THE INTERNATIONAL EMERGENCY MANAGEMENT SOCIETY

Newsletter - ISSUE 28 - November 2016

ISSN 2033-1614

TIEMS is Opening a TIEMS Chapter in Ukraine



Minister of Internal Affairs Arsen Avakov, the Secretary of the National Security and Defence Council of Ukraine, a former acting President of Ukraine, Oleksandr V. Turchynov and the Minister of Defence of Ukraine General of the Army Stepan T. Poltorak, are opening the international event in Kyiv, on safety, security, defense, and aerospace, including one of two accepted conferences, namely, the TIEMS DCEM 2016 conference.





The Brass Band of the State Emergency Service of Ukraine at the opening ceremony dedicated to the 100th anniversary of the first firefighting engine in Ukraine and the front side of the coin.

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.

Joseph Pollack TIEMS Newsletter Editor

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Message from TIEMS President

Leadership and Governance in Emergency Management

In these changing times, leadership and governance should be the main focus in emergency management. Two articles in this Newsletter cover these issues:

- Importance of Presidential Leadership in Emergency Management
- Can Citizens be Included in Epidemic Preparedness and Response?

In the first article, Kay Goss, TIEMS USA Chapter President, points to presidental leadership in emergency management, and underline that the top leader in any country needs to engage in and be a leader in emergencies threatening the country, and thus setting a standard for the whole countrys's emergency organizations to follow.

In the second article, John Haukeland from the Danish Board of Technology, presents results of Citizen Consultations workshops performed in the ASSET EU project in eight European cities, where 8 groups of approx. 50 people each or totally more than 400 randomly selected citizens were asked several questions concerning participatory governance in epidemic and pandemic situations. They gave a very clear answer that citizens should be involved in decisions concerning any epidemic or pandemic situation threatening the public health.

Both articles deals with specific issues in USA and Europe, but points in general to what I will call needed leadership and governance in these changing times. Leaders dealing with emergencies of any kind need to both have a clear vision about their tasks and functions and the goals to reach. But they also need to be a "devil in details", meaning understanding how their whole organization is functioning and operating, what they ought to do and say in an emergency, etc. in order to set a leadership standard for their whole organization to follow.

Furhermore, leadership in 2016 and beyond, means also listening to the public. We are talking about participatory governance, and this means opening channels for two-way communication with public. and the understanding the changing needs in the population, and include their worries and demands in the ruling governance.

Social media has totally changed the issue of leadership and governance, and understanding the strength of these media cahnnels and using them for the purpose of catching the opinion and opening a two-way communication is a must in any future leadership.

Above issues relates of course to leadership in general, but these issues are also most relevant in emergency management and disaster response. Some may say that this is not possible, to both be a leader with a vision, and at the same time knowing details, and in addition listen to the laymens opinion.



Oslo 30th November 2016 K. Harald Drager TIEMS President

However, I think todays and tomorrows leaders need to be measured towards these qualifications, in order to be successful in handling future serious emergencies, threatening their country.

This Newsletter

In this newsletter, reports from TIEMS conferences, workshops and activities in USA

(TIEMS 2016 Annual Conference), Ukraine, China, India and Iraq are covered, showing the magnitude and outreach of TIEMS organization worldwide. TIEMS Korea Chapter also had their annual conference late November, so their report will be covered in the next newsletter. Above activity shows that local TIEMS activity is the core of TIEMS organization.

I am also proud to announce the establishment of a new TIEMS Chapter in Ukraine. I like to welcome them onboard TIEMS international network, and I also like to thank the Ukraine chapter for arranging their first TIEMS conference in Kiyv, Ukraine.

TIEMS network of Chapters worldwide is the strength of TIEMS organization, and I am very pleased to announce that dialogue is also opened with local experts in several other countries worldwide, so hopefully we see other new TIEMS Chapters being established soon.

For 2017 several TIEMS events are already planned, in Iraq, Finland, USA and India, and I expect annual events also to be arranged in other chapters like Japan and Korea. Announcements will be done on TIEMS website, www.tiems.org

As can be seen from the newsletter reports, TIEMS chapters has different focus on emergencies, mostly related to the main local emergencies, and this add value to the multitude of expertise within TIEMS organization, and also add the aspects of cultural differences in emergency management and disaster response.

In TIEMS 2016 Annual Conference, this year in San Diego, USA, new directors were elected and new officers were appointed, and the pictures, names and positions of all 23 members of TIEMS Board are shown in the newsletter. They come from 15 countries, so TIