

TIEMS INTERNATIONAL ITALIAN CONFERENCE 2015 FINAL PROGRAM

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**ICE - Agenzia per la promozione all'estero e
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Rome, September 30 - October 2 2015

International Emergency Management and Disaster Response

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GROUP**



RESILIENCE ENHANCEMENT OF A METROPOLITAN AREA



Agenzia nazionale per le nuove tecnologie,
l'energia e lo sviluppo economico sostenibile



**PROGRAM DAY 1 – WEDNESDAY SEPTEMBER 30, 2015
AULA MAGNA**

<p>09:00–09:50</p>	<p>WELCOME OPENINGS CHAIR: CARMELO DI MAURO, TIEMS ITALY CHAPTER High Representative of the National Fire Brigade Corp Mr. K. Harald Drager, TIEMS President Thomas Robertson, TIEMS Regional Director for North America</p>	
<p>09:50 – 13:00</p>	<p><i>Morning Plenary Session</i> <i>Session 1</i> <i>Best practices in Civil protection</i> Chair: Dr. Mario Massimo Simonelli, ISPRA, Rome (Italy) Co-Chair: prof. Guosheng Qu, TIEMS Vice President</p>	
<p>09:50–10:30</p>	<p>Invited Speaker: Dr. Meen P. Chhetri (NCDM, Nepal), “Nepal earthquake aftermaths”</p>	
<p>10:30–11:10</p>	<p>Invited Speaker: prof. Mauro Dolce (DPC, Italy), “The Italian Dept. of Civil Protection (DPC) and its role in the Emergency Management”</p>	
<p>11:10–11:40</p>	<p>COFFEE BREAK</p>	
<p>11:40–12:00</p>	<p>Invited Speaker: Dr. Kim, Jae-Kwon (Korean Society of Disaster & Security) Sewol Ferry Disaster and Emergency Response Management in Korea</p>	
<p>12:00–12:20</p>	<p>Invited Speaker: prof. John Hamilton (Kestrel Group, New Zealand) Emergency Management after the Christchurch earthquake (video interview by prof. Sonia Giovinazzi, University of Canterbury, NZ)</p>	
<p>12:20–12:40</p>	<p>Lessons Learned from Mass-fatalities Management Research</p>	<p>Kailash Gupta</p>
<p>12:40–13:00</p>	<p>The European Union Civil Protection Mechanism: challenges and possibilities</p>	<p>Claudia Morsut</p>
<p>13:00–14:20</p>	<p>LUNCH BREAK</p>	

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<p>14:20 – 16:00</p>	<p align="center">DAY 1 Afternoon Plenary Session (Aula Magna) Session 2 <i>New technologies, use of big data, collaborative approaches to sustain Emergency Management</i> Chair: Prof. Roberto Baldoni, University of Roma (Italy) Co-Chair: dr. Jack Zhang, TIEMS Treasurer</p>	
<p>14:20–15:00</p>	<p>Invited Speaker: Prof. Dirk Helbing (ETH Zurich, Switzerland), “How to Increase Systemic Resilience in an Information-Rich World”</p>	
<p>15:00–15:20</p>	<p>Advanced Procedures for volcanic and Seismic Monitoring: APhoRISM, an FP 7 “space” Project</p>	<p>S. Stramondo, C. Bignami, S. Corradini and L. Merucci</p>
<p>15:20–15:40</p>	<p>Information sharing in EM: theory and practice</p>	<p>Simona Cavallini</p>
<p>15:40–16:00</p>	<p>Site Location and Information Retrieval for Anti-terrorist Medical Rescue System Based on GIS</p>	<p>Haibin Meng, Jinghui Wei and Dongsheng Zhao.</p>
<p>16:00–16:20</p>	<p align="center">COFFEE BREAK</p>	
<p>16:20 – 18:00</p>	<p align="center">Afternoon Plenary Session (Aula Magna) Session 3 <i>Round Table: Lesson Learnt from the Nepal Earthquake event</i> Chair: Carmelo Di Mauro, President TIEMS IC Co-Chair: prof. Guosheng Qu, TIEMS Vice President</p> <p>Earthquakes are linked to the tectonic movement within the Earth. They are hardly predictable as difficult is to quantify strains and stresses of the tectonic plates and to identify the exact threshold beyond which an earthquake will occur. Furthermore, they can also trigger other natural hazards such as landslides, tsunamis and ground liquefaction. Although It would be wrong to claim that an earthquake event can be prevented, it would be possible and wise to be appropriately prepared for an earthquake and similar natural events. Starting from the lessons learnt from earthquake disasters recently occurred in Nepal, the Round Table aims to discuss how and what could be improved to reduce the impact and the consequences of these events. In particular, it aims at discussing the following issues that could contribute to improve Disaster Management:</p> <ul style="list-style-type: none"> • Forecasting, alert and warning systems • Strategic co-ordination, task prioritisation and role designation • Training and formation of all stakeholders • Allocation material and human resources • Inter-disciplinary collaboration • Inter-organisational collaboration and international co-operation • Communication strategies and dissemination of information to the public. <p>The Round Table will be based on contributions from experts active in the field of disaster management and Civil Protection:</p> <p>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 , General Director of the Italian Dept. of Civil Protection, Italy</p>	
<p align="center">Finish Day 1</p>		

