, attended the conference as a guest expert. He made a speech and communication at the 1st Round-table Session whose theme is "Resilience on Big Cities" in the morning of October 30th 2015.

Chairman Jack Zhang (1st from right), was invited to participate in Emergency Management Round-table Forum

VP Jack Zhang (1st from right) in Emergency Management Round-table Forum

It is worth mentioning that Beijing Harmony Technologies Co.,Ltd and Z-park Industry Alliance of Emergency Management, as co-organizers of the Conference, had been selected five papers by the Proceedings. The five papers are "Alarm Problems and Solutions existed in Production Safety Emergency Monitoring And Early Warning Of IoT", "Model of Modern Insurance Services Combining With Emergency Service in Catastrophe Rescue And Equipment Online Services", "The Thinking And Outlook On The Beijing Public Traffic Safety Intelligent Management", "low-resolution Face recognition technology in intelligent security surveillance applications sixth dimension index Design and Analysis of cloud computing platform services", "..."
and "risk-based evaluation system for disaster prevention and mitigation under the standard of smart city construction in China".

Conference of Korean Society of Disaster & Security (KSDS) and TIEMS Korea Chapter

The 2015 Annual Conference took place 26th November 2015 and was held along with “Korea International Safety & Security Expo 2015” at Korea International Exhibition Center (KINTEX) in Ilsan.

Opening speech by KSDS Chairman Dr. Jae Kwon Kim.
The KSDS 2015 Annual Conference gathered 300 participants, approx. 100 professors, 100 businessmen, 50 researchers and 50 students. Presentations ranged from topics within the medical field to technical subjects.

Professor Changsam Jeong from Induk University

Emergency & Disaster Expert, Professor/MD Soon-Joo Wang presenting the 2015 Middle East Respiratory Syndrome (MERS) outbreak in South Korea, causing death of 37 people this year.

The response of emergency medical centre in disaster: a case of MERS below.
Professor Youngjae Lee is delivering a presentation to local government officers from all over Korea.

President of Korean Standards Association Ph.D. Soo Hyun Baek presented the historical development, status and future of safety standards in South Korea.
Parallel sessions during the KSDS Annual Conference engaged a large number of government officials.

Lectures including research and technologies for road maintenance, such as Investigation and Analysis for Road cavity by use of GPR (Ground Penetrating Radar), and Road Sinkhole agreement in Seoul.
Panel debate during the parallel session of the KSDS Annual Conference.
International Events Supported and Endorsed by TIEMS in 2015 - 2016

TIEMS has endorsed the following conference where the TIEMS President also has been a keynote speaker:

1. 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/

2. E-COM Dissemination Symposium, 10th November 2015, Stockholm, Sweden
   http://ecomeu.info/

3. The China International Conference on Petroleum & Petrochemical Spill Response and Environmental Remediation (PPSRER 2015), 18 – 19 November 2015 in Tianjin, China
   http://topcoevents.com/ppsrer/index.html

   http://www.aemconference.asia/

5. Geospatial World Forum, 23 – 26 May, Rotterdam, The Netherlands

TIEMS has also supported and endorsed the following conferences and workshops:


2. 12TH INTERNATIONAL CONFERENCE ON DETECTION OF INTRUSIONS AND MALWARE & VULNERABILITY ASSESSMENT, 9 – 10 July 2015, Milan, Italy
   http://www.dimva2015.it/

3. Summit of Capacity Building of Disaster Medical Rescue Professional Team, Beijing, China, October 19 - 20, 2015


6. International Workshop on Innovation for Crisis Management (I4CM), 8 – 9 December 2015 in Berlin
   https://www.eurtd.com/driver/i4cm/berlin/index.php

7. Final conference of the POP-ALERT & TACTIC projects, 15 – 16 March 2016, Brussels, Belgium

8. 14th PSCE Biannual Conference in Brussels, 18 – 19 May 2016
TIEMS Newsletters in 2015

TIEMS issued four newsletter editions in 2015, three regular issues and a fourth issue, which was a Special Scientific Issue, which was dedicated fully to presenting papers presented at TIEMS 2015 Annual Conference in Rome in 2015. TIEMS will continue with issuing both a regular issue and a special issue dedicated to special projects or articles from conferences and workshops in the future. The newsletters will be issued three times a year.

TIEMS first newsletter issue was in October 2004, with six pages, and the growth has been considerable over the years, with two issues in December 2015, with total 226 pages with articles on global emergency and disaster management, different announcements and advertisements and TIEMS news. TIEMS newsletters are now a recognized international additional publishing channel for the international emergency management community.

