



THE INTERNATIONAL EMERGENCY MANAGEMENT SOCIETY

Newsletter - ISSUE 21 - August 2014

ISSN 2033-1614



A group photo during TIEMS 2014 USA Conference in Hattiesburg at Southern Mississippi University

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The International Emergency Management Society

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

Alex Fullick
TIEMS Newsletter Editor

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Message from TIEMS President

On a sad and tragic world news background in July, with the following main events; the Malaysian Airplane shot down in Ukraine, two airplane accidents, one in Taiwan and one in Algeria, war on the Gaza strip, and civil war in Ukraine, terror by the ISIL group in Iraq, Ebola epidemic spread in Nigeria & West Africa, all with many lives lost, a very happy and historic event took place for TIEMS during the TIEMS 2014 USA conference in Hattiesburg in July.

The TIEMS USA Chapter was established during TIEMS Hattiesburg Conference, and approved by TIEMS Board 10th August.

This is a very special and historic event for TIEMS, being back in the USA and having a TIEMS USA Chapter established after 11 years with TIEMS "travelling" around the world with conferences and workshops and establishing chapters worldwide.

The TIEMS organization was founded in a Sheraton Hotel room in Washington DC, on 25th of May 1993 by a group of international emergency management experts.

TIEMS was first registered as non-profit organization in Dallas, Texas, later moved to Florida, then to Zürich, Switzerland and finally registered as a non-profit international NGO in Belgium, where it resides in Brussels with its Secretariat today.

Despite arranging TIEMS Annual Conferences in Fort Lauderdale, Florida (1994), in Washington DC (1998), Orlando (2000) and

arranging its first workshop in Washington DC (2003), a TIEMS USA Chapter was never established. TIEMS is now back where it all started, and the TIEMS USA Chapter is registered as a non-profit organization in Florida.



Oslo 10th August 2014
K. Harald Drager
TIEMS President

Furthermore I am very proud to announce that former Associate FEMA Director Kay Goss is the TIEMS USA Chapter President, and leading a strong team of fellow board members; Brent Woodworth (Vice President), Connie White (Secretary), Tom Robertson (Treasurer), Jim Hagen, Mike Martinet, Joseph Pollack, and Tom Stahr.

I trust that Kay Goss does not need any introduction to our American readers, but for our other readers not knowing Kay Goss, they should know that Kay Goss was Associate FEMA Director from 1994 to 2001, appointed by Bill Clinton. One of her many achievements at FEMA and throughout her distinguished career has been establishment and improvement of

education, training and certification of emergency management personnel, a task that she still full heartedly engages herself in.

I think the best way to describe Kay Goss is to call her an emergency management education, training and certification Champion, and TIEMS is already using her expertise in TIEMS worldwide efforts in establishing an international standard in emergency and disaster management education, training and certification. TIEMS DREVS initiative (Disaster Resilience Establishment in Vulnerable Societies), presented in TIEMS March 2014 newsletter, will also benefit from her experience and expertise, in TIEMS efforts with capacity building of such education in TIEMS chapters and development countries for improving resilience in vulnerable societies.

When I put so much emphasis on TIEMS USA Chapter, it is because of the strong and historic position and recognition of the emergency management profession in USA.

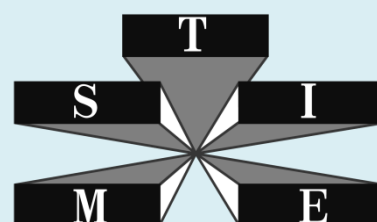
However, the TIEMS other 11 chapters shall not be forgotten. They are all doing an excellent and very important job, being part of TIEMS worldwide expert network and creating local TIEMS activity, contributing to improved resilience in their region.

TIEMS Nigeria & West Africa Chapter was established and approved by TIEMS Board earlier this year, and is the first TIEMS chapter in Africa. From the recent news about the rapid Ebola epidemic spread in this region, a TIEMS chapter in this region can hopefully get important knowledge and experience through the TIEMS network, and likewise inform back what is experienced on the ground in this region.

TIEMS involvement in the ASSET EU project, where the focus is on development of an Action and Mobilisation and Mutual Learning plan in Science in Society in Epidemics and Total pandemics, will produce results that also could be of importance for TIEMS Nigeria & West Africa Chapter.

Finally I would like to point out that the TIEMS Japan Chapter is arranging the TIEMS 2014 Annual Conference in Niigata in Japan, 21 - 24 October this year. The local TIEMS arrangement committee has joined forces with the anniversary committees of four disaster events in this region in Japan, the Niigata earthquake in 1964 (50 years), the Yakeyama eruption in 1974 (40 years), the Niigata Flood in 2004 (10 years) and the Chuetsu earthquake in 2004 (10 years). The Niigata Governor is supporting the event, and it will be an important place for learning and exchange of experience in emergency and disaster management.

My focus in this message has been TIEMS chapters and the important role they play in TIEMS, as a network of experts and local TIEMS activity. The TIEMS slogan is "Think Globally and Act Locally", and the TIEMS focus is on cultural differences to be understood and included in the society's events, education and research programs. TIEMS chapters are the foundation of TIEMS.



Editor's Message

Hello once again good readers!

Welcome to the 2014 summer edition of the TIEMS Newsletter. I hope you're enjoying the warmth of the summer months. It has been quite a busy time for TIEMS members. In this edition you'll find just how busy TIEMS members are, with multiple research projects on the go, all focused on bringing Emergency and Disaster Management to new heights.

There are also two fantastic announcements about the TIEMS organization. I've said it before and I'll say it again, this is truly a global organization with a global voice, which I like to capture in this newsletter. This edition is no different because we welcome two, yes, two new chapters to TIEMS; the United States Chapter and the Chapter from Nigeria & West Africa. I expect to hear lots from them in the coming months!

As always, we try to keep all submissions in *your* voice to truly adhere to the global feel of TIEMS, amending only where absolutely necessary.

Speaking of coming months, don't forget the 2014 Annual TIEMS Conference in Niigata, Japan coming up in October. Check out the TIEMS website for details (www.tiems.org).

Continuing with our spotlight on TIEMS board members; in this edition we focus on our Secretary, Stela Petrescu, who I had the pleasure of traveling with in China, after the TIEMS Beijing conference a few years ago.

We are always looking for interesting articles and announcement to provide you - our readers. If you have an article you'd like to contribute on topics related to Emergency and Disaster Management, Business Continuity or Crisis Communications - or anything else you feel would suit the newsletter - feel free to send them to my attention at the email below.

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

Sincerely,

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

Editor, TIEMS Advisory Board

Email: alex@stone-road.com

TIEMS 2014 Annual Conference in Niigata, Japan

20 - 23 October 2014



CALL FOR PAPERS

TIEMS 2014 Annual Conference is the premier forum for the presentation of case study report, technological advances, research results in the fields of risk management. TIEMS 2014 Annual Conference will bring together leading researchers, practionars and companies from around the world.

DEADLINE: EXTENDED: August 15, 2014

Topics: Topics of interest for submission include, but are not limited to:

Hazard

Natural hazard
Nuclear, Biological and Chemical
weapons/attacks
Infuluenza
Others

Informatics

Institute of Electronics, Information and
Communication Engineers
Artificial Intelligence
Robots

Risk Management

Business Continuity Management
Training

Past Experiences

2004 Niigata Chuetsu Earthquake
2004 Niigata Rainfall
1964 Niigata Earthquake
1999 Chi-chi Earthquake
2009 Typhoon Morako
Other

Civil Engineering

River/Hydraulic Engineering
Erosion Control Engineering
Geological & Geotechnique Engineering

TIEMS 2014 ANNUAL CONFERENCE WEB-SITE :

<http://emc.nhdr.niigata-u.ac.jp/tiems2014/cfp.html>

5th International Conference on Sustainable Built Environment

Kandy, Sri Lanka – December 12 – 15, 2014

About the Conference

The 5th International Conference on Sustainable Built Environment 2014 (ICSBE) will be held at Earl's Regency Hotel, Kandy, Sri Lanka, as the next in line of a highly successful series of conferences held since December 2010. The Conference will run over four days and features presentations by authors of all accepted papers, as well as keynote lecturers. General and plenary sessions will be accompanied by workshops and technical sessions. Accepted papers will be published in a special volume of proceedings with an international standard book number (ISBN).

Conference Themes

Green Energy
Green Technology
Community, Environment and the Ecosystem

Climate Change
Sustainable Buildings & Infrastructures

Registration

Registration Fees - Foreign		
	Before 15/11/2014	After 15/11/2014
Full Registration	USD 400	USD 500
Student Registration	USD 300	USD 350
Accompanying Person (without conference pack)	USD 200	USD 200
Registration Fees – SAARC Countries		
	Before 15/11/2014	After 15/11/2014
Full Registration	USD 300	USD 350
Student Registration	USD 250	USD 300
Accompanying Person (without conference pack)	USD 200	USD 200
Registration Fees - Local		
	Before 15/11/2014	After 15/11/2014
Full Registration	LKR 20,000	LKR 25,000
Student Registration	LKR 7,500	LKR 10,000
Accompanying Person (without conference pack)	LKR 15,000	LKR 15,000

Payment Methods

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Credit Card Cheques
Band Draft Payable to Sri Lanka

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Account No.: 057-1001-3001-5231
Account Name: CSBE
Bank: People's Bank, Peradeniva
Swift Code: PSBKLKLX

Account No.: 005160000114
Account Name: ICSBE
Bank: Sampath Bank, Peradeniya
Swift Code: BSAMLKLX

Accommodation

The Earls Regency hotel, Kandy, is perched above the Mahaweli river and overlooks Kandy. [The hotel](#) considered to be a landmark of impeccable taste and unique style where one can unwind and relax while experiencing five star luxury and comfort. Accommodation include 104 rooms, each fully air conditioned with private balcony and with breathtaking views of the surrounding mountains countryside & Mahaweli river. The view from the room's make you feel as if you are a part of the picturesque natural & cultural landscape outside.

The Earl's Regency offers you the ideal five star luxury facilities from which to explore the cultural landscape of Kandy. It is located in the cultural Triangle of Sri Lanka and offers a range of fascinating places to visit. Further information about the hotel can be found at: <http://www.aitkenspencehotels.com/earls/>

Important Dates

A 200 word abstract on or before - **July 10, 2014** (extended)

Notification of Abstract Acceptance – **July 31, 2014**

Full Paper Submission – **September 30, 2014**

Camera Ready Paper Submission – **November 1, 2014**

Early Bird Registration – **November 15, 2014**

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Board of Directors Spotlight: Stela Petrescu (Romania)

Over the last few issues of the newsletter, we've been profiling a member of the TIEMS Board of Directors so that our readers can get to know the faces working hard behind the scenes that contribute to the continued success and growth of TIEMS. With this edition we profile long-time member, Stela Petrescu.

I had the pleasure of meeting Stela at the 2010 Annual TIEMS conference in Beijing, China; then post-conference, Stela and I (along with her husband) became travel companions as we took in the wonderful sights and sounds of China. Along with her colleagues, Stela was also responsible for organizing the successful 2011 Annual TIEMS conference in Bucharest, Romania.



When did you first become involved with Disaster Management and why?

In March 1977 a strong 7.5 Richter magnitude earthquake hit Romania. At that time I was student at the University of Architecture and witnessed the collapse of several tall residential buildings bordering the main avenues of Bucharest. It was frightening and the created chaos frightened me. The damage was huge; 28 tall multi-story residential buildings collapsed and the casualties amounted to 1600. It was the first time when I felt, and somehow acknowledged, the need for disaster management. In the following weeks I was part of a surveying team, investigating, measuring and analyzing the damage of several affected buildings, becoming more and more convinced about the necessity of mitigation measures, in order to protect the people and the existing buildings against earthquake.

My direct involvement in disaster management developed after year 2000 when I started to work in a central institution in charge with the enforcement of the legal framework and implementation of related measures regarding emergency situations caused by earthquakes and landslides. As head of the department for international projects in the mentioned domain the collaboration with the Council of Europe's EUR-OPA Major Hazards Agreement, the Japan International Cooperation Agency and the World Bank brought valuable knowledge and strengthened and enriched my experience.

How did you find out about TIEMS and what events lead to you become a member and member of the Board of Directors?

When searching for data and documentation to accomplish an Energy Sector Risk Assessment Study, I attended a TIEMS Workshop on “Fuel Safety & Disaster Management” organized in Luxembourg (September 2008). The shared information was extremely useful for my work and, as I found the goal and topics of the organization overlapping with my professional interest; I became a TIEMS member and started to participate in TIEMS events.

In 2010 attending the Annual Conference in Beijing, this event became a milestone for me with a standard level to be followed. At the AGM I was elected board member, Director for Conferences and Meetings.

As the TIEMS Romania Chapter previously made a commitment to organize the 2011 Annual Conference in Romania, I acted to make this agreement happen and made all diligences to organize/ensure this important event in Bucharest, obtaining the consistent support of two line ministries: the Ministry of Regional Development and Tourism and the Ministry of Interior, also having the contribution of the General Inspectorate for Emergency Situations and TIEMS Romania Chapter.

At the 2011 Annual Conference in Bucharest I had the honor to be elected TIEMS Secretary for a three years mandate.

What Disaster Management accomplishment are you most proud of?

It was definitely the achievement of the “Hazard risk mitigation and emergency preparedness project”, a multi sector World Bank project, to reduce Romania’s environmental, social and economic vulnerability to natural disasters (earthquakes, floods, landslides) and catastrophic mining accidental spills. This project was jointly financed through Romania’s Government budget, a Loan granted by the World Bank and a GEF Grant, implemented in eight years by four line ministries with respect of the signed Loan Agreement. I was directly in charge as Project Manager with the implementation of “Seismic risk reduction” component and also with the overall reporting and auditing activities for the whole project. The Project was successfully closed in 2012 and its results were well appreciated having a positive social impact. The most relevant results were:

- Seismic retrofitting and upgrading to EU standards of 44 public buildings (hospitals, universities, central and local emergency command centers, city halls, child protection centers, important public buildings, among them several are cultural heritage buildings) were completed, about 23,350 people working in those buildings being protected with better working conditions ensured. The area deserved by those public buildings is the Vrancea seismic zone.
- A new Building Code compliant with Euro code 8 was finalized and enforced, a chapter for innovative retrofitting methods was included. A handbook for training in innovative and cost efficient retrofitting methods was elaborated for the future use of the authorities.

- Construction works for flood protection in 10 critical locations and works to increase the safety of 7 dams. Protection against flood was provided to about 45,500 people.
- Remediation works in 6 sites to improve the operational safety and to reduce the number and magnitude of accidents of mine waste facilities; increased trans-boundary cooperation for integrated water resources management; an environmental monitoring system was installed.
- Strengthened institutional and technical capacity for emergency management and emergency response through the Information System; a software was installed in all county emergency command centers.
- Technical work and drafting the legislation for the new Romanian Catastrophe Insurance Program was completed.

I appreciate that the highest importance of these results is their concrete and timely effectiveness, the fact that vulnerabilities were already reduced. This complex Project implementation requested devotion and long-term hard work but all team members gave their best. And indeed, we are proud of what we achieved.

What do you believe is the biggest challenge for the Disaster Management industry?

To create technologies and to produce equipment sufficiently up to date to cover and to respond to the various necessities and demands, in order to prevent an emergency situation or serving an occurred crises situation. It is well known that natural disasters are generally unpredictable and unrepeatable due to local conditions, so a large scale of possibilities must be taken into consideration. Meanwhile, there are already advanced essential technologies in use helping all phases of disaster management for all kind of intervention (for example GIS) which must be improved and diversified continuously.

Is there a Disaster Management project or initiative that you are most proud of and can you tell us about it?

Because it was very dear to me, I should mention the first disaster management project I was involved in, starting with the negotiation process and along a five years implementation. It was a Japan Technical Cooperation Project on “Reduction of Seismic Risk for Buildings and Structures”, aiming to improve and disseminate effective and low-cost retrofitting technologies, in order to reduce building collapse in case of great earthquake, introduce post-earthquake evaluation techniques and promote disaster prevention education for citizens. I had the opportunity to work with and learn from short and long term Japanese experts and I proudly became a JICA trainee after absolving a training course in Tokyo.

Following the success of the Project described on question 3, I drafted a new Project for seismic resilience in which concepts and new tools as Urban Mitigation Planning were included. The micro-zoning of urban areas, determination of urban “risk sectors”, exploration of risk factors in each sector, quantification and prioritization of risks are elements to be considered for city- level mitigation planning together with investigation of history of seismic

hazards, earthquake engineering, geology and geophysics. The draft is under analyze and identification of financial resources.

Based on personal experiences, what words of wisdom would you offer other Disaster Management professionals?

Disaster management is a multifaceted process that entails various stages as Mitigation, Preparedness, Emergency Response, and Rehabilitation & Reconstruction. The Mitigation effort reduces the probability of the occurrence of damages in order to remove/reduce their intensity; through Preparedness complex sets of actions are promoted by planning for future emergencies; the Emergency response activities are mobilizing resources in a coordinated way ensuring the greatest assistance to those who need it; R&R represents a set of long term programs to restore the system at least to its pre-disaster stage.

Mitigation and Preparedness are pre-disaster components and I strongly support their implementation with priority because of their efficiency; it is well known that to prevent a disaster is seven times cheaper comparing with the cost of the post-disaster intervention after the crises situation was installed, mentioning also an extremely important social aspect: to avoid the human sufferance and life losses.

Can you tell us something about yourself? For instance, what do you like to do in your spare time? Hobbies?

I love nature, animals and wildlife; we are often climbing mountains and spend time in a quiet, natural environment. At home I enjoy pre-classic music, and opera.

(Editor: Thanks Stela!)

TIEMS Nigeria / West Africa Chapter Gets into Business

Following the recent approval of TIEMS' Board of Directors for the establishment of the Nigeria & West African chapter, all is now set for the full commencement of activities.



Already, Membership of TIEMS Nigeria/West Africa has continued to increase with individuals from the Nigerian military, response agencies, security agencies, non-governmental organizations and the media registering to become members.

With this development, a few strategic officers have been recruited to carry on the day to day running of the Society at its recently acquired office located on the busy Samuel Ladoke Akintola Boulevard in Nigeria's Federal Capital Territory Abuja.

The Society is in the process of expanding membership and paying sensitization and advocacy visits to some relevant agencies in Nigeria, the headquarters of the Economic Community of West African States (ECOWAS) and some selected universities. There are currently six universities in Nigeria with centres for emergency studies.

In addition, the Nigeria/West African Chapter has also begun to issue press statements and releases on the activities of the Society and to also sensitize members of the vulnerable communities about basic but important tips for public and personal safety during emergencies.

Arrangements have reached advanced stage to visit some states in the North East parts of the country where the internationally notorious Boko Haram insurgents are terrorizing citizens of both Nigeria and Cameroon. It is important to note that it is in these parts that close to 300 secondary school girls were abducted in the night of April 14, 2014 while they were writing their school certificate examinations.

The Chapter has also brought on board retired Air Vice Marshall Muhammad Audu-Bida to chair its board.

Muhammad Audu-Bida was a Search and Rescue Specialist with the Nigerian Air Force until he retired and was immediately appointed Director General of the National Emergency Management Agency (NEMA). He occupied the position for a term of four years. Since then, he has established the Community Intervention Relief Initiative, a non-governmental organization along with some other individuals.

(Editor: Welcome aboard!)

A Request for Assistance: Help Save Lives



The National Steering Committee for Earthquake Preparedness of the Government of Israel has established a sub-committee to elaborate and formulate imperative SOPs for People-with-Disabilities [PwD] in case of earthquakes, tsunami, Natural Phenomena triggering Technological Disasters [NaTech] and Major Fires.

We intend to confront the entire scope of disabilities: deaf, blind, the elderly, handicapped, mental/intellectual disabilities (ID) or general learning disabilities, Autism Spectrum Disorders, complex/combined disabilities, wheelchair users, and even children in their first 40 months and unable to care for themselves, from 2 seconds following the onset of an earthquake until 20 days later. We would be happy to learn about PwD dwelling in institutions, but also at private houses together with their families.

I would be grateful, as the Humanitarian Coordinator [HC], for every ounce of facts and experience based on empirical evidence and real-time observation and documentation of events {not analytical models} following Large-Scale-Sudden-Disasters [LSSDs] triggered by major earthquakes.

Please, send your contribution in every type of formula and file: videos of CCTV-cameras; personal description and/or reports; documentaries; 'personal memories'; First-Responders' reports; Urban Search & Rescue [USAR] videos; written papers and definitely research papers based on observation.

Please, no editing. We prefer original "raw-material", as is. Please note down every reference by: name/s, time of origin, specify location, circumstances, and observer. I will comply strictly with your privacy requests.

I would be most grateful for your assistance.

Best Wishes from the Holy-Land

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IASON Project: Earth Observation (EO) to Support Prevention and Resilience to Climate Change Induced Risks and Disasters



Earth observations (EO) and information, derived from space, airborne, land and marine networks, play a critical role in supporting first responders and risk managers by providing effective tools to rapidly map damages and impacts during rescue operations following disasters (<http://www.earthobservations.org/area.php?id=di>). European Union through its Environment research program supports better coordination and integration of European activities within the Group on Earth Observations (GEO), giving policy-makers more accurate information as they draw up environmental legislation to protect society and nature (http://ec.europa.eu/research/environment/index_en.cfm?pg=earth).

EU supports the development of European earth observation systems and activities in areas of environmental research needed for GEOSS. Developing capacity-building activities in the domain of earth observation, providing support to international research initiatives in which Europe would contribute to the development of observing systems.

IASON - Fostering sustainability and uptake of research results through Networking activities in Black Sea & Mediterranean areas, is EU funded project within FP7 instrument aiming at establishment of a permanent and sustainable Network of scientific and non-scientific institutions, stakeholders and private sector enterprises belonging in the EU and third countries located in two significant areas: The Mediterranean and the Black Sea regions.

IASON intends to create the proper conditions for knowledge transfer, capacity building, and market opportunities in using EO applications and mechanisms in specific research and innovation fields that are addressing climate change actions. The intention is to create synergies among researchers and institutions in order to transfer technology, techniques, capacity between these two regions and EU member states.

EO could also be used for understanding of the relationship between natural disasters and climate change aiming at risk reduction and disaster resilience. Another aspect of climate change, sea level rise, which is caused by the global warming, is going to affect coastlines. Taking into consideration that most of the affected countries that are lay in the Black Sea basin, and South Mediterranean are poor countries, actions must be taken to strengthen their ability to deal with these phenomena.

All focal points (coastline management and monitoring, monitoring of water and soil resources) can be dealt with the usage of Earth Observation activities and applications.

Besides climate change, the goal of IASON is also to identify the EO related needs in resource efficiency and raw materials management and in the Mediterranean and Black Sea region and promote capacity building and technology transfer that will help the adjoining countries to deal with these issues.

More information about the Project and its outcomes could be found at:

<http://www.iason-fp7.eu>



IASON project has received funding from the European Union's Seventh Framework Program for research, technological development and demonstration under grant agreement no 603534

Can Organizations be Resilient?

By A. Alex Fullick, © StoneRoad 2014

There's a lot of talk of organization's becoming resilient and how they need to be resilient if they are to compete successfully and respond accordingly to the ever increasing disasters of the world – both man-made and natural in causation. But that begs the question: Can an organization be resilient? It is possible? In this practitioner's opinion, yes, they can be resilient though it takes more than the commonly focused 'technology resiliency' to become resilient. Becoming and being resilient is much more than just having a sufficient technological solution in place.

All too often, vendors would have you believe that you can buy resiliency off a shelf; a service or product purchased from a firm touting the fact that their product or service will make your organization resilient, as though the procurement of a 'product' will create a resilient state. Well, unless they're pseudo-psychologists or have a background in leadership psychology, they can't; at least not completely.

Yes, it's fine to say that Business Continuity Plans (BCP) and Technology Recovery Plans (TRP) et al will make an organization resilient but that's not the complete picture and it only addresses the technology components; it's only part of the overall resiliency picture.

What will make an organization resilient? Is there some sort of magic ingredient that will suddenly ensure an organization can – and will - bounce back from any and all adverse situations? The answer isn't easy because it can be yes...and no. The 'bounce back' won't occur based on a single ingredient – technology resiliency – it take multiple ingredients that when combined just so, will aid in getting an organization through difficult situations.

The following sections outline some areas that must be considered as part of the overall resiliency plan if an organization is to become resilient. See which one's fit within your organization and which items you might want to focus on to improve or instil a sense of resiliency.

1 - Previous Adverse Experiences

Resilient by definition means 'bouncing back from adversity' so no one can be resilient if there hasn't been previous adverse situations that the person / organization hasn't bounced back from. How is an organization resilient if it's never had an adverse experience? If it's never had to bounce back before, how will it know that it *will* bounce back? How can you measure resiliency? What are you measuring against? What has it bounced back from to prove it became resilient? It can't be because it's wouldn't have anything to bounce back from, so how could it ever know it was resilient? It can't. Of course, some would say that because the organization didn't suffer badly during a disaster, it was resilient. Well, maybe it really wasn't a disaster or major crisis, just a well-timed and coordinated response; that doesn't automatically equate to being resilient.

2 - Plans/Process

It would be ridiculous to suggest that BCPs and TRPs etc don't help make an organization resilient; of course they do. These are what get opened up and followed (or used as a guide) when the 'real' situation occurs. Through consistent validation and testing, amendments are made and they become more and more robust over time; able to deal with a myriad of situations. If the plans are living, validated and leveraged, then the plans will help the organization become resilient. Not just from providing point by point activities but because the validation and the testing that goes on behind them helps instil a sense of accomplishment and progression to those who use them.

3 - Technology

You can set technology functions up in a way that keeps it going even when the power goes out; even when a primary server (or other component) goes down and data/communications are redirected. You can keep the 'green lights' on in many ways (too many for this small article). The technology component is the single most discussed area of resiliency, to the point where many organizations believe they are resilient simply if they have a strong technology recovery or IT disaster plan in place. Well, we know that IT is only part of the overall picture.

4 - Leadership

Leaders are usually leaders because they are resilient as a person, not because they have a high profile title behind their name. They have fought their way through the ranks, overcoming obstacles and thought their way through many complex challenges, all so they can be the leader – or a leader – of an organization; a reward for hard work and perseverance. A good leader will give back to the organization and help train others within the organization how to better focus energies and deal with adverse situations.

5 - Culture

Who creates the culture? Leaders, create it. If the aspects noted in #4 are true, then the corporate culture will eventually sway in that direction, even when those that oppose the leader find they have to deal with the new way of doing things or decide to leave for other pastures. We all know what flows downhill when there's a problem, but if a good leader really is a good leader, then the good also flows downhill. This positive aspect will help.

6 - People

People are the most important component of resiliency and the most important aspect of any organization. Without resilient minded people, no organization will ever truly be resilient. It's people that bounce back from adversity and as the old English adage states, 'Carry On.' From the org's leadership right down to the newest person walking through the door. They all must work together to support each other; from the top down to the bottom up. Everyone has something to offer in an organization and everyone has a role to play when a disaster occurs.

When all these aspects are combined, then and only then, will an organization have the chance to become resilient? Then, an organization must encounter a situation that tests all these components and *that's* when an organization can determine if it's resilient or not. Once an

organization has bounced back from a situation, or at the very least, been able to stop a situation from escalating, and can stand in front of its clients, customers, partners and the general public stating that it has weathered the storm with its reputation intact, that's when it has become resilient – that it has shown it can be resilient. It's not by purchasing a product or service off a shelf.

FORTRESS – Foresight Tools for Responding to Cascading Effects in a Crisis



Foresight Tools for
Responding to
cascading effects
in a crisis

FORTRESS (Foresight Tools for Responding to cascading effects in a crisis) aims to identify and understand cascading effects in crises. It will analyse how past crisis situations unfolded and what factors enabled cascading effects to occur. Research into four scenarios will be carried out with the purpose of mapping the interdependencies and relationships between different sectors and actors involved in crisis management. The chosen scenarios are: a dam disruption, a European-wide blackout, a cross-border flooding, and mass-flooding in a large city. Using the knowledge gained from this, FORTRESS will develop models that will map different aspects at play in cascading crises. Subsequently, FORTRESS will build and test the FORTRESS Incident Evolution Tool (FIET) to assist decision-makers in understanding the potential effects of their decisions on the unfolding of a crisis. To find out more, or to participate in FORTRESS workshops, please get in touch using the following options:

Project coordinator	Dr. Leon Hempel, Technische Universität Berlin hempel@ztg.tu-berlin.de
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Twitter	@FORTRESS_EU

FORTRESS is funded by the European Union's Seventh Framework Programme under grant agreement no. 607579. Thirteen partners from eight European countries are working on FORTRESS.



TACTIC – Tools, Methods and Training for Communities and Society to Better Prepare for a Crisis

Kim Hagen, Hayley Watson & Kush Wadhwa – Trilateral Research & Consulting (UK)
<http://trilateralresearch.com>



TACTIC (Tools, methods and training for CommuniTIEs and society to better prepare for a Crisis) aims to increase preparedness to large-scale and cross-border disasters amongst communities and societies in Europe. Throughout its two-year duration (May 2014 – April 2016), TACTIC will analyse risk perceptions and behaviour to identify pathways from risk perception to preparedness, and will develop a preparedness audit that communities can use to assess how prepared they are for different types of crises. Additionally, TACTIC will focus on identifying and categorising good practices of communication and education practices for preparedness. The audit, communication and education practices will be discussed and analysed with stakeholders in a series of workshops as part of TACTIC’s case studies on four types of crises: terrorism, floods, epidemics, and earthquakes. Subsequently, a long-term learning framework for improving community preparedness to a range of crisis situations will be developed. All of TACTIC’s outputs will be presented in a web-based platform. Further information on TACTIC can be found using the following options:

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TACTIC is funded by the European Union’s Seventh Framework Programme under grant agreement no. 608058. Seven partners from five European countries are working on TACTIC.



IFREACT – Improving First Responder Ensembles Against CBRN Terrorism



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Introduction

Large European cities are increasingly exposed to terrorist threats. The terrorist attacks on Tokyo (1995), New York (2001), Madrid (2004) and London (2005) have proven international cities and capitals to be the preferred terrorists' targets. Chemical, biological and radiological incidents (CBR), whether carefully planned or accidental, are among the major risks for the EU member states¹. However, the threat of terrorist attacks, especially those using CBRN agents, often go underestimated even though the ability to respond to these events often demonstrates the vulnerability of the existing protection systems and does not correspond to dramatic consequences these accidents often entail².

In fact, over the last few decades of the 20th century and the first decade of the 21st century, first responders (FRs) were confronted with multiple chemical, biological and radiological accidents or terrorist attacks. CBRN protective garments for (FRs) need to provide protection against a myriad of threats whilst still allowing a high standard of operability in case of a CBRN calamity, as FRs are our first line of defence. However, the European Security Research and Innovation Forum (ESRIF) in its 2009 Final Report states that the available

¹ European Security Research & Innovation Agenda (ESRIA), "ESRIF Final Report 2009", *European Research & Innovation Forum*, December 2009, p. 24, http://ec.europa.eu/enterprise/policies/security/files/esrif_final_report_en.pdf

² RMS Risk Management Solutions, 2011, "Terrorism Risk in the Post-9/11 Era, A 10-Year Retrospective", p. 4, https://support.rms.com/publications/9_11_Retrospective.pdf

technical means and equipment used in providing emergency response in these kinds of incidents are ‘far from ideal’³.

The realistic situation on the ground and the post-event deep analyses demonstrated to FRs as well as policy makers that in-use PPE are not very well adapted to their response. Civilian FRs represented by police, firefighters, healthcare providers and special CBRN forces use personal protective equipment (PPE) that resembles, in lesser or greater degrees depending on the model, the versions used by military forces. Unlike military or professional responders, some civilian FRs may receive only sporadic training in using their protection ensembles and this compounds issues such as heat stress and over-protection. Moreover, the PPE is heavy and bulky, has incompatible interfaces between different components and presents a physiological burden that interferes with the operational duties of FRs. Finally, PPE is not standardised or universal. In either case, FRs are unable to perform their tasks in the desired way or level.

In order to solve the existing constraints, PPE must be adapted to civilian FR tasks and missions by striking a balance between the PPE’s protective properties and operational burden, and the capacity to give rapid care to victims. These premises are the basis of IFREACT project aiming thus to remove the above shortcomings without compromising the freedom of movement and dexterity while at the same time ensuring a full compatibility of protective clothing with innovative respiratory protection. Adequate protection which does not interfere with the level of dexterity in performing operational tasks is extremely important for the most effective response. Due to differences in the threat spectrum, the selection of equipment is subject to a variety of factors, i.e. the type of threats, the type of mission, operating conditions, the balance between protection and burden of the system.

Shortcomings and challenges of current protective technology

Threats

The types of threats are rapidly changing after the 11/09 attacks, whereas the last decade has proven as the most intense in the history of terrorist activities⁴ (Figure 1). Accordingly, there has been a shift in the perception of the threat of CBRN terrorism and the changes in the scope of such threats, from classic military to local terrorist threats. Whereas in the past the first to respond to a CBRN incident were mainly military forces, nowadays it is the civil FRs, just as well as CBRN incidents nowadays occur in densely populated urban environments, targeted at the time of day when the victims may be most massive. With such a careful selection of spatial and temporal targets, the consequences of terrorist attacks are becoming ever more far-reaching, even with the use of limited means. Not only do warfare-specific chemical and biological agents have to be taken into account when developing response capabilities and protective equipment, but toxic industrial chemicals are also entering the

³ European Security Research & Innovation Agenda (ESRIA), “ESRIF Final Report 2009“, *European Research & Innovation Forum*, December 2009, p. 146

⁴ RMS Risk Management Solutions, 2011, “Terrorism Risk in the Post-9/11 Era, A 10-Year Retrospective“, p. 4, https://support.rms.com/publications/9_11_Retrospective.pdf

range of modern threats. Such changes of threats at all levels should entail the modification of protective equipment.