PROGRAM DAY 2 – THURSDAY OCTOBER 1, 2015

Morning Parallel Session (Aula Magna)		
Session 4		
<i>Risk Management of “new” classes of phenomena - I</i>		
Chair: Dr. Gregorio D’Agostino, ENEA and AIIC (Italy)		
Co-Chair: dr. Jaroslav Pejcoch, TIEMS Advisory Board Chair		
09:00 – 13:00		
09:00–09:40	Invited Speaker: Prof. Nicola Perra, University of Greenwich Business School, London. “Modeling and forecast of epidemic events”	
09:40–10:00	CRISMA-NH: Natural Hazards Impact Simulation and Decision Support System. A pilot application based on L’Aquila 2009 seismic crisis scenario	Giulio Zuccaro
10:00–10:20	GENERATE: Global Educational Network for Emergency Resilience And Training Excellence	Thomas Robertson
10:20–10:40	How to survive nuclear emergency; structuring local preparedness and further radiation protection based on hands-on measurements.	Yukako Komasa
10:40–11:00	GDACSmobile - An IT Tool Supporting Assessments for Humanitarian Logistics	Daniel Link
11:00–11:20	COFFEE BREAK	
11:20–11:40	Relationship between vision and reality in public perception of safety structures: the role of seismic simulators	Vasile Meita
11:40–12:00	Landslide risk: recent developments for the emergency management	Francesco Castelli
12:00–12:20	EMERCOM web-based system for earthquake loss estimation in emergency mode	Nina Frolova
12:20–12:40	Risks and Vulnerabilities under multi-hazards threats in a protected area of Bucharest	Emil-Sever Georgescu
12:40–13:00	Public space and seismic risk in Mexico City: a broken relationship?	Milton M. Castillo
13:00–14:00	LUNCH BREAK	

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09:00–13:00	DAY 2 Morning Parallel Session (Room 22) Session 5 <i>Risk Management of “new” classes of phenomena - II</i> Chair: dr. Kailash Gupta , TIEMS India Chapter President Co-Chair: prof. Snjezana Knezic, TIEMS Membership & Chapters Chair	
09:40–10:00	Data-Driven Criticality Maps of Urban Street Networks	Pierpaolo Mastroianni
10:00–10:20	Smart crowds in crisis situations: risks and opportunities	Havlik Havlik
10:20–10:40	Demonstrating a Community-based Disaster Risk Reduction Technology Sharing Platform	Young-Jai Lee
10:40–11:00	Emergency Management with Interdependency Modelling in the URANIUM project	Dario Masucci
11:00–11:20	COFFEE BREAK	
11:20–11:40	RISING: Radio Frequency Identification and inertial navigation for indoor localization in emergency management and building maintenance	Francesca De Cillis
11:40–12:00	Crisis Scorecard: a systemic tool for crisis management	Josè M. Sarriegi
12:00–12:15	Analysis of energy consumption by sensor nodes during localization in emergency management sensor networks	Dhyanesh Ramamoorthy
12:15–12:30	How To Understand Extreme Risk- Beyond Hazard, Vulnerability Assessments	Carl W. Taylor
12:30–12:45	Analysis of fatalities originated by burning of agricultural and forestry residue in Portugal	Ricardo Oliveira
12:45-13:00	Interoperability of National Fire Services Control Rooms	Guido Parisi
13:00–14:00	LUNCH BREAK	