In order to handle this increasing workload, TIEMS has now two volunteer newsletter editors, given responsibility for one newsletter each, Joseph Pollack for the Regular Newsletter and Alex Fullick for the Special Scientific Articles issue.

The newsletter issues in 2015 are:

1. Regular Issue no 23, March 2015
2. Regular Issue no 24, July 2015
3. Regular Issue no 25, December 2015
4. Scientific Articles Issue no 1, December 2015

All newsletters can be downloaded at: [www.tiems.info/About-TIEMS/tiems-newsletter.html](http://www.tiems.info/About-TIEMS/tiems-newsletter.html)
- Regular Issue no 23: March 2015
Regular Issue no 24:
July 2015
- Regular Issue no 25: December 2015
Scientific Articles Issue no 1: December 2015
TIEMS Chapters

TIEMS chapters are self-governed entities within the TIEMS framework. Today chapters are established in Be/Ne/Lux, China, Finland, India, Iraq, Italy, Japan, Korea, Middle East and North Africa (MENA), Romania, USA and Nigeria & West Africa (NWA).

Dialogue has been opened with experts in other countries, who see the benefit of the TIEMS international network of chapters and expert members, where partnership, education and research in disaster resilience is the focus.

Special focus will be on Latin America and Caribbean, Australia, New Zealand and Oceania in the coming year, to see if chapters can also be established in these regions. However, TIEMS members from all countries and regions are welcome to take the initiative to establish chapters in their own region/country.

TIEMS International Education, Training and Certification Program

TIEMS launched its International Education, Training and Certification Program in Emergency and Disaster Management at the end of 2011. TIEMS motivation for this program is expressed below:

- Put International Focus on the Profession of Emergency Management and Disaster Response
- Contribute to an Internationally Shared Understanding in Education, Training and Certification in Emergency Management and Disaster Response
- Contribute to Education in Emergency Management and Disaster Response in order to Promote the State of the Art in Technology, Systems and Methods Available
- Contribute to Education at all Levels, from Policy Documents to Courses in Primary School Education
- Establish a TIEMS Certification of Qualifications in International Emergency Management and Disaster Response (TIEMS QIEDM)
- Contribute to Capacity Building in Countries where little or no Education and Training in this field is available
- Recruit International Experts in Emergency Management and Disaster Response to TIEMS Pool of International Teachers and Instructors

TIEMS slogan for this effort: *Preparedness Saves Lives!*

During 2015 the GENERATE RTD Proposal was launched, expressing how TIEMS plans to develop its International Education and Training Programs the coming years. The highlights of the proposal is described in the following. GENERATE stands for “Global Educational Network for Emergency Resilience and Training Excellence”.
TIEMS GENERATE Project Proposal

Project Background

The world is increasingly vulnerable to emergencies, because of climate change, population growth and aging, 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.

Emergency resilience is the ability and capacity to respond to disasters and emergencies in a way that:

- Minimizes human suffering and loss of life and property
- Efficiently returns society to normal
- Uses lessons learned to better handle future disasters and emergencies

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 enough 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.

Nations across the globe must prepare themselves to respond to emergencies arising from changes in climate and demographics, as well as evolving international tensions (Drager & Robertson, 2014). Although each nation faces emergency management challenges that are unique to its geography and society, they can improve their preparedness by tapping into the knowledge and experience of the international emergency management community. The reasons for this include:

- Nations have much to learn from each other. Emergencies are, fortunately, rare events. However, this means an individual nation may have limited experience with some of the emergencies it must prepare for. Each nation can therefore improve their preparedness by accessing international experience
- Emergency management professionals around the world have developed successful approaches to preparing for and responding to emergencies, including development of individual professionals. This international experience can provide a useful benchmark of standards, to guide advancement of the emergency management profession across the world
In addition to improving local capability, sharing emergency management knowledge and standards across nations will make it easier for nations to work together in preparing for and responding to emergencies. International collaboration is becoming increasingly important, not only to allow effective humanitarian aid, but also because our world is increasingly interdependent economically, and connected through information, energy, and transportation infrastructures.

Today there are organizations such as the United Nations, the World Bank, and the International Federation of Red Cross and Red Crescent Societies that support international cooperation in emergency management. Though these organizations support exchange of knowledge and best practices, cross-national insights are often limited to the relatively few individuals who directly participate in international meetings and other forums. And, at present there are no international standards for emergency management professionals. Our global community would benefit if it were possible for any individual in any country to have improved access to the knowledge and experience of the global emergency management community. And development of international professional and academic standards would greatly help each nation guide the development of its own professional emergency management community.

**International Educational Partners**

TIEMS invites GENERATE to be developed through the cooperation of multiple partners, and invitations to participate are sent to leading universities and educational institutions around the world including global institutions such as:

1. World Bank
2. US Federal Emergency Management Institute
3. Humanitarian Leadership Academy
4. UN OCHA
5. EU Civil Protection Unit
6. International Civil Defence Organization
7. Etc.

**GENERATE Goals**

The goal of the Global Educational Network for Emergency Resilience and Training Excellence (GENERATE) is to improve access to the world’s collective knowledge and experience in emergency management, by

- Developing an internationally shared understanding of emergency management elements, qualifications, and terminology
- Helping students find and connect with useful live and online educational resources
• Making increasing amounts of emergency management knowledge available online, especially to vulnerable societies
• Providing a platform to share critical lessons learned from disasters and emergencies.

Project Outputs

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
• A mobile application that provides convenient access to GENERATE directories, knowledge bases, and community of practice

The GENERATE concept is summarized in the figure below:
Project Approach

We propose the GENERATE Project begin with a workshop at which GENERATE participants will review and finalize plans and coordinate their activities. Over the subsequent year, the project team and partners will

1. Identify and catalogue University/Training institutions worldwide with degrees and certification in emergency management
2. Establish criteria for certification of TIEMS Educational Centres of Excellence, and for certification of individuals with the TIEMS Qualifications in International Emergency and Disaster Management (QIEDM) certification
3. Develop GENERATE software modules to
   a. Provide students online access to a catalogue of Universities/Training Institutions
   b. Allow Universities/Training Institutions to enter information into the GENERATE system and Centres of Excellence to create portals into their online educational resources
   c. Support Community of Practise communication and collaboration
   d. Allow students and practitioners to learn and review emergency management basics and specializations, take practice and final examinations, and apply for and obtain TIEMS QIEDM certification
   e. Provide a structured repository of lessons learned in international emergency management
   f. Provide a directory and access to GENERATE online services through the TIEMS public website
4. Develop the first certified TIEMS Educational Centres of Excellence, and establish them as an educational resource on the GENERATE network
5. Recruit a group of students from different regions and backgrounds to use as testers of the GENERATE system, helping us refine the design and eventually earning them QIEDM certification

Near the end of the year-long project we will hold an end-of-project workshop, to present project results, including documentation and recommendations for administrative and business models for growth and sustainment of the GENERATE network and system.

Software development will be performed in an incremental fashion wherever possible, developing, testing, and demonstrating GENERATE modules in cycles throughout the year of the project. Participation by all partners and stakeholders throughout these cycles will insure that project resources are prioritized toward the most useful possible result.

In the course of the development activities described above, the project will address a number of key research questions, including:
What are the critical elements of knowledge needed by emergency management personnel, of various roles and levels? How does the knowledge needed by emergency management personnel in a specific area compare to that needed in other parts of the world?

Can the qualifications of emergency management personnel be tested and certified reliably and efficiently using online methods?

Where does critical emergency management knowledge reside, across the world, and how can it be efficiently accessed?

Can we design an effective online system to access critical emergency management knowledge worldwide and teach it to a distributed network of students, across the world?

How effective would such a system be, in comparison to alternatives?

What next steps would need to be taken to further the goals of international assessment and certification, and collecting and making widely available international emergency management knowledge?

The GENERATE System

The GENERATE Software System comprises of seven modules as shown in the following picture:
These modules are described as follows:

1. TIEMS Universities/Training Institutions Catalogue Module – this module is a searchable database of educational resources, organized according to a common classification framework that allows resources to be compared to each other, and to the needs of the student

2. TIEMS International Centre of Excellence Module – this module provides a portal into on-line resources available at Centres of excellence. Tools are provided to support the Centres in making their resources available according to the GENERATE classification framework

3. TIEMS Web-Site GENERATE Core Module – this module builds on the TIEMS website to create the core of the GENERATE online system. It provides entry into the GENERATE system, and directs users to its various services

4. TIEMS Community of Practise COP Module – this module enables creation of communities and rich communication across a spectrum of emergency management topics and interest groups. Tools include a directory of members and their interests/affiliations, and the ability to establish ad hoc online discussion and collaboration

5. TIEMS Wikipedia of Lessons Learned Module – this module captures experiences and lessons learned of emergency management personnel. The wiki structure makes it easy to contribute while the memory is fresh. The wiki will contain several levels of refinement, to capture “raw” observations quickly, then to allow refinement with more time and perspective