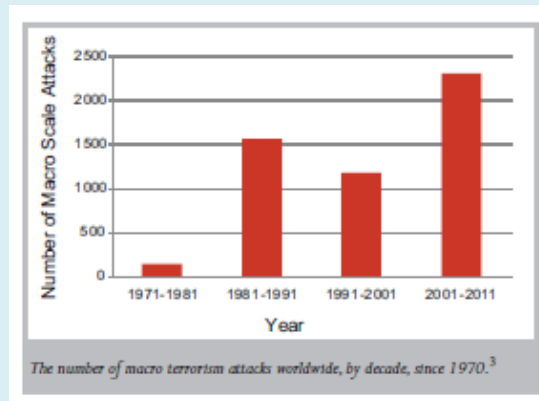


Figure 1: Increase in terrorist attacks after 1970

Missions and tasks

The types of missions are rapidly changing too. The cold war scenarios in heavily contaminated areas have been replaced by smaller missions characterized by asymmetric threats that are difficult to predict. The type and severity of an attack or incident affect the mode of responders' action, their tasks within a mission and the type of protective equipment they are using. Specific tasks of the FRs in such events are different and require different PPE. The choice of equipment is also affected by individual responders' roles which greatly vary within different EU member states. Paramedics in some countries, in case of a CBRN event, must perform triage within the hot zone, while in other countries triage is performed outside the hot zone. Should an ambulance driver and a policeman cordoning the area wear the same protective equipment like a paramedic who must act within the hot zone?

Burden vs protection

The burden vs protection dilemma is still unresolved. The type of threat and the mission, working conditions and the existing protective technology have an effect on the optimum between the physiological burden and protection. There is still no (and the question is if there will ever be) protective suit which at the same time offers optimal protection and optimal comfort. The compliance with protective requirements usually comes at the expense of comfort, and vice versa. The combination of the threat, working conditions and protection capacity provided by a PPE also affects the physiological and psychological state of the FR. The physiological burden is increased by the heat under the suit and its extra weight, which in turn affects dexterity and freedom of movement and finally also the ability to efficiently perform allocated tasks. The psychological burden refers to acceptance by the responder of the PPE in terms of their feeling of safety against the threat. The stress level is significantly influenced by complicated and time consuming donning and doffing, and can be further increased by the lack of a quality communication with the rest of the team and commanders. Accordingly, the existing CBRN PPE available on the market today needs adjustment to suit civilian needs by modification at all levels, whether in terms of materials and design or in terms of compatibility with commonly used add-ons.

IFREACT and its goals

The objective of „Improved **F**irst **R**esponder **E**nsembles **A**gainst **C**BRN **T**errorism“ research project, or IFREACT, based on the above mentioned system shortcomings, is to develop a new generation of protective equipment for FRs which would enable them to provide a more efficient response in case of CBRN incident. This is a 3-year, still ongoing project ending in December 2014 which answers to the EU FP7 call ‘CBRN Individual Protective Clothing’ where the task is “to develop innovative protective clothing for FRs and/or for the public in case of a CBRN crisis.”

This main objective will be realized by combining innovative security technologies and materials with cutting-edge software solutions. Furthermore, this innovative set of protective equipment will include, besides protective clothing with an integrated respiratory protection, a set of high-tech communication devices. In the final phase of the project, different parts of protective equipment will be integrated into a single set to be the first such set representing a complete solution for a CBRN event.

IFREACT consortium gathers 11 partners from six EU states (France, the United Kingdom, Germany, the Netherlands, the Czech Republic and Croatia) and consists of CBRN manufacturers, subject-matter experts and end-users:

- NBC-sys and BLÜCHER are PPE companies developing and producing gas masks and protective clothing;
- UPEC/SAMU is an academic teaching institution and a pre-hospital medical service;
- DUZS is the national Croatian protection and rescue directorate;
- HOTZONE SOLUTIONS is an international training company specialized in CBRN consulting;
- SUJCHBO is a national Czech institute and certified laboratory for Nuclear, Chemical and Biological Protection;
- ASTRIUM SAS is a market leader in the design of satellite-based telecommunications;
- PROMETECH is an innovative Dutch homeland security start-up;
- BERTIN is an expert in biotechnologies: biodefence and biosecurity;
- CBRNe World is a specialized communication company, publishing the CBRN sector’s leading magazine and
- BUSINESS EDITING is an international communication consultancy.

Bringing together leading protective technology and blending it with some of the latest software will enhance the CBR protection of European FRs. IFREACT will focus on functionality, optimal wear-ability and comfort through the development of new and innovative key functionalities:

- a PPE system that:
 - addresses the real protection needs of the typical users;

- provides adequate protection, while keeping the burden of the system as low as possible;
- includes solutions for hand and foot protection as well as respiratory protection;
- addresses tactical needs such as communication, localisation and situational awareness with affordable, robust and easy to use technology.

The IFREACT project will develop solutions for a number of professional responders, according to the typology developed by CEN Workshop Agreement 43, (Document CWA 16106). This project will focus on initial responders, CBRN professionals and emergency services, including medical personnel. Based on the results of a threat analysis and user requirements, IFREACT will also provide a digital selection tool that allows end users and procurement staff to select the most appropriate PPE for their mission.

Exercise and laboratory tests

A simulation exercise carried out has indicated the basic flaws of protective equipment and the differences in the specific needs of the civil responders in relation to the military users. The field exercise scheduled for October 2014 will further test the manufactured prototypes. Laboratory tests of the existing PPE (both air-permeable and air-impermeable ones) have measured protective parameters and the impact of PPE on the physiological functions of the user during the use as well as protection properties using chlorine test and aerosol tests. The test has shown that air impermeable suits do not necessarily provide a better protection compared to air-permeable ones because of the bellows effect (pumping effect). It was also shown that, even in case where the PPE was made of high quality materials, in combination with other parts of the protective equipment there is a decline in the level of protection due to incompatibility between the interfaces (particularly between the hood and the gas masks, or the suit and the gloves/shoes) and due to excessive physiological burden put on the user. The tests also help to prepare work for the standardization of PPE solutions.

Respiratory protection

A full compatibility of the protective suit and respiratory protection is one of the main goals of the project. Respiratory protection has always been a challenge for manufacturers and FRs. After having identified all the different types of respiratory protection existing on the market and collected user requirements, two types of respiratory protections have been foreseen: a *positive pressure hood* giving priority to comfort and freedom of movements and a *gas mask* with a hood adjusted on it which can be used either with a blower or an individual filter (*Figure 2*).

The positive pressure hood will maintain an over pressure by a blower system carried on the body of the wearer and not on the head, to avoid heavy load and fatigue during the mission. The regulation of the air flow inside the hood will be done directly through the fabric, by a special construction to avoid carbon dioxide storage inside the hood. Namely, end-user feedback from our workshops, particularly in Paris, made it clear that the heat stress to the

face and head is arguably the biggest problem to overcome. The overpressure hood visor will provide a good visibility and no effort for breathing as it works with a blower (PAPR). The aeraulic circuit is made of fabric to reduce weight and has two air pipes, one on each side of the hood, to supply air-flow over the visor in order to avoid moisture building up and for ease of breathing. A third aeraulic pipe goes over the top of the head to cool the user.

The main innovative elements of the gas mask combine a textile head harness and a softer material made to reduce burden; a smaller canister connector reducing neck fatigue with a special device developed to move the canister to one side of the gas mask; a larger, flexible, panoramic visor, an aeraulic circuit reducing the build-up of fog on the visor and limiting re-breathing of CO². A special drinking device is developed to be used with a reservoir. This drinking device is fixed to the hood. The balaclava is pre-assembled to the mask prior to donning. Blücher and NBC-Sys worked together in order to match the balaclava with the new mask thanks to an innovative butyl ring. This is preassembled, and then donned very quickly when needed. This type of product avoids leaks in interfaces.

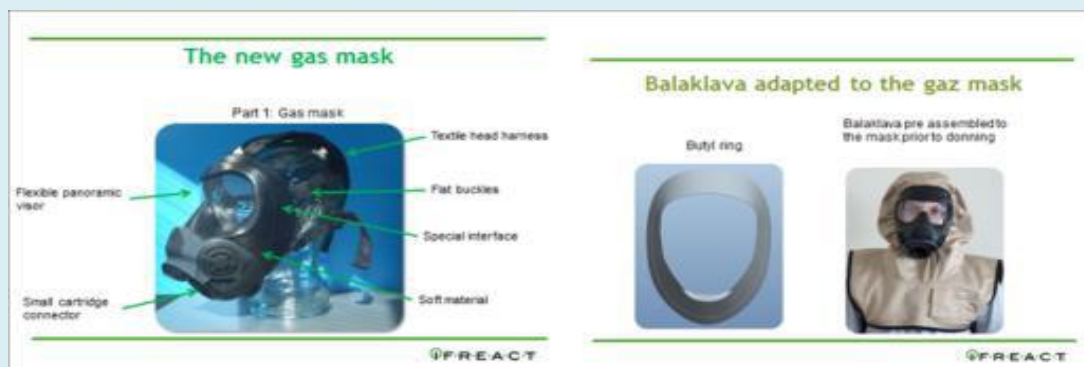


Figure 2: Innovative gas mask

Skin protection

The PPE thus is conceived as an ensemble for modular use with different airway protections. An ensemble means that skin protection and airway protection specialists will work together to produce a PPE with optimal interfaces. IFREACT project is developing three types of suits intended for different uses and tailored to suit different needs of civil responders, their tasks and levels of training. Blücher is developing these suits with air permeable Saratoga technology (oil and water-repellent outer fabric, capable of purifying contaminated air when passing the adsorbent layer and of providing convective and evaporative cooling when water vapour penetrates to the outside). They are developing an adsorptive, stretchable undergarment (*Figure 5*) for fire fighters or policemen so they can use their own certified equipment; a suit for well-trained FRs responsible for Search and Rescue (*Figure 3*) and a suit which facilitates use for occasionally trained FRs acting in the warm zone for a limited time (6 hours) (*Figure 4*). The suits have group affiliations by their colours (high visibility from far distances; during the day; reflective materials for night visibility).

In order to reduce physiological burden, Blücher uses novel, lightweight materials and is developing hybrid suits with materials of different properties to be used in different body areas. Different concepts of adsorptive, impermeable and hybrid gloves cover all types of

tasks from fine gestures to physically demanding performances. Different solutions of foot protection are being developed too.

Studies conducted within IFREACT at the early phase demonstrated the requirement for using air permeable technologies in CBRN protective PPE for FRs. As such technologies are currently not covered by any existing performance standard, IFREACT is preparing the way for subsequent standardization by providing as much performance information as possible by the end of the project.