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14:00 – 18:40	DAY 2 Afternoon Parallel Sessions (Aula Magna)	
	Session 6	
	<i>Preparedness and Resilience enhancement in growing metropolitan areas: are “smart cities” coping with these issues?</i>	
	Chair: Dr. Alessandro Coppola, Resilience Manager of Roma Capital (Italy) Co-Chair: dr. Samantha Ueno, TIEMS Social Media Officer	
14:00–15:40	Invited Speaker: Dr. Daniel Stevens, Director of Emergency Management at City of Vancouver (Canada) Emergency Management and Resilience in the metropolitan area of Vancouver	
14:40–14:50	City reporter for resilient Smart Cities: a crowdmapping mobile platform of urban asset problems	Roberto Gueli
14:50-15:00	Common Alerting Protocol: how to leverage semantic reasoning for improving its effectiveness	Roberto Gueli
15:00–15:20	A single platform approach for the management of emergency in complex environments such as large events, digital cities and networked regions.	Giorgio Mosca
15:20–15:40	Inter-organizational Lessons Learned: Perspectives and Challenges	Mirko Thorstensson
15:40–16:40	COFFEE BREAK WITH TIEMS AGM	
16:40–16:55	Emergency Management Public Management Networks: Case Analysis of the Florida State Emergency Response Team	Tanya Shannon
16:55–17:10	Towards the Next Generation Training System for Crisis Management	Jiinquan Xie
17:10–17:25	Community Participatory Mapping and Advanced Safety Improvement Project of Korea	Sosoon Park
17:25–17:40	Resilience of Critical Infrastructures: benefits and challenges from emerging practices and programmes at local level	Boris Petrenj
17:40–17:55	Risk assessment in complex geopolitical areas: the project SECRET	Alessandro Zanasi
17:55–18:10	What you really need to be prepared?	Jaroslav Pejcoch
18:10 -18:40	QUESTIONS AND ANSWERS	Alessandro Coppola
20:30	Social Dinner at Residenza di Ripetta Via di Ripetta 231, Roma	

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14:40–15:40	<p align="center">DAY 2 Afternoon Parallel Sessions (Room 22)</p> <p align="center">Session 7</p> <p align="center"><i>Decision Support Systems for Risk Management - I</i></p> <p align="center">Chair: Dr. Sandro Bologna, TIEMS IC (Italy)</p> <p align="center">Co-Chair: dr. Thomas Robertson, TIEMS North America Regional Director</p>	
14:40–14:55	Supporting Decision Makers in Crisis Management Involving Interdependent Critical Infrastructures	Alberto Tofani
14:55–15:10	Knowledge sharing in police forces: a resource for emergency management.	Pietro Costanzo
15:10–15:25	Development of a Risk Assessment Model for Disaster Management	Hyunjung Kim
15:25–15:40	Improving Critical Infrastructure Resilience through Scheduling of Fire-fighting Resources	K. Alutaibi, A. Alsubaie and J. Martí
15:40–16:40	COFFEE BREAK WITH TIEMS AGM	
16:40–18:40	<p align="center">Afternoon Parallel Sessions (Room 22)</p> <p align="center">Session 8 Pan EU lesson sharing crisis management: DRIVER Project</p> <p>Organization: Dennis Andersson (FOI), Josine van de Ven (TNO), Maciej Szulejewski (ITTI)</p> <p><i>The DRIVER (Driving Innovation in Crisis Management for European Resilience) project was aimed at enhancing European resilience in the face of major crisis situations and to facilitate sustainable innovation in crisis management. A part of the project looks into new ways for European Member states to learn with and from each other. Sharing lessons learned is a way to do this. Our focus is on methods to identify lessons that are valuable to organisations in other sectors and nations. Within DRIVER evolved learning we aim at improving organisational resilience through cross-border, cross-sector, cross-phase (X-BSP) sharing of tactical and operational mission experience. Our goal is to propose a systematic solution to identify, collect, analyse, adapt, generalise, and store observations and lessons learned for X-BSP sharing. Specific emphasis is put on generalisation of such lessons to support learning with and from each other; other organisations, other risks and other emergency management system instances. The workshop participants are invited to share their personal experiences from crisis management, and lessons drawn from such experience. The objectives of the workshop are to stimulate lesson sharing, to identify how such lessons can be transferred to other organisations, and to identify what types of methods and tools can support such initiatives. If you have any practical lessons drawn from crisis management experience that you are willing to share, please join in on our effort to build and connect with knowledge sharing pan-European crisis management communities. The workshop is meant to share ideas and expertise within the European community in an effort to connect platforms for increased knowledge sharing.</i></p> <ul style="list-style-type: none"> - Introduction to DRIVER and invitation to join the DRIVER community - Introduction to the DRIVER Lessons Learned Framework and workshop objectives - Presentations: Invited speakers on lessons from emergency management - Presentation: Introduction to lesson generalisation, sharing, and adaptation - Work session: Open discussion on prerequisites for X-BSP lesson sharing - Wrap-up and invitation for Pan-European lesson sharing community 	
Finish Day 2		