6. TIEMS Mobile Application Module – this is a mobile application module reachable over a smart phone

7. TIEMS On-line Education, Exam and Certification module, detailed in the following:
a. Input Module for Education Courses On-Line from Participating Universities – this module provides a portal to online courses, made available worldwide through the GENERATE system. The GENERATE classification system will make it easy to identify courses relevant to particular students

b. On-Line Courses in Emergency Management Module – this module will support the creation of special-purpose online GENERATE courses that will be widely available and useful, even to students who would have difficulty accessing or understanding existing university courses. These courses would be introductory in nature, or address very specific topics

c. TIEMS On-Line Education, Exam and Certification Module – this module incorporates a model of competencies in international emergency management, and a certification process that helps raise the level of competency in emergency management throughout the global community. The module includes common international elements, as well as specializations for particular regions, cultures, and emergency management roles

d. Request for Certification and Granting TIEMS QIEDM Certification Module – this module allows anyone to apply for certification, and it guides them through the process

e. Pre-Exam Preparing for TIEMS QIEDM Certification Exam – this module allows certification applicants to prepare for the final certification exam, by identifying topics and weaknesses for which applicants may need further study or experience
f. On-Line Exam Module for TIEMS QIEDM Certification – this module provides the final certification exam

Organization of the Project

The GENERATE project will be organized as shown in the diagram below. The project management team, led by TIEMS, will work under the guidance of the Project Board and different Advisory Boards, which will assure alignment with sponsor and partner priorities. In serving as project manager, TIEMS will draw on 23 years’ experience developing excellence in emergency management and disaster response, through worldwide conferences and workshops, education curricula, training workshops, and establishing a network of experts in international emergency management education.

Proposed Project Work Plan

The work of the proposed project will be organized into 7 work packages, as summarized below:
WP0 = Contract signing, preparatory work and workshop = PREPARATIONS & WORKSHOP

WP1 = Project Management = MANAGEMENT & CONTROL

WP2 = Final system structure and detailed design = STRUCTURE & DESIGN

WP3 = Survey universities and establish GENERATE network = UNIVERSITY NETWORK

WP4 = Develop GENERATE Software Module = GENERATE SYSTEM

WP5 = Establish Student group for QIEDM certification testing = STUDENT TESTS

WP6 = Establish GENERATE Administrative System = GENERATE ADMINISTRATION

WP7 = Project documentation and final workshop = DOCUMENTATION & WORKSHOP

**GENERATE Status**

The below logo symbols the project and the following TIEMS team has been involved in the development and sponsored the GENERATE Project development so far on a voluntary basis:
In the first development phase of GENERATE it has been focused on concretization of the TIEMS QIEDM Certification framework and conclusions are highlighted in the following.

The application requirements for TIEMS QIEDM Certification are:

**TIEMS QIEDM CERTIFICATION APPLICATION REQUIREMENTS**

- Being Certified in Emergency Management/Disaster Response or Similar by Another Certifying Institution Approved by TIEMS
- Document a Practical or Theoretical Background in Emergency and Disaster Management for a minimum of 4 years
  
**OR**

- Provide a Letter of Recommendation to TIEMS QIEDM Program from a Current or Former Employer

TIEMS QIEDM Certification shall be available to all experts working in emergency Management and Disaster Response.

The TIEMS QIEDM Certification Objectives concerning availability and focus, etc. are as follows:
QIEDM CERTIFICATION OBJECTIVES

- Availability Globally
- Web-based On-Line
- Low Cost
- A Common Understanding of Emergency and Disaster Management
- The Common Language is English, but local language adaption in TIEMS Chapter Countries
- Lessons Learned Focus
- State-of-the-Art and Up-to-Date

Competence requirements, when taking QIEDM Certification exam:

1. Global Overview of International Emergency and Disaster Management (EDM)
2. International Emergency and Disaster Management Definitions, Tools and Techniques
3. International Emergency and Disaster Management Planning and Operations
4. International Emergency and Disaster Management Research and Development Worldwide
5. International Emergency and Disaster Management Miscellaneous Issues of Importance

Examples follow:

Global Overview of International Emergency and Disaster Management (EDM)

<table>
<thead>
<tr>
<th></th>
<th>EDM Global Differences and References</th>
<th>International EDM Organizations</th>
<th>National EDM Organizations of Importance</th>
<th>International Humanitarian Aid Organizations</th>
<th>EDM Stakeholder Categories</th>
<th>Natural Disasters Types</th>
<th>Non-Natural Disasters</th>
<th>Security Issues</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA/Canada</td>
<td>UN OCHA</td>
<td>FEMA USA</td>
<td>Red Cross</td>
<td>First Responders</td>
<td>Earthquakes</td>
<td>Terrorism</td>
<td>World Disaster Report</td>
<td>etc.</td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td>EU Civil Protection</td>
<td>Homeland Security USA</td>
<td>etc.</td>
<td>etc.</td>
<td>Tsunamis</td>
<td>Transport Accidents</td>
<td>etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU/Europe</td>
<td>TIEMS</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia/New Zealand</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>Droughts/Floods</td>
<td>etc.</td>
<td>etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>KDIO</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>Volcanic Eruptions</td>
<td>etc.</td>
<td>etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>UNISDR</td>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
<td>Extreme Temperatures</td>
<td>etc.</td>
<td>etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Examples follow:
### The way towards TIEMS QIEDM certification.