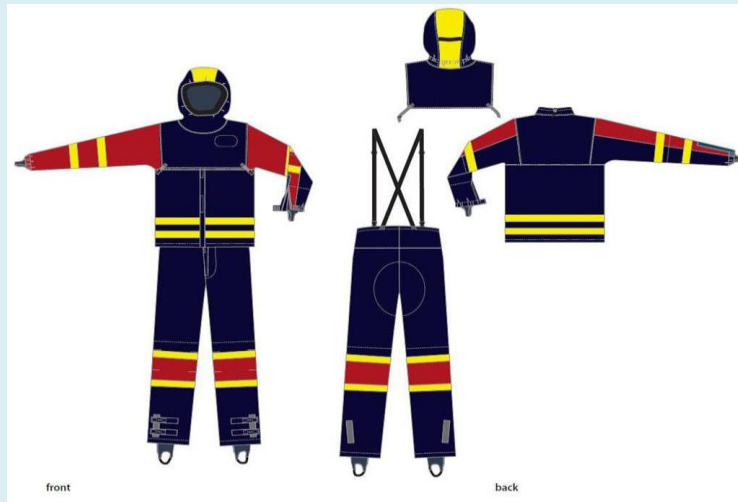


Figure 3: Heavy duty suit



Figure 4: Light-weight suit

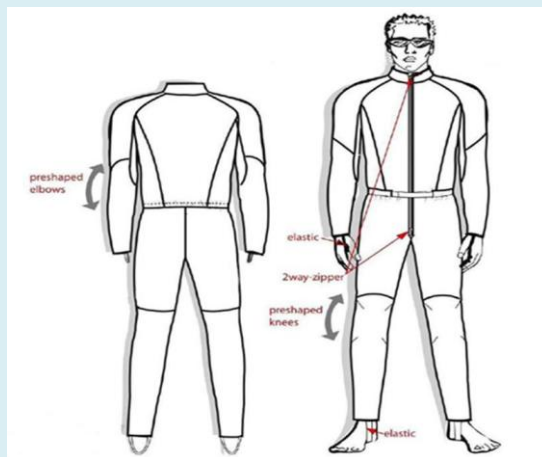


Figure 5: Protective undergarment



Figure 6: IFREACT PPE

High-tech add-ons

In CBRN events, communication means that ensure the safety of responders, allow the autonomy in the performance of tasks through the exchange of information (audio and visual) between FRs and the command and control room are vital. This innovative system of protective equipment will include, in addition to the protective clothing and integrated respiratory protection, a host of high-tech communication devices that provide access to and exchange of information between the field and the headquarters. The body protection will be considered as a platform, such as a network link, to connect all the add-ons needed during a CBRN operation.

Prometech provides software for the **head-up display** (HUD), placed inside the mask. The HUD system can help improve situational awareness by providing the FR with accessible, relevant, appropriate and key information on the task or activity the FR is to perform such as looking at a map, receiving directions, accessing timers which show time spent from the start of the mission or since entering the zone or time left to do a task, receiving an alarm and directions for urgent evacuation (*Figure 7 and 8*). When the FR enters the CBRN zone this

information is displayed on the HQ screen. The name of the FR is also displayed, together with their picture and role. The chest camera is a smartphone mounted on the chest of the suit in a special transparent pocket. The chest phone can take pictures/videos of the surroundings and send them to the HQ; these videos have a fairly low resolution but they allow commanders to receive live input directly from the field, which is particularly useful for tracking.

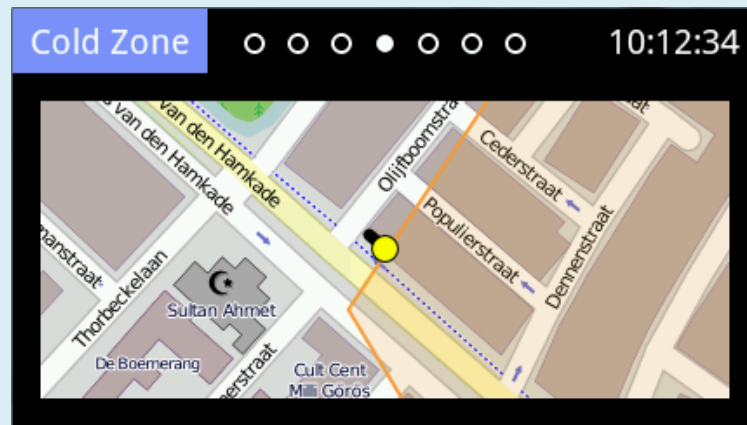


Figure 7: HUD provides real-time information on task/mission, ability to check maps, receive directions, notifications etc.

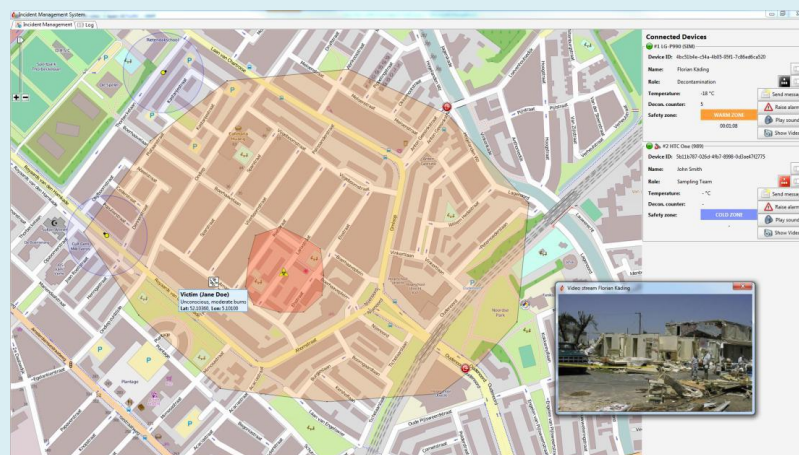


Figure 8: HUD display showing warm and hot zone

The Astrium **communication bubble** (Figure 9) is the size of a large suitcase and when in place, it has a 1.5 km expandable range of action. It is easy to deploy and provides a dedicated network to communicate via standard GSM phones. It allows the creation of a large number of lines with a capacity of 28 simultaneous calls. Astrium also provides a roaming capability, so users inside this pool of lines are able to contact phones all over the globe through a satcom link connected with the bubble. Astrium is developing Voice over IP software products to provide a completely hands-free communication service. The application also allows the wearer of the PPE to be better identified, to localize them and to take and share geo-localized field photographs the FR needs to share with the HQ or other FRs (to share interrogation about symptoms, for instance). The phone will be worn on the forearm to keep the FR's hands free, it is worn inside a case keeping the tactile capability and protecting the device from water spray and splash. It goes with a headset that is so small it will not obstruct the auditory

canal, allowing the FR to hear ambient sounds. The use of these add-ons can significantly improve situational awareness. It will prevent FRs from carrying heavy communication devices and cameras.



Figure 9: Communication bubble

Levels of exposure of responders to the impact of various chemicals in the field are unknown until symptoms begin to develop, which delays suitable and timely medical treatment. The final add-on is a very small, lightweight **biodosimeter** device (*Figure 10*), composed of a small air pump, a mini-cyclone, two rechargeable batteries and electronics. It can perform continuous aerosol collection for around 6 hours (with an air flow-rate: 10 – 30 L/min and physical collecting efficiency: >50 %.) After collection, the cone is taken off for quick provisional identification by hand-held assays (immunoassay), and further identification can be conducted through laboratory analysis. Periodic readings of these aerosols can provide tracking of biological incidents in the warm zone.



Figure 10: Biodosimeter collects data on biological exposure

Digital PPE selection tool

IFREACT will also provide a standardised interactive PPE selection tool (*Figure 11*). This tool is designed to aid responders and procurement services in selecting the most appropriate PPE for a given task. The tool will take into account the threat, the environment, the likely duration of tasks and so on, in order to best advise the responder or procurement services on the most suitable PPE. It will be based on the knowledge gained in the Real Threat Scenario Analyses (where challenge levels are calculated using different CBRNe Consequence models), User requirements (through regional workshops and outcomes of threat analysis) and

Concepts of Use collection (the missions and tasks to be executed by FR, duration etc.). The added interactivity and flexibility of the IREACT selection tool will enable end users to modify their PPE selection to the most specific of tasks and environmental conditions. As the PPE Selection Tool is a web application, it can be accessed through the Internet using any modern browser. The selection tool consists of a set of questions which require the end-user to make a choice between one of several options. Once the user has answered all the questions, he or she will be presented with a recommendation. If no suitable ensemble is found in the database the ensembles that provide the best protection are shown instead, together with a warning.

Figure 11: Set of questions based on which digital selection tool offers recommendation on optimal PPE to use in a given context

Conclusion

IFREACT will help FRs gain flexibility, thus capability and efficiency, by creating PPE with less physiological burden, less induced psychological stress and thought disturbance, easy and rapid donning and easy FR identification. The design of PPE developed within IFREACT project is based on an analysis of existing solutions, current threats and the real needs of end users, and pays particular attention to the compatibility of the interface between the different parts of the protective equipment to ensure continuity and consistency of protection. Developed protective equipment, tested in the laboratory and in two field exercises will be adapted to the specific incident and emergency services mission members to optimize their protection and will be a self-sufficient solution to answer a CBRN event.

By developing new, innovative CBRN PPE to improve European capacity to respond to Bio/Chemo threats, we are delving into as yet uncharted territory. For that reason, the exchange of collected info, experiences and achieved results will be deemed highly useful. You are free to contact us. Our website (ifreact.eu) introduces the project, consortium members and provides information on the past and upcoming events.

These innovations benefit from research funding by the EC under the 7th Framework Program for research and technological development, under the grant No. 285034. We invite you to join us for the final meeting in BRUSSELS in December 2014.

TELL ME Project: A Summary



Background Information and Context

From the onset of an infectious disease outbreak, public health communication is a critical component for influencing population behaviour toward an effective containment of the disease. The continuous growth and development of information and communication technologies (ICT), calls for public health authorities to break through traditional barriers and shift away from the conventional top-down, representative governance approach, which makes use of a number of behavioural models to convey persuasive messages to the public. In the effort to meet the ever-growing information needs and requirements by the general public, experts involved in outbreak communication should explore new pathways and strategies, towards a participatory governance approach, to effectively address general public concerns and deal with deeply entrenched beliefs that have an effect on the uptake of preventive measures in the event of an outbreak.

The recent developments in ICT have triggered changes in the communication dynamics between public health authorities, the media and the general public, leading to a certain extent to the “*deinstitutionalisation of information*” as various stakeholders take an active role in the outbreak communication process. By taking into account opportunities and challenges posed by ICT developments and increasing interconnectedness as a result of globalisation, it becomes imperative to create a suitable and innovative framework to address new challenges and exploit the huge potential that the information society can offer in terms of participatory communication in preparedness and response phase of an epidemic. This is the pivotal concept that drives the TELL ME project, backed up by the notion that open and transparent communication is key element in the process, which requires delivering of evidence-based messages, involvement of citizens and health professionals in decision-making processes and engagement in two-way dialogue with public health authorities.

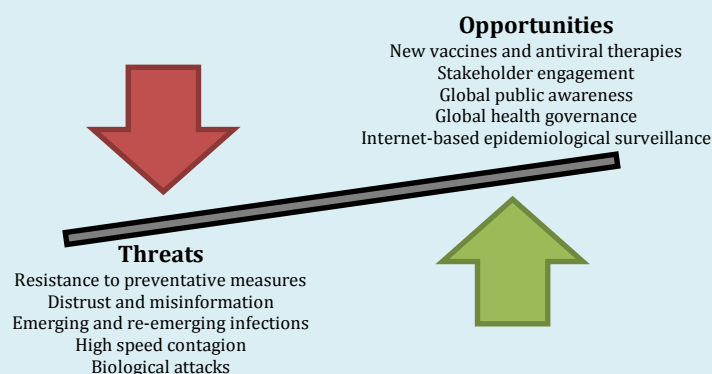


Figure 1 - The TELL ME concept

Research Questions and Objectives

TELL ME set as an overarching goal the establishment of an integrated research project involving a range of experts in social and behavioural sciences, communication and media, health professionals and representatives from civil society organisations to develop an evidence-based behavioural and communication package to respond to major infectious disease outbreaks, notably flu pandemics. In such a context, the project aims to address the following three distinct research questions regarding communications during infectious disease outbreaks, to better articulate the TELL ME concept:

- **RQ1** : How can the general public be better motivated or positively influenced to take effective preventive measures during the outbreak?
- **RQ2** : Which are the most appropriate communication methods to deal with the complexity, uncertainty, misinformation and malicious information?
- **RQ3** : What are the best communication strategies to maximise vaccine uptake, and to assist health professionals and agencies to cope with vaccine-resistant groups?