PROGRAM DAY 3 – FRIDAY OCTOBER 2, 2015

DAY 3 Morning Parallel Sessions (Aula Magna)		
Session 9		
<i>New approaches and methods for Emergency Management - I</i>		
Chair: Prof. Paolo Trucco, Politecnico di Milano (Italy)		
Co-Chair: dr. Nina Frolova, TIEMS Europe Regional Director		
10:00 – 12:40		
09:00–09:40	Invited Speaker: Dr. David Bamaung, Scottish Government (Scotland, UK),	
09:40–10:00	Invited Speaker: Ji Zhang, Ten year development in China Emergency Management 2006-2015	
10:00–10:15	The Smart Mature Resilience Project for Resilience Management Guideline	Josè M. Serriegi
10:15–10:30	Taxonomy for disaster response: a methodological approach	Snjeziana Knezic
10:30–10:45	Comprehensive Approach to Complex Emergencies	Lilian K. Stene
10:45–11:00	Integrated Open Service Platform for Enhanced Risk and Emergency Management: the PHAROS Solution	Javier M. Chaves
11:00–11:20	COFFEE BREAK	
11:20–11:35	Less is more - Some cautions regarding mindless ICT use in emergency management	Jonas Borell and Emilie Stroh
11:35–11:50	Interactive virtual world models for crisis preparedness – better than the real thing?	Havlik Havlik
11:50–12:05	Implementation of the Canadian Emergency Department Triage and Acuity Scale (CTAS) in an Urgent Care Center in Saudi Arabia	Abdullah Arafat
12:05–12:20	Assessing the Value of Early Warning Apps for Disaster Cost Reduction - A Framework to Facilitate Investment Decisions to Protect Private Property	Simone Wurster
12:20–12:35	Low pressure water mist fire fighting systems - The alternative to traditional systems	Ilenia Manassero

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Day 3 Morning Parallel Session (Room 22) Session 10 <i>New approaches and methods for Emergency Management - II</i> Chair: Dr. Meen P. Chhetri Co-Chair: dr. Carmelo Di Mauro, TIEMS Italian Chapter President		
10:00–12:40		
10:00–10:15	Simulation of primary service degradation for crisis management operations	Alberto Tofani
10:15–10:30	A Study on Disaster Response Terminologies Mind Map by SN Analysis	Seongkyung Kang
10:30–10:45	Threat modelling for CPS-based critical infrastructure protection	Jianguo Ding
10:45–11:00	Strategy research of city infrastructure vulnerability appraisal and slow-down adaptation due to climatic change	Lianhui Wang
11:00–11:20	COFFEE BREAK	
11:20–11:35	Developing flood disaster management system using BIM Technology (Case study at Uijeongbu city, Korea to dealing with reservoir break)	Changsang Jeong
11:35–11:50	Flood by design: challenges with governance of disaster risk in Liguria, Italy.	Massimo Lanfranco
	FP7 EDEN project demonstrations as example of Collaborative Crisis Management (CCM) approach	Massimo Lanfranco
11:50–12:05	Timeliness objective function construction method of pump scheduling in mine water disaster	Jialian Li
12:05–12:20	Study on the method of the hazardous chemical security risk early warning	Quidong Yong
12:20–13:00	CONCLUDING REMARKS (CONFERENCE HALL)	
Finish Day 3		

Presentation of Keynote Speaker Mauro Dolce

Name: Mauro Dolce
Position: General Director, Italian Department of Civil Protection

Mauro Dolce is Professor of Structural Engineering (1994-) at the University of Naples Federico II (2007-) and is Director General at the Italian Department of Civil Protection (DPC) (2006-), where he was Head of the seismic and volcanic risk office until October 2012 and is now scientific consultant of the Chief of the Department.