- Re-Certification each 3rd Year
- Exam for Qualification in International Emergency and Disaster Management (QIEDM) Certified Professional
- Test Exam for Professionals (becoming QIEDM certified)
- Certification Schemes Worldwide for Emergency/Disaster Management of Service to be Approved for Qualifications for TIEMS QIEDM Certification
- Courses Offered for Preparing for TIEMS QIEDM Certification

### PREPARING FOR TIEMS QIEDM CERTIFICATION EXAM

- CEM by IEMW
- Others?

- Free Courses Offered On-Line
- Courses Offered by GENERATE Education Institution Partners On-Line
- Courses to be Developed by TIEMS and GENERATE Partners to be offered On-Line

### The type of examination questions.

**QIEDM Exam**

- Essay questions, e.g.,
  
  "Describe how the United Nations has worked to bring about a reduction in global disaster risk"

- Fill-in-the-blank questions, e.g.,
  
  "In May 1994, UN member states met at the World Conference on Natural Disaster Reduction in __________, Japan, to assess the progress attained by the IDNDR. At this meeting they developed the _________ Strategy and Plan of Action for a Safe World"

- Multiple choice questions, e.g.,
  
  "Which of the following UN Agencies typically coordinates the response to major disasters:"
  - UNHCR
  - UNOCHA
  - WFP
  - UNDP"
Summing up the GENERATE Project conclusions.

**GENERATE PROJECT CONCLUSIONS**

- Interconnection makes Resilience to Emergencies to an International Problem
- Interconnections can make us more Resilient if we share Knowledge and the latest Lessons Learned and make this information more accessible
- On-Line International Education and Certification will Promote sharing Best Practices and Collaboration
- GENERATE will realize these Goals by Creating a Networked Coalition
- TIEMS looks forward to Ideas and Participation
- TIEMS QIEDM Certification is a certification for all working within emergency management, for ex. practitioners, academics, medical personnel, authority personnel, etc.
- TIEMS QIEDM exams includes questions in the prep course and exam about a comparison between the way emergency management is done nationally in the country of the candidate, with the global trend and way of doing it. This is what TIEMS chapters will add into the exam and the prep course. This will be a two way learning, and capacity building

The GENERATE system will be used by TIEMS in the HERACLES project where TIEMS is one of the partners.

TIEMS is welcoming further support and cooperation to develop the GENERATE Project potential to its fullest, so if this is of interest, please, contact TIEMS Secretariat or TIEMS President.

**TIEMS on Social Media**

TIEMS has been active on Twitter and Facebook since 2011, and TIEMS has appointed Samantha Ueno and Connie White as responsible for editing TIEMS social media publications.

The Twitter account has now reached 1067 tweets and has 281 followers, and the activity level is high with good participation from many international actors. The TIEMS Facebook page has pictures and reports from the latest TIEMS events, and both Twitter and Facebook will be regularly used in future TIEMS events.

Also other social media will be explored for active participation of TIEMS in the future.

**TIEMS Research and Development Projects**

TIEMS members constitute a large international multidisciplinary group of experts, with different educational background and various experiences in the field of emergency and disaster management. They represent a unique source of expertise and ideas, which is an important asset for research and development activities. TIEMS has therefore established a
Research and Technology Development (RTD) service for its members, which operates as follows

1. Based on TIEMS members ideas, propose RTD projects which can improve methods, systems, operations and technology in emergency and disaster management
2. Initiate RTD Consortiums where TIEMS members can participate in RTD proposals
3. Inform members of established RTD Consortiums and RTD activity where TIEMS members can participate

**EU Projects with TIEMS Participation**

TIEMS participated in the NARTUS EU project, 2006 – 2009, with the responsibility for consensus building and establishing the Public Safety Communication Europe Forum.

http://www.psc-europe.eu/

TIEMS is a partner in the EU Project ASSET (Action Plan on Science in Society Related Issues in Epidemics and Total Pandemics), see web-site.

One of TIEMS tasks in the project is to establish a High Level Policy Forum, recruit members to the Forum and get the Forum operational and addressing Epidemic and Pandemic issues.

Introduction of ASSET HLPF.

The first Forum meeting was held in Brussels 12th March 2015, see

Minutes from the first Meeting.