To address those questions, which have been set to define the scope of the project, research in TELL ME concentrates on key focus areas, such as: **a)** the investigation of behavioural traits and ways that human behaviour influences disease transmission, vaccine acceptance or refusal, and antiviral therapy acceptance in the general population during a health crisis, **b)** development of appropriate communication methods, especially regarding complicated messages and advice based on uncertainties and/or information gaps, **c)** evaluation of knowledge and attitudes towards vaccination for a better understanding of the level of acceptable risk in vaccination in relation to the perceived risk of disease.

In essence, the project comprises **three main stages** (Figure 2) and by use of mixed-method research techniques (e.g. focus groups, expert interviews, stakeholder surveys, validation meetings etc.), TELL ME seeks to meet the following **four objectives**, with each objective mirroring a scientific Work Package (WP):

1. To collect and discuss evidence about population behavioural responses to infectious disease outbreaks, and ways in which different types of communication can affect human behaviour (**Objective 1 - WP1**).
2. To identify and assess emerging challenges and new methods for public health communication with respect to infectious disease outbreaks (**Objective 2 - WP2**).
3. To develop an integrated, evidence-based communication package (TELL ME Communication Kit) – based on a ground-breaking framework model that will offer a new participatory model for outbreak communication – comprising a series of guidance documents for health professionals and agencies to support an effective engagement with vaccine-resistant groups during infectious disease outbreaks (**Objective 3 - WP3**).
4. To design and construct a model prototype (Agent-Based Simulation Model) to test the effect of new communication strategies developed in TELL ME, by simulating the

actions and interactions of autonomous decision-making entities within a virtual environment in the event of an epidemic outbreak (**Objective - WP4**).

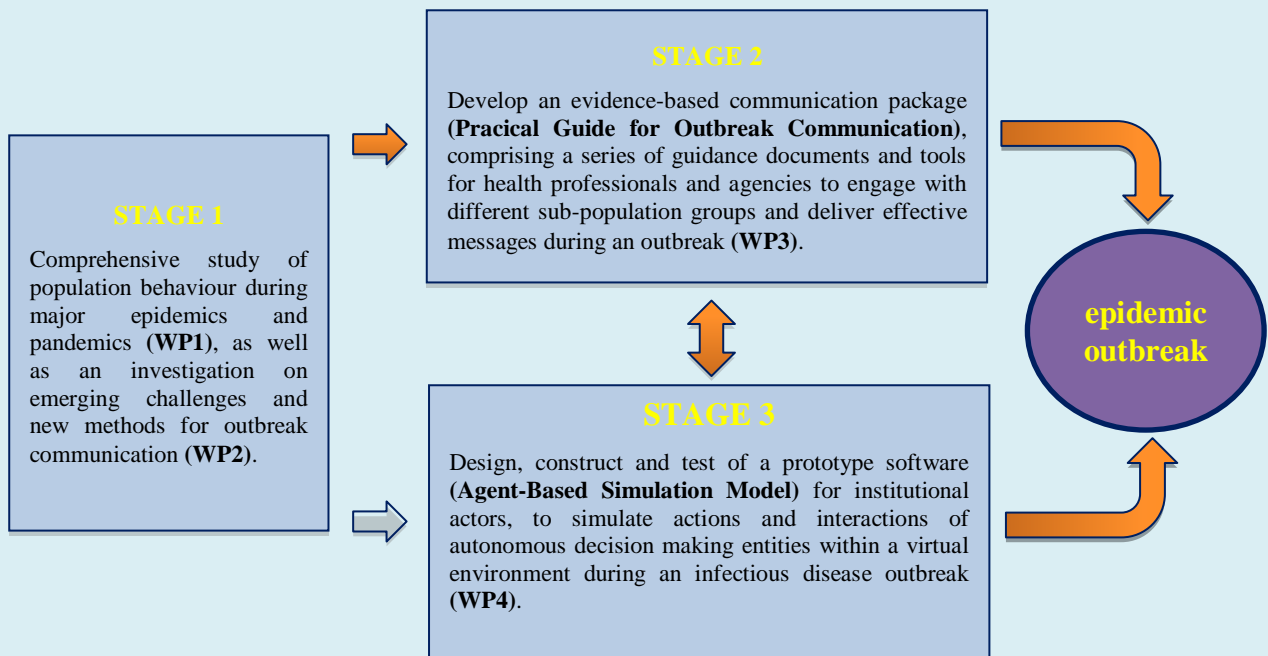


Figure 2 – The three stages in TELL ME to develop a communication package for responding to epidemic outbreaks

Potential Impact

The TELL ME project will provide public health agencies, policy makers, and civil society organizations with a state-of-the-art assessment of best practices in risk communication and an enhanced understanding of communication problems that have occurred in previous infectious disease outbreaks. Communication strategies to support vaccine uptake will be developed, as well as a series of guidance documents will be created for health professionals and agencies to support an effective engagement with vaccine-resistant groups and groups at risk of stigmatisation and discrimination. Furthermore, the TELL ME project will provide policy makers, public health agencies, and communicators with an innovative prototype model for crisis communication, on the basis of which messages can be produced for different sub-populations across different countries. The model will offer guidelines for institutional actors to work with different sub-populations of health professionals and form partnerships with them as local opinion leaders, towards an effective intervention during a crisis. With the prototype model will be possible to test public response and impact of messages communicated in the event of an infectious disease outbreak.

To minimise deviations between perceived and intended messages in the course of a pandemic, the TELL ME project will focus efforts to thoroughly investigate information distortion and overload, information discontinuity, gaps between intended and perceived messages etc. It is expected that the TELL ME project will make valuable contributions on theoretical level, concerning availability and types of information during the outbreak. On the practical side, the TELL ME project is expected to provide communicators and officials with an effective simulation tool so that any risks could be tested and calculated in advance, with the aim to make any refinements for minimization of deviations between perceived and intended messages.

Consortium and TELL ME website

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| 1. Vitamib SAS (VITAMIB) | 7. Latvijas Cilvektiesību Centrs
Biedriba (LCHR) |
| 2. British Medical Journal Publishing Group
(BMJPG) | 8. Vrije Universiteit Brussel (VUB) |
| 3. CEDARthree (CEDAR3) | 9. National Disaster Life Support
Foundation (NDLSF) |
| 4. University of Surrey – CRESS (SURREY) | 10. University of Haifa - School of
Public Health (HU) |
| 5. Istituto Superiore di Sanità (ISS) | 11. Zadig (ZADIG) |
| 6. Union Européenne Des Médecins
Omnipraticiens (UEMO) | |
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Scientific Coordinator:

Manfred Green (University of Haifa)

Administrative Coordinator:

Olivier de Bardonnèche (Vitamib SAS)

TELL ME Website:

www.tellmeproject.eu

TIEMS 2014 USA Conference

The conference was hosted by the University of Southern Mississippi (USM) in Hattiesburg, Mississippi, and this conference marked the return of a TIEMS conference to the USA after a number of years since the last conference of TIEMS in Washington D.C. in 1998 and a workshop same place in 2003. Attendees and organizers agreed that the conference was a great success – high-quality presentations, attendees from ten countries fully engaged in great discussions and networking, and a friendly, relaxed atmosphere to enjoy each other's company in the hospitable Southern USA!



Group photo during the conference

Five prominent keynote speakers set the stage for in-depth discussions of the many dimensions of the conference theme: “Global Response for Capacity Building of Disaster Preparedness”. K. Harald Drager (Norway), TIEMS President, explained the driving force behind the conference - TIEMS’s mission to contribute to building resilient societies worldwide. Dr. Guosheng Qu (China), TIEMS Vice President, challenged us to participate, telling us how USA institutions, organizations, and industries can help third-world nations become better prepared. Kay Goss (USA), CEO for World Disaster Management, provided her unique perspective on how emergency management has evolved over the last ten years, and where it is headed in the next decade. Lt. Col. Martin Thomsen (Denmark), Chairman of Sahana Software Foundation, gave us a dose of reality from his recent experience with on-the-ground international relief efforts, and also led us in a Q&A session that left us wishing we could go on for a few more hours! Brent Woodworth (USA), President and Chairman of Los Angeles Emergency Preparedness Foundation, shared his extensive experience and insight into global crisis relief, particularly engaging the substantial resources of global corporations.



Keynote Speaker Martin Thomsen



Keynote Speaker Brent Woodworth

And of course, the keynote presentations were just the beginning – the rest of the conference papers were truly high-quality and stimulating, covering a remarkable range from theory to practice, specialist to activist, and technology to politics. See the TIEMS website library to read the papers and presentation materials from the conference.

A particularly important goal of the conference was to establish the first TIEMS USA Chapter. We were extremely pleased to assemble a founding Board of Directors with eight very capable and energetic members: Kay Goss (President), Brent Woodworth (Vice President), Connie White (Secretary), Tom Robertson (Treasurer), Jim Hagen, Mike Martinet, Joseph Pollack, and Tom Stahr. The group is already talking about exciting opportunities and initiatives for the Chapter!



TIEMS USA Chapter President Kay Goss

The USA conference organizers were Jim Hagen, Tom Robertson, and Connie White. As local host, Connie arranged excellent facilities at the University of Southern Mississippi, an

impressive tour of a local Emergency Operations Center, and some very enjoyable social functions, including a trip to New Orleans.



*The three organizers, Tom Robertson, Connie White and Jim Hagen being thanked by
TIEMS Vice President Guosheng Qu*

The conference kicked off what we expect to be growing TIEMS activity in the USA, and increased interaction between the USA and international emergency management communities. We invite you all to participate, and look forward to seeing you at the next TIEMS USA conference.

TIEMS China - Medical Committee Update

National Emergency Medical Rescue Construction in Guangdong Province

Deputy Director of the International Emergency Management Society Emergency Medical Committee (TEMC), also as the president of Guangdong Emergency Hospital, Junzhang Tian gave a speech on the construction of the national emergency medical rescue team. Guangdong province locates in the south of China where there have been many infectious outbreaks. According to the requirement of Ministry of Health in 2010, Guangdong emergency hospital took charge of establishing the national emergency medical rescue center and team. Through constant training of simulation, such as long camp and field training, coordination and cross-regional comprehensive rescue ability exercise. The capacity of emergency rescue has had a great strengthening. The rescue equipment has been improved these years that is one of the best in China.

The Chinese government is paying more and more pay attention on the construction of emergency rescue systems after the Wenchuan earthquake. However, compared with other the developed countries, there are is a shortage in emergency rescue concepts, on-site rescue mechanisms, and emergency talent cultivation within China. It is a way to strengthen international exchanging and build some training base. The Department of Emergency Medical was setting up in Ji Nan University four years ago with the support of Guangdong Emergency Hospital. Meanwhile, Guangdong Emergency Hospital also focused on creating opportunities to earning the recognition to become not just a leader of emergency medical and rescue in China, but also a key global centre for Pilot Studies and Training.



Junzhang Tian, deputy director of TEMC and president of Guangdong emergency hospital

The Chinese Doctors Training 118 Rescue System in Italian

“During June to September, 2013, as a Chinese doctor, I was assigned to hospitals of Florence, Italy by the Ministry of Health of China for training programme. There was exciting experience that we had an opportunity training with 118 emergency rescue systems in Florence, Italy that was manages scientifically, responds quickly, strengthens joint co-ordination, rescues corporately and achieves remarkable successfully.