As the head of the Seismic and Volcanic Risk Office, he coordinated the Civil Protection monitoring, prevention and mitigation activities in the field of the seismic and volcanic risks. He coordinated the technical management in the emergency of the 06.04.09 Abruzzi Earthquake and the 20-29.05.2012 Emilia Earthquake. He has also been coordinating the Italian seismic structural prevention programs (art. 11 of Law 77/2010) and the relationships of DPC with the scientific competence centres for seismic risk. Research activities carried out in his academic involvement since 1978, have been mainly related to Earthquake Structural Engineering, as well as Seismic Vulnerability and Risk assessment, resulting in about 400 scientific papers, 12 books, 8 volumes (as editor) and 8 patents of antiseismic devices and systems.



He has been member and convenor of several national and international committees for structural engineering standards.

He was vice-president of the European Association of Earthquake Engineering (2010-2014) and is currently a member of its Executive Committee (2002-). He is the Italian delegate (2008-) and President of the Governing Board of GEM (Global Earthquake Model). In 2011-12 he led the international expert group investigating the "Rationale and Feasibility of a Global Risk Modelling Initiative" for the Global Science Forum of the Organization for Economic Co-operation and Development (OECD-GSF).

Presentation of Keynote Speaker Nicola Perra

Name: Nicola Perra, PhD
Position: University of Greenwich Business School, London UK

Undergraduate studies at the Department of Physics of the University of Cagliari (Italy). Master degree at the same University working on Diffusion processes and centrality measures in Complex Networks.

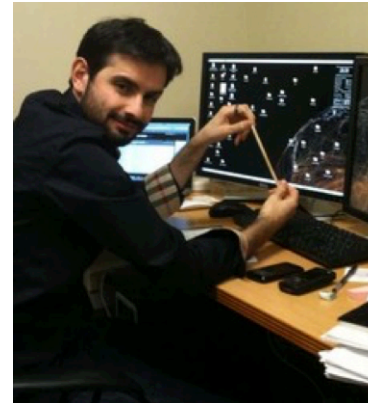
In January 2008 I began my PhD studies at the Department of Physics of the University of Cagliari in the field of Complex Networks Science and Statistical Mechanics. I got my Ph.D. on January 11th, 2011 presenting the thesis Reaction-Diffusion processes on complex networks.

During the period between 3/08 and 11/08 I worked with COSMOLAB in the Research project Community Detection in Infrastructural Networks.

From November 2008 till July 2009 I was Visiting Scholar at the Complex Networks group of the Indiana university in Bloomington, IN, USA.

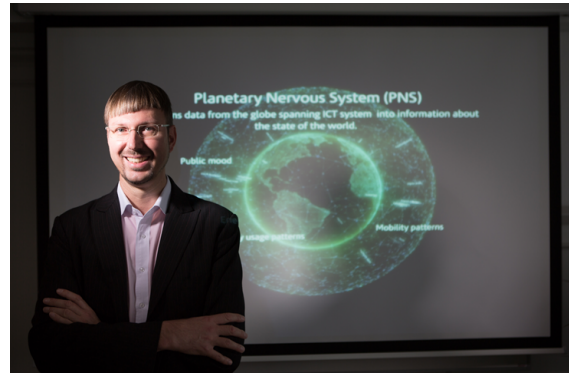
From July 2009 till August 2011 I was Research Associate at the Center for Complex Networks Systems Research of the Indiana university in Bloomington, IN, USA.

From September 2011 till August 2014 I am Post-Doctoral Research Associate at the Northeastern University in Boston, MA, USA. From September 2014 till July 2015 I am Associate Research Scientist at the Northeastern University in Boston, MA, USA. From August 2015 till now I am Senior Lecturer in Network Science at the Business School of Greenwich University, London, UK.