The second Forum meeting was held in Copenhagen 15th January 2016, see

Minutes of the second Meeting
The third meeting in ASSET HLPF is planned for Brussels March - April 2017. For interest becoming a member of ASSET HLPF, please, contact, TIEMS President.

TIEMS is now also a partner in a new EU Project: HERACLES.

The HERACLES EU PROJECT

HERACLES main objective is to design, validate and promote responsive systems/solutions for effective resilience of Cultural Heritage (CH) against climate change effects, considering as a mandatory premise an holistic, multidisciplinary approach through the involvement of different expertise (end-users, industry/SMEs, scientists, conservators/restorators and social experts, decision, and policy makers).

This will be operationally pursued with the development of a system exploiting an ICT platform able to collect and integrate multisource information in order to effectively provide complete and updated situational awareness and support decision for innovative measurements improving CH resilience, including new solutions for maintenance and conservation.

HERACLES system will be designed and developed by accounting for the economic sustainability and future acceptance by the market and for the social and economic impact for public and local communities while respecting the integrity of CH and the value it hold for communities.

The HERACLES EU PROJECT Case Study Cites

HERACLES Case Study Sites

- Medieval Town of GUBBIO, Italy
- Old harbour and Venetian fortress, HERAKLION, Crete, Greece
- Knossos Palace HERAKLION, Crete, Greece
TIEMS has also been/is a member of the following EU projects Advisory Boards or member of the end user group of the following EU projects:

- ACRIMAS;  [www.acrimas.eu/](http://www.acrimas.eu/)
- Opti-Alert;  [www.opti-alert.eu/](http://www.opti-alert.eu/)
- CRISMA;  [www.crismaproject.eu/](http://www.crismaproject.eu/)
- Archimedes;  [www.archimedes-eu.eu/](http://www.archimedes-eu.eu/)
- DRIVER;  [www.driver-project.eu/](http://www.driver-project.eu/)
- TAWARA_RTM;  [www.caen.it/csite/DisplaySupportData.jsp?Type=News&Id=47&home=y](http://www.caen.it/csite/DisplaySupportData.jsp?Type=News&Id=47&home=y)
- PHAROS;  [www.pharos-fp7.eu/](http://www.pharos-fp7.eu/)
- RESCUER;  [www.rescuer-project.org/](http://www.rescuer-project.org/)

TIEMS member experts and end users are valuable assets for EU projects, and also TIEMS worldwide conferences and workshops every year are efficient ways to disseminate results from EU projects. Therefore, TIEMS is invited to participate as a Consortium partner in many EU project proposals. TIEMS is also a partner in new proposals for the next security call in Horizon 2020 with deadline August 2016.

TIEMS will encourage and stimulate more participation in RTD project proposals in the coming years, and will monitor research calls from EU and notify TIEMS members in order to initiate RTD participation.

Other research funding opportunities worldwide will also be explored in 2016.
TIEMS Library Update

TIEMS Library was opened at the end of 2012 containing most papers presented at TIEMS annual conferences from 1994 to present, as well as papers and posters from some of the workshops and conferences arranged by TIEMS. The address of the TIEMS Library is:

http://www.tiems.info/About-TIEMS/tiems-library.html

User name and Password can be obtained by contacting TIEMS Secretariat.

The TIEMS Library was updated with papers and posters from TIEMS conferences and workshop in 2015.

Weekly Disaster Resilience Internet Links

The TIEMS Regional Director for Australia, New Zealand and Oceania, Neil Dufty, posts every week a list of disaster resilience internet links to relevant information around the world. The posts of the week ending 19th February 2016, can be found at:

http://tiems.info/images/this%20week%20in%20disaster%20resilience%2019%20Feb%202016.pdf

Internship Students are Welcome in TIEMS

TIEMS had one student from Ecole des Mines in France, Thomas Achéritogaray, working part-time for TIEMS in Oslo during his 10 weeks internship in 2013, and another student, Hugo Barrellon, also worked for 10 weeks in Oslo in 2014. Both internship periods were shared between TIEMS and Ansur Technologies AS, an Oslo based company within research, designs and supplies innovative solutions for satellite and mobile wireless communications.

These internships were very good experiences, and we welcome other students from all over the world to contact us about doing an internship at TIEMS.

TIEMS Conferences and Workshops Planned for 2016

The TIEMS worldwide program planned for 2016 includes at present the following 6 events:

1. TIEMS 2016 Annual Conference in San Diego, USA, 13 - 15 September
3. TIEMS Finland Chapter 2016 Conference, dates TBD
4. TIEMS 2016 International Conference on Emergency Medicine, Shaoshan China, dates TBD
5. TIEMS China Chapter 2016 Annual Conference, Zuhai, China, dates TBD
6. TIEMS Korea Chapter 2016 Annual Conference in Korea, dates TBD

Other events are in planning worldwide in cooperation with TIEMS Chapters and other partners.