“As soon as the trained phone operator gets through the rescue call, he or she dispatches rescue persons and vehicles according to the specific information in order to achieve the fastest, the nearest, economic and rational, sequential rescue. When necessary, the helicopters are dispatched to the spot and transfer the patients. Sometimes firemen, policemen, rescue boats and dogs work corporately. The sea, land and sky emergence rescue achieve the remarkable successfully. At the same time, the procedure of Italian psychological rescue is very regular, and the level, the rate of popularity and the degree of emphasis are all very high. For example, the successful emergency rescue experiences of the aground of the cruise liner Costa Concordia, on the 13th Jan, 2012. Including the successful experiences of the psychological crisis intervention. As a psychologist, I am really interesting in the matter. In fact, whether pre-hospital care (First Aid) or emergency rescue in hospital, the psychological emergency rescue is all indispensable in Italy. With the increasingly emphasis of the psychological health, it will surely become one of the important tasks. It is obviously important that several officers and specialists talked about the psychological crisis intervention in this Chengdu Meeting of The International Emergency Management Society Medicine Emergency Committee. In additional, the training of the staffs is forthcoming and the volunteer system is very excellent.

“Compared with Italian psychological emergency rescue, Guangxi Province as one of the underdeveloped area in China, should more and more emphasis on the psychological training. Actually, there is one psychological crisis intervention group in Guangxi Province. The members take part in the national regular training of psychology and play an important role in practice. and the psychological emergency rescue group gets involved and play an important role in the great meeting such as the ASEAN –CHINA EXPO, and major accidents. We hope there are more opportunities to share our experience with other countries’ colleagues. Anyway, it is worth of Italian emergency rescue training. And welcome friends from other countries to share experience in Guangxi Province of my hometown.”



To Explore the Mode of Human Resource Training on Emergency Medicine in China

The president of Guangxi Medical University, Jinmin Zhao shared the experience of training the medicine rescue talents.

Guangxi Province locates the southern of China and bordering with Vietnam. It has the Land border over 1.02 kilometers and a coastline of 1.5 kilometers. and it is a spot of integration of the economical resources between western and south-eastern of China. With the development

of society and economy, Guangxi province faces more and more influences such as natural, environmental uncertainties and public incidents.

During the speech, president Zhao pointed out the shortages of emergency rescue construction system in China, for instance, lacking of capability in fundamental system building and public common rescue awareness, poor networking construction and disorder in emergency rescue field. Those are the problems and issues not only for Guangxi province but also for the whole nation. As a result, building the platforms for cultivating the medical rescue talents comes to the first priority of the medicine rescue construction.

A series of platforms have been built to offer the chance to the talent cultivation such as Rescue Association of Guangxi, Guangxi PTC (Primary trauma care center) Training Center, the AHA(American Heart Association) Guangxi Medical University, Guangxi University key laboratory of emergency medicine and so on. At the same time, the first affiliated hospital of Guangxi Medical University dispatched the medical rescue group to join the crews to transfer the injuries in the Wenchuan earthquake, and that experience also bring the values and ideas for the Guangxi province in constructing the system of medical rescue.



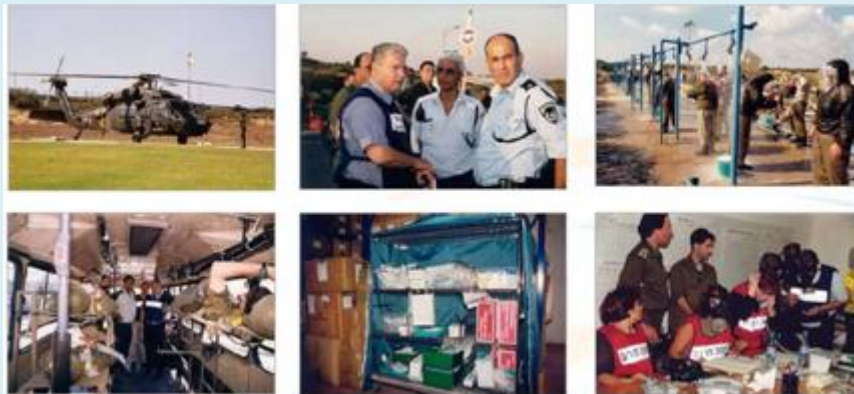
Jinmin Zhao, the president of Guangxi Medical University, shared the experience of raising up the medicine rescue talents in the convention

A Brief to the Sino-Israeli Intergovernmental Program (MASHAV) in the Preparedness and Response to Emergence and Disasters

On the 17th of April, the First Working Conference of International Emergency Management Society Emergency Medical Committee (TEMC) was held in Chengdu, which offers a new platform for peers in the preparedness and response to emergency and disasters, with the facilities for academic exchange and cooperation. Prof. Peng Xinyu, the President of School of Medicine, and the Director of the 1st Affiliated Hospital of School of Medicine, Shihezi University, PRC. (the Hospital), detailed the way they have carried on a comprehensive cooperation in this line, with Israeli experts mainly from the Hillel Yaffee Medical Center, Hedera, Israel (HYMC) as partners from 2010. The cooperation has drawn attention and support from the Embassy of Israel in Beijing, from the Israeli Ministry of Foreign Affairs (MASHAV), from SAFEA, from Chinese Embassy in Tel Aviv, Israel, XPCC, TEMC, also

from experts of civilian and military medical institutes, as sponsors or cosponsors. Prof, Peng focused on the background, the current situation and the trend of the cooperation.

The cooperation began in 2010, for the similarities in natural surroundings, geographical political surroundings, the situation in anti-terrorists and the needs for medical service to such situations. In 2012, the Hospital and HYMC tied as “Sister Hospitals” and with joint efforts, a “Sino-Israeli Wound Healing Center of XPCC” was founded. As a symbol, the cooperation stepped into a new phase.



Prof. Meir Oren, Director of HYMC, was the former minister of Israeli Ministry of Public Health, former Director of the Medical Division of Israeli Defense. Now the Chairman of “Israeli Committee of Trauma and Disaster Medicine”, and Chairmen of Israeli Committees of in different directions of emergency and disasters, one of Executive Director of TEMC. Prof. Meir Oren is enthusiastic in promoting the cooperation between China and Israel in this line. Prof. Matan Vilnai, Embassy of Israel in Beijing, senior scholar in military and mass organization management in the Research Institute of the Johns Hopkins University of Washington and of the Center of International Affairs of Harvard University, Boston, is an active participator in the cooperation.

The Mashav program, as an intergovernmental training program in the line between Israel and China will last for 5 – 8 years, consisting of courses training and forum of high end experts. The former will be held in the Hospital and Sichuan University respectively, the latter will be hosted by the Hospital in Shihezi, every year. Israeli experts in this line come to China under the efficient organization of Prof. Meir Oren, offer their ideas, technologies, systematic structure and practical experience, lessons in order to improving international exchange and cooperation of health care system in this line, to develop the whole system a high efficient medical assistant team for emergency and disaster aiding. In near future the cooperation will be extended to Israel for real time and occasion training, the ultimate aim is to introduce Israeli state trauma system and its base in medical sciences: the Training Course in the Preparedness and Response of Health Care System to Emergency and Disasters.

Emergency Medical Rescue of Kunming Terrorist Attack on the 1st March 2014

The commissioners of The International Emergency Management Society Emergency Medical Committee (TEMC), president Lihong Jiang of Yanan Hospital of Kunming City,

represented Mrs. Heping Xu who is the vice Director of Bureau of Health of Yunnan Province, gave the speech on Emergency Medical Rescue of Kunming Terrorist Attack on the 1st March 2014.

Yunnan Province of China locates in the southwest part and borders some Asia countries. Kunming is the capital city of Yunnan Province. As the crossroad of economy and cultural in the Province, it has been very important strategical place. The terrorist ers attack brought out 29 death and 143 injuries casualties in Kunming railway station on the evening of the first March 2014. More than 11 hospitals of provincial and municipal level took part in medical rescue. Kinds of experts groups were participated the action immediately, including the psychological intervention group.

It is a lesson for the emergency event occurring in Kunming City. Compared to high developed countries, it revealed a lot of problems from the event, such as lacking of a common sense of public responses to the emergency situations, common defending and quickly management capacity, etc. As a result of that, it is real important to improve the emergency responding system and rescue capacity. Therefore, there is large space for emergency management and medical rescue in China.



K. H Drager, the President of TIEMS and Heping Xu, the vice Director of Bureau of Health in Yunnan province.

The Significance and Advantage of Telemedicine in Emergency Rescue

The First Working Conference of The International Emergency Management Society Emergency Medical Committee (TEMC) during the 17th April, the commissioner also as the president of Gansu Provincial Hospital, Tiankang Guo gave a speech on the applying of telemedicine in Gansu Province of China where is located in the northwest of China, more than 1600 kilometers from west to east and covers the 453700 square kilometers. The medical conditions is poor because of the geography and the imbalance of the health medicine care. In order to solving the problems, the Gansu Provincial Hospital voluntarily investigated and established the telemedicine consultant center. The system became the first hospital in China which cover the more than 100 counties level hospitals and offers the minimum charges and

free installation. Ministry of Health, China put Gansu Province to be an example in China for the telemedicine consultant center and set up the on-site operation conference to instruct national work.

The telemedicine medical network is not only presented the characters of efficient, timely, and authority but also show special merit of the emergency event such as the rescue of Wenchuan earthquake in China. Due to efficiently work, the State Council presents Gansu Provincial Hospital as one of two with the most advanced units for the excellent performance. From the cases in Gansu Hospital, the telemedicine system can be used in the normal healthcare management also it can be more useful emergency situation, especially underdevelopment areas. Therefore, the telemedicine will bring a good future on emergency medicine in China.



President K. H. Drager presented the Tiankang Guo

Multidisciplinary Efforts to Build “Mass Emergency” Medical Rescue System

On April 17, 2014, the First Conference of the International Emergency Management Society Emergency Medical Committee (TEMC) was successfully convened in Chengdu, Sichuan Province. As TEMC commissioner and conference keynote speaker, Professor Wang Xinsheng, president of the Affiliated Hospital of Qingdao University, delivered a speech about the rescue experience of “11.22” Qingdao Oil Pipeline Blast Accident and the thought to build “Mass Emergency” rescue system.

First, President Wang Xinsheng briefly introduced our hospital and reviewed the accident. Established in 1898, the Affiliated Hospital of Qingdao University is now a general hospital governed by Shandong Province. At present, our hospital has 3,500 beds with annual patient visits up to 3.45 million, discharged 110,000 patients and performed 46,000 surgical cases. The hospital currently undertakes 2 national key clinical disciplines and 20 provincial key clinical specialties, which include Postdoctoral Research Station and the First-level Academic Doctoral Programs of Clinical Medicine and Nursing, as well as the First-level Professional Doctoral Programs of Clinical Medicine.

On November 22, 2013, a Sinopec oil pipeline in Qingdao Economic and Technological Development Zone exploded, causing heavy casualties and serious economic losses. Being the only large general 3-A hospital near the scene of the accident, the Affiliated Hospital of Qingdao University Huangdao Branch received and treated a total of 110 wounded, among which 44 under severe conditions were successfully rescued, with no patients having died. President of China Xi Jinping visited the wounded at our hospital, commended medical staff and spoke highly of professional medical team and consistent work and professional dedication.

Following the accident and the ensuing rescue operations to share with everyone.