Presentation of Keynote Speaker Dirk Helbing

Name: prof. Dirk Helbing
Position: ETH Zurich



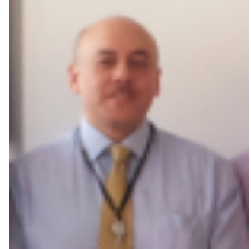
Dirk Helbing is Professor of Sociology, in particular of Modeling and Simulation, at Department of Humanities, Social and Political Sciences and and affiliate of the Department of Computer Science at ETH Zurich. He earned a PhD in physics and was Managing Director of the Institute of Transport & Economics at Dresden University of Technology in Germany. He is internationally known for his work on pedestrian crowds, vehicle traffic, and agent-based models of social systems. Furthermore, he coordinates the FuturICT Initiative (www.futurict.eu) which focuses on the understanding of techno-socioeconomic systems, using Smart Data. His work is documented by hundreds of scientific articles, keynote lectures and media reports worldwide. Helbing is member of the prestigious German Academy of Sciences "Leopoldina" and of the Leopoldina standing committee for digitalization. He was an elected member of the World Economic Forum's Global Agenda Council on Complex Systems. He is also Co-Chairman of the Physics of Socio-Economic Systems Division of the German Physical Society and co-founder of ETH Zurich's Risk Center. In 2013, he became a board member of the Global Brain Institute in Brussels. Within the ERC Advanced Investigator Grant "Momentum" he works on social simulations based on cognitive agents. His recent publication in Nature discusses globally networked risks and how to respond. With a publication in Science, he furthermore contributed to unveiling the hidden laws of global epidemic spreading. In January 2014, he received an honorary PhD from the TU Delft jointly from the Faculty of Technology, Policy and Management and the Faculty of Civil Engineering and Geosciences.

Presentation of Keynote Speaker David Bamaung

Name: David Bamaung
Position: Scottish Government Critical Infrastructure Resilience Unit (CIRU)

Dr David BaMaung, BSc (Hons), MSc HRM, PhD, PG Cert Mgt, LCGI, GCGI, FSyl, CSyP, FICPEM, MCMI, CMgr, Chartered MCIPD David has worked within the emergency services sector in a variety of different roles for over 35 years. During his career he was mainly involved in operational roles but also has experience in emergency planning, business continuity, and other specialist roles.

He was responsible for the introduction of a number of National (Scottish) resilience and security initiatives within his own and other organisations. During the development of the multi-agency Glasgow City Centre Evacuation Plan in 2007, David led on the development of the communications workstream of the plan. This involved the development of a 'warn and inform' strategy using all possible means including the transport infrastructure. David has also been involved in work out with his organisation and qualified as a member of the multi-agency EU Community Mechanism for Civil Protection cadre. He is currently seconded on a part time basis to the Scottish Government Critical Infrastructure Resilience Unit (CIRU), working on an EU Critical Infrastructure Resilience project 'MiRACLE' with partners from Holland and Italy. Most recently, David has been involved in the project management of a GIS Mapping initiative which is partnered with the Scottish Government and the University of Ulster. The GIS project involves the mapping of all high value critical infrastructure assets in Scotland, including the transport infrastructure. David holds a PhD on 'The Impact of Information and Interdependencies in ensuring CNI Resilience to a Terrorist Threat' and an MSc in Human Resource Management which focussed on the issue of insider threat and the role of the HR community in combatting this. He is currently a Fellow of the Security Institute, a Chartered Security Professional, Chartered Member of the CIPD, and Chartered Manager. He holds City and Guilds Licentiate and Graduate qualifications in Counter Terrorism Security Management. Scotland.





Presentation of Keynote Speaker Meen Poudyal Chhetri

Name Meen Poudyal Chhetri
Position Head, Nepal Center for Disaster Recovery

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



Dr. Chhetri was awarded with Australia Alumni Excellence Awards 2014 on 20 January 2014. He was also awarded with the "Best Paper Award" in October 2013 in Velaux, France. He is decorated with various prestigious medals like: Janpad Sewa Padak 1991, Mahendra Vidhya Bhusan Padak, 1996, Prabal Gorkha Dakshin Bahu, 1998, Gaddi Arohan Rajat Padak, 2001, Daibi Prakopoddar Padak, 1998, 1999, 2000 and 2001.

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

Dr. Chhetri completed Post Doctorate (Post Doc.) Research Study on "Disaster Risk Reduction: Policy Implications for Nepal, Australia and Beyond" from the Queensland University of Technology (QUT), Brisbane, Australia in 2011 where he also attended the Pandemic Disaster Preparedness Training Course from August 24 to November 29, 2008. Dr. Chhetri earned his doctorate degree in Economics from the University of Vienna, Austria in 1995. He also holds an MA and Law degree. He carried out Drug Abuse Research Study at the Johns Hopkins University, Baltimore, U.S.A. from 2002 to 2003.