**TIEMS Web-site Update and Improvement**

The TIEMS web-site has been edited and updated during 2015. It now appears as shown below.

A new web-site is planned being developed in 2016.
TIEMS Membership

Membership, donation packages and journals available through TIEMS membership are as follows:

1. Standard Member
2. Standard Member "Transition Economy Country"
3. Professional Certified Member
4. Student Member
5. Institutional Member
6. Platinum Donation
7. Gold Donation
8. Silver Donation
9. Bronze Donation
11. International Journal of Risk Assessment and Management

In addition, local chapter membership is available, which is recruited and governed by each chapter, within TIEMS guidelines.

Details on TIEMS membership can be found at:

http://tiems.info/About-TIEMS/membership.html

TIEMS Economy and Financial Situation

The TIEMS economy and financial situation is a challenge as with many other non-profit and international NGO’s. However, volunteers working for TIEMS around the world in TIEMS chapters, with recruiting members and sponsors and arranging events have made it possible to establish and maintain a TIEMS Secretariat in Brussels, which started its operation at the end of 2010, and has now been in operation more than 5 years. Having professional administration and legal advice at a permanent registered address for TIEMS has proven worthwhile and beneficial, and is a priority among the different cost items to be financed by the society.

TIEMS membership is increasing, both personal and institutional members. TIEMS chapters arranging events around the world adds value and income by recruiting new members and local sponsors, improving the overall the economic situation of TIEMS. TIEMS by-laws allow different categories of membership, which we expect will further increase recruitment of new
TIEMS members, both locally in chapters, and also professional certified members according to the TIEMS QIEDM certification service.

The TIEMS financial situation has also improved with TIEMS participating in successfully funded RTD proposals. This is also a good benefit for TIEMS members, for whom it is an opportunity to be a TIEMS team member in performing the projects. TIEMS has therefore prioritized increased activity by TIEMS members in this area. As TIEMS increases its scientific profile and serious work worldwide, we expect to attract additional sponsors and supporters, which will have a positive impact on TIEMS economical and financial situation.

**TIEMS Members, Officers and Directors**

The main assets of TIEMS are its members, officers, directors, and TIEMS Chapter board members (See TIGE), their expertise and the voluntary work they do in order to develop and promote the society worldwide. I therefore like to thank them all for the work they do and the loyalty to TIEMS and its mission. Without them and their efforts, TIEMS could not exist. Members of TIEMS Board of Directors are elected at the Annual General Meeting (AGM), which takes place at the TIEMS Annual Conference. TIEMS members make up the AGM, and they make the decisions by their voting in the AGM. At the AGM in Rome, Italy, new board members were elected for a period of three years and TIEMS Board has now the following board members with positions mentioned below:

- K. Harald Drager, TIEMS President (Norway)
- Guosheng Qu, Vice President (China)
- Jack (Ji) Zhang, Treasurer (China)
- Jaroslav Pejcoch, Secretary and Chair of TIEMS Advisory Board (Czech Republic)
- Ranko Britvic, Director for International Relations (Croatia)
- Snjezana Knezic, Director for Chapters and Membership (Croatia)
- Nina I. Frolova, Regional Director for Europe (Russia)
- Thomas Robertson, Regional Director for North America (USA)
- Neil Dufty, Regional Director for Australia, New Zealand & Oceania (Australia)
- Jae Kwon Kim, Regional Director for Asia (Korea)
- Mohammed Shuaib, Regional Director for Middle East and Africa (Iraq)

Introduction and pictures of the Board of Directors are shown below:
The Board appoints officers each year for various tasks, and the following officers are appointed for the functions described below for one year; they are also members of the TIEMS Advisory Board:
Sandro Bologna, Chair of TIEMS International Program Committee (Italy)
Meen Poudyal Chhetri, Chair of TIEMS Paper Review Committee (Nepal)
Wenlong Yang, TIEMS Asia Secretariat Officer (China)
Joseph Pollack, TIEMS Editor, Regular Newsletter (USA)
Alex Fullick, TIEMS Editor, Special Issue Newsletter (Canada)
Samantha Ueno, TIEMS Editor, Social Media (UK)
Shakir Katea, TIEMS Task Force Activity Officer (Iraq)
Jean – Paul Monet, TIEMS Sponsorship Officer (France)

There are several board positions open for election each year, and all TIEMS members can stand for election. I encourage all TIEMS members to consider taking on a position either as a board member or be appointed officer for special tasks. TIEMS needs active and dedicated directors and officers, so I encourage TIEMS members to use the opportunity in San Diego, USA, this year to suggest their candidacy for either a director or officer position.