1. The vigilance of leaders at all levels is important to maintain order. When the accident occurred, government officials of national, provincial and municipal levels visited our hospital many times to comfort patients and instruct rescue work; hospital leaders directed rescue operation on site.
2. Effective and well-aligned emergency operations should be in place and well-rehearsed. Our emergency plan was carried out immediately; 80 beds and 30 stretchers were rapidly deployed to receive those wounded.
3. There is a need for joint efforts among multidisciplinary departments. On-site consultation was implemented by experts from our Respiratory Medicine Department, Neurosurgery Department, Orthopedics Department (National Key Specialty), Emergency Medicine (Provincial Key Specialty), etc.
4. Cooperation among experts of our three branches was indispensable. After being notified, experts from Headquarters and East Branch hurried to Huangdao Branch for rescue support, and set up rescue teams for each severely wounded patient.
5. Experts inside and outside the hospital coordinated together. The rescue plan was formulated with the support of experts from Peking Union Medical College Hospital and Peking Jishuitan Hospital.
6. Compatible work between functional departments. Under the instruction of hospital leaders, functional departments rapidly launched the emergency plan and operated on site.
7. The necessity of timely and sufficient logistical support: logistics materials and rescue equipment were delivered to Huangdao Branch from Headquarters and Eastern Branch continuously.
8. Our century-old tradition and hospital ethics continue to be upheld. Medical experts performed consecutive emergency operations all day long to rescue patients and carry forward the fine tradition of our hospital.

On the basis of the “11.22” accident rescue experience, President Wang Xinsheng innovatively came up with the thought of “Multidisciplinary Efforts to Build a ‘Mass Emergency’ Medical Rescue System”, which includes:

1. Strengthening discipline construction. Our hospital has established the multidisciplinary development system with national key disciplines as lead, provincial key disciplines as the backbone and provincial key labs as support.

2. Improving medical quality management. To actively carry out medical quality management initiatives and improve the management of key departments, critical processes and priority patients.
3. Optimizing talent training systems. Promote skills training of personnel at all levels and international exchange as well. Talent training cooperation with Maryland University and Yonsei University has been established.
4. Further implementation of “Barrier-free Medical Treatment Project”, which was once specially reported on by CCTV News. With “Mass Emergency” concept in mind, our hospital launched “Barrier-free Medical Treatment Project” for the first time. This adoption included a series of patient-oriented measures like a flexible outpatient service schedule, abolition of registration number limits, patient service center, and emergency express service and improved Interactive Emergency Response Mode.

In the end of his speech, President Wang Xinsheng summarized that our hospital will take improving our emergency response capacity as our objective, attach more importance on discipline construction, and promote the collaboration of Emergency Medicine with other disciplines, then consistently and actively dedicate ourselves to the health of the general public.

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Emergency Medicine Training Project between Italy and China

During the 17th April the First Working Conference of The International Emergency Management Society Emergency Medical Committee, Professor Franco Nacarella, the commissioner also as the president of China-Europe Health Alliance, made the speech on Emergency Medicine Training Project between Italy and China. In order to dealing with the emergency public cases, some developed countries such as American, Canada, and Italy have a complete system in emergency rescue. The national civilian institution has put much efforts in collecting and surveying the public emergency situations, network of telecommunication and videos and data from fire department or police station in Italy and emergency rescue resource library is access-able to the public.

Professor Franco shared also the emergency information systems in Italy such as “118” and “112”, both dealing with the public emergency situation. And besides, Professor Franco specifically introduced some programme with China on cardiological emergency. He is very interesting in cooperation with China in emergency rescue field and is promoting these works. Comparing with the other developed countries, China has a lower capability construction in emergency rescue including lack of coordinating, responding, training and external exchange. Due to the biggest developing country in the world, China has to face the most furious natural disasters and public cases. It is a necessity to improve skills in managing the emergency cases both in department of government and public through international cooperation and exchanging.



President K.H Drager presented the professor Franco Nacarella

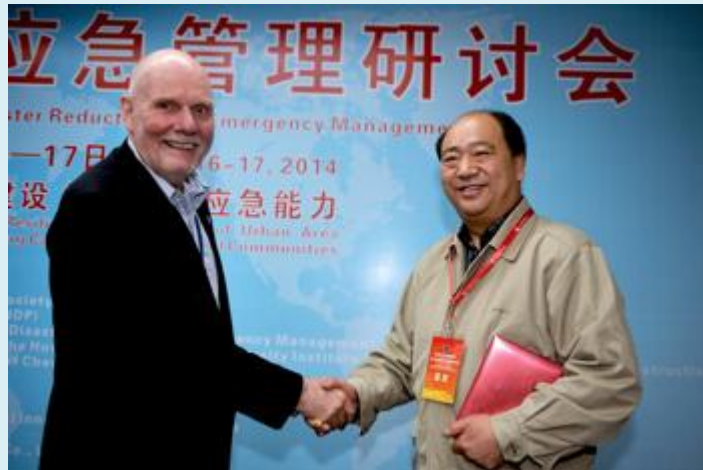
Emergency Treatment and Management

Wang Fa sheng, the president of the people's Hospital of Xin Jiang Uygur Autonomous Region, gave the speech on Emergency Medical rescue experience in 2009. The People's Hospital of Xinjiang Uygur Autonomous Region was established in 1934, is a comprehensive hospital comprised of fields as clinical medicine, education, scientific research, prevention, health care and community health services, is one of the large-scale comprehensive "three level of first-class hospital", "eleventh five" national technology support projects, 36 state-level scientific research projects, 21 cooperation projects and 66 provincial research projects.

Our hospital is one of the 11 branches of the emergency medical rescue team. Emergency rescue covers four provinces of Northwest China and simultaneously is emergency medical rescue team of Xinjiang region. Emergency medical rescue team of our hospital will hold "Differ not to lean, self-based, research and training, training with the side edge to build" as the constructive idea, gradually standardizing construction of national emergency medical rescue team, and thus stablishing "a compilation of various functions, a task is many kinds of strength, a strength multipurpose medical rescue team. Our rescue team participated in Wenchuan earthquake of 2008, "July five" event of 2009 and Yushu earthquake of 2010 and Shanshan terror attack of 2013.

A series of violent occurrences took place in Urumqi Xinjiang around 20:00 pm 5th July in 2009 and a great number of citizens were injured. The People's Hospital of Xinjiang Uygur Autonomous Region is located at the central area the event took place. On the day of the event, a large number of wounded citizens were brought to hospital and the hospital immediately launched the emergency rescue plan, reallocated human and material resources, effectively organized everything in good order and performed rescue mission as following, Firstly, authorization management and multidisciplinary collaboration. The hospital has admitted the largest number of the wounded , the most severely wounded patients and the most surgical cases in this incident, which had many characteristics such as large quantity of the wounded and the severely wounded patients in a short period and multiple trauma was given priority to with craniocerebral trauma. On the spot, one of the vice presidents of hospital who was in charge of the unified command has organized the directors of the medical department and the nursing department to be responsible for the coordination of patient treatment and trans-shipment. Second, our hospital established 5-stop sorting channel, which was composed of physicians from the general surgery, neurosurgery, orthopaedics, radiology departments and the admission department. When a large number of wounded arrived, using patients sorted channel to deal with survivors. Simultaneously, experienced high qualification doctors were divided into three groups, so they could sort the wounded quickly. Third, the hospital conducts CT "one-stop" secondary assessment. To avoid missed diagnosis of severe trauma and multiple trauma patients, we also needed to execute brain, abdominal CT "one-stop" secondary assessment quickly. Owing to our hospital conducted CT "one-stop" assessment for severe trauma and multiple trauma patients to avoid missed diagnosis, and built "Train" from the emergency department to the operating room, It only costs 15 minutes to bring the patient from acceptance to the operation ,which fully reflected the hospital rescue "Through quickly". Fourth, the director of the thoracic surgery commanded each specialists to collaborate in patient waiting hall of the operating room, According to the degree of the trauma, namely the priority principle, they conducted surgery in 20 operating rooms simultaneously. They have finished 52 big surgeries, from the night to the next morning. Fifth, organized further treatment, set aside a certain hospital resources, because the final numbers of injury victims were unclear in certain duration. At the same time, we also needed to organize each specialists coming from outpatient sorting, the operating room, department of anaesthesiology, surgical intensive care unit to take turns to rest, in order to deal with more wounded. Medical department and Nursing department collaboratively completed the deployment of measures, nosocomial infection office organized staff to check for the care unit of surgery department etc. to reduce the occurrence of nosocomial infection.

7.5 turmoil was also a comprehensive inspection for our hospital emergency treatment work. Drawing experiences and lessons from the incident emergency treatment, our hospital has made a lot of efforts in the aspects of strengthening the construction of emergency response team, expanding the hospitalization, standardizing the wounded sorting, keeping clear of communications, etc, we also established a high level team and formed a standard, effective mechanism in order to make greater contributions to protect the health of the people of the Northwest.



The president of TIEMS K. H Drager and the commissioner Faxing Wang

5th International Disaster and Risk Conference (IDRC)

Davos, Switzerland - August 24 – 28, 2014

The [IDRC Davos 2014](#) is bringing together over 1000 leading experts from government agencies, science, and the private sector including **Margareta Wahlström**, UN Special Representative of the Secretary-General for Disaster Risk Reduction, **Michael Gerber**, Ambassador and Swiss Special Representative for Global Sustainable Development, **Ortwin Renn**, Dean of the Economic and Social Science Department, University of Stuttgart, **Martyn Parker**, Chairman of Global Partnerships and member of the Group Management Board, Swiss Re, and [many more](#).

We are pleased to present an outstanding [conference agenda](#). For your convenience we have compiled an [overview brochure](#) with the most important facts and figures about the conference.

The outcomes will be presented at the UN World Conference WCDRR in Sendai, Japan in March 2015 and aim to influence the **Post-2015 Framework for Disaster Risk Reduction (HFA2)**.

With the opening ceremony of the 5th International Disaster and Risk Conference IDRC Davos 2014 less than 20 days ahead we are pleased to announce, that there are a limited amount of seats left. Take now advantage of our **Super - Last - Minute Registration Offer**.

Join the debate from **24 – 28 August 2014** in Davos, Switzerland and [register now online](#) (<http://idrc.info/registration/registration-fees/>).

Find more information under: <http://idrc.info/home/>

2nd World Disaster Management Congress

Hyderabad, India – November 12 – 15, 2014



The 2nd World Disaster Management Congress 2014 (2nd WDMC 2014) will be held at Hyderabad from 12 – 15 November, 2014.

The WDMC 2014 will address the numerous interconnected, complex and emerging risks today's societies are faced with. Environmental, technical, social and economic risks are often closely linked and can result in successive impact. For example the 2011 earthquake in Japan, resulted in a disastrous tsunami, creating nuclear meltdown at its key facilities. Risks and disasters explored at the WCDM 2014 include, amongst others, natural hazards, failures of critical infrastructure and services, pandemics, acts of terrorism and financial crises. All can severely impact and influence human beings and collective societies.

WDMC 2014 will gather again over 1000 participants globally including Risk Management Experts, Practitioners, Scientists, key players from Civil Society, Government and Non-Governmental Organizations and the Private sector. The diversity of participants enables both a strategic and operational level of discussion to ensure "the last mile" will be considered with key players from line ministries and disaster and risk management authorities.

WCDM 2014 will provide a unique venue for Disaster Management professionals from around the world to present, network and learn.

Find out more about the conference here: <http://wcdm.info/>

Papers for the conference have been invited here: <http://wcdm.info/callforpapers.html>

Registration is possible via this link: http://wcdm.info/payment_details.html

Next TIEMS Newsletter

The next TIEMS Newsletter is planned for December 2014.

TIEMS issues its electronic newsletter quarterly, and it is distributed to more than 36 000 experts worldwide, with articles on global emergency and disaster management events and activities, TIEMS news, etc.

Advertisement is possible on [these terms](#).

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Issue no. 22 is planned for December 2014 and contributions are welcome. Please, contact one of the editors or TIEMS Secretariat if you have news, an article of interest or like to list coming events of interest for the global emergency and disaster community or like to advertise in this issue.