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

In a nutshell -- Nepal earthquake has left very important lessons and messages to learn and analyse which we can use to save a number of precious human lives and huge amount of physical properties in the days to come. The biggest lesson we have learnt is that local communities and people are the major player and very very important factors during such a huge disaster particularly in remote, rural and hilly areas where the government machinery and aid agencies cannot reach on time. For this reason we have to make aware, train and equip each and every community to cope with such disasters. TIEMS can play pivotal role to disseminate those lessons and findings to the world communities.



Presentation of Keynote Speaker Kim Jae-Kwon

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



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

Workshop Keynote: Sewol Ferry Disaster and Emergency Response Management in Korea

On April 16, 2014 8:48 AM, a Korean Ferry called Sewol sank. Out of the 476 people who boarded the ferry, 172 were rescued and 304 were killed. At the time of the accident the emergency process and the problem is analyzed and after the accident the emergency process is expected to change. In South Korea, the Sewol accident brought a big change to the emergency system and emergency organizations. The Sewol Ferry Tragedy brought huge change to the emergency management system and organizational structure of Korea. The Ministry of Public Safety and Security was established on November 19, 2014 to create a prompt, comprehensive system, to cope with disasters and safety problems by building a systematic disasters and safety management system. So, I would like to introduce the new disaster and safety management system of Korean and our activities of TIEMS Korea Chapter at the conference.

Presentation of Keynote Speaker Daniel Stevens

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

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



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

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

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



Presentation of Keynote Speaker Ji Zhang

Name: Ji Zhang
Position: Harmony Technologies Ltd

Mr. Zhang Ji (Jack) has a Ph.D of management from China Academy of Sciences (CAS), a MBA from Peking University and a BE of Electrical Engineering and a BS of Applied Maths from Tsinghua University.

Dr. Zhang has more than 20 years of working experiences in IT industry for many years. He has worked for well-known companies such as Lenovo, IBM, Netframe, Micron Electronics Inc, eNet, etc. His main areas of study focus on the government emergency management information systems, Internet of Things (IOT), Big data management, and data sharing and information integration in the Smart-city construction.

Dr. Zhang co-founded Beijing Harmony Technologies Company (HARMONY) and served as the chairman of the board CEO since 2002. HARMONY developed the first domestic Government Emergency Management Information Software (GEMIS) at a district-level and successfully applied it to fight against SARS in Beijing Haidian district early 2003. Dr. Zhang actively involved the undertaker of the Emergency Response System (EMS) project for the EMO of the State Council of China, acting as the architecture design member for the EMS platform of China and the consulting member of Beijing government EMS Consulting Group.

He has published many articles on EMDR such as "The Application of Internet of Things(IOT) in Emergency Management System in China", "Resilience lessons from China", "The protection of the Chinese national critical infrastructures from the three-year practice and revision of US NIPP", "Brief Introduction of China's Emergency Management under the Construction of Harmonious Society", "Smart EMS in the Smart city construction in China" etc.

Now, with four branch offices in China, Guangdong, Shanxi, Heilongjiang and Jiangsu, HARMONY participates actively in the construction of the emergency management and disaster reduction systems for the governments, big enterprises, and the public. Mr. Zhang is now TIEMS board member and Treasurer, Managing director of Z-park Industry Alliance of Emergency Management, and the Member of Advisory Board for the ICT Development Committee of Beijing Government.



Key points of the key note:

- 1) China initiated government EMO (Emergency Management Office) system since 2006, and set up national EMO platform standard the same year. Harmony took part in that process and would like to introduce the "One-plan, three-system" since that year.
- 2) the National Emergency Law launched in November 2007, the key responsible organization for that law is State Council of China and provincial and municipal government. The National Safety Law launched in July 2015, the leading organizations are CCP Central Committee, State Council and National People's Congress. So much difference from 8 years, I would like to introduce.
- 3) the principle of Emergency management in China ten years ago is "comprehensive co-ordination, professional treatment, local recovery", now the new principle raised by new leader, Xi Jinping, is "Dynamic surveillance, Prevention first, scientific treatment ". I would like to introduce the change and some high technologies (Internet of Things, Cloud Computing, Big data etc.) applied to the change.
- 4) the hot concept and huge investment to "Smart City construction" in China also changes the method and brings new challenge and opportunities to the Emergency management in China. I would like to predict the future EMDR progress of 2016-2020 together with "Smart city" realization.

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