**TIEMS Secretariat in Brussels**

The TIEMS Secretariat in Brussels, Belgium started its operation for TIEMS 1st November 2010. Most administrative TIEMS activities have been transferred to the Secretariat and the board
members have more time to concentrate on the long term planning of the development of TIEMS. The Secretariat office can be found at the following address and phone, fax and e-mails:

**TIEMS Secretariat**

*Rue Des Deux Eglises 39, 1000 Brussels, Belgium*

*Phone: +32 2286 8038*

*Fax: +32 2286 8039*

*E-mails:*

*secretariat@tiems.info*

**TIEMS Asia Secretariat**

The activity level has increased considerably in TIEMS China Chapter, and the TIEMS Board approved at the end of 2013 the establishment of a TIEMS Asia Secretariat in Beijing. First of all, it will take care of the increased TIEMS activity in China, with workshops and conferences already planned in 2016. In addition, it will also serve as the liaison with the International Emergency Industry Alliance on Technological Innovation and Strategy, see:


The TIEMS Asia Secretariat is also prepared to assist other chapters in Asia and worldwide with professional administrative and expert assistance in emergency management and disaster response.

**TIEMS Future Plans**

As can be seen from the report above, 2015 was another very active and expansive year for TIEMS, but also an important year with a major effort towards increased professionalism and further spread of the society’s activities worldwide.

This progress is in line with the TIEMS 5 year plan agreed by the Board of Directors at the end of 2012, which set concrete goals. This sends a message to TIEMS members and the international emergency management community that TIEMS has a promising future, in which all with interest in emergency and disaster management can participate, and work together towards the TIEMS goal of a safer world.

A dialogue has been opened with quite a few countries for establishing chapters. The TIEMS slogan of “Think Globally and Act Locally” is demonstrated in a very concrete way with the
establishment of TIEMS chapters. TIEMS is a decentralized organization, where the driving force and momentum of the organization is with its chapters. The activity level in the established chapters is clear proof of this. The TIEMS Board of Directors and Officers and TIEMS Secretariat are the core of TIEMS, supporting the chapters and establishing a solid framework and support structure from which all chapters can benefit.

The increasing number of chapters has allowed TIEMS to continue to maintain a high activity level. In 2016, 6 events are already scheduled, and more events are expected to come. The papers and posters presented at these events are also giving TIEMS an important international academic standing. The model for the annual conference, with both English papers and local language papers, with two chairs for each session, one international and one local, assures a good dialogue between the international and local experts. This will also be practiced in the future to assure good influence by the local cultures.

The research project service for TIEMS members, where members are informed of RTD project calls, for example in the EU, has resulted in TIEMS participation in the successfully funded EU projects, ASSET, which started 1st January 2014 and will last for 4 years, and in the EU project HERACLES, which started 1st May 2016 and will last for 3 years. TIEMS is continuously involved in new proposals for the EU Horizon 2020 calls. It is also expected that TIEMS will be invited to participate in more proposals. The TIEMS RTD service is expected to lead to more participation by TIEMS members in RTD projects in the coming years, and also to add important value to research for improved worldwide resilience and a safer world.

By launching the GENERATE project and TIEMS QIEDM Certification, we expect to trigger interest from worldwide universities and training institutions to work together with TIEMS to create an international accepted understanding in emergency and disaster management education. TIEMS here provides an international joint drive to put focus on the profession of emergency management and disaster response, and also contribute to capacity building where needed.

TIEMS is only one of many good and dedicated organizations working to improve resilience worldwide, and TIEMS invites complimentary organizations for partnering to gain an even stronger momentum towards a safer world. Together we can achieve more than working alone one by one. TIEMS encourages and invites future partnerships with complimentary and similar organizations.

TIEMS is a decentralized organization where the momentum and driving force stay with TIEMS chapters. A team of TIEMS volunteers worldwide, driven by the motivation and mission of TIEMS work for a safer world, have made 2015 achievements possible. I would like to thank them all, and encourage them to further stay on and develop and spread the society’s network to reach further out and recruit new members and volunteers to join TIEMS in this work.
I would like to conclude TIEMS Presidents annual report on TIEMS activities in 2015 by expressing my strong belief that TIEMS has an important role to play internationally in education, training and certification and research and development activity, improving methods and tools for better emergency management and disaster response, and in policy concerning emergency and disaster management and disaster response. TIEMS will continue to strive to develop this role to the benefit of TIEMS members and others, and towards TIEMS mission for a safer world.

Oslo 10th July 2016

K. Harald Drager
TIEMS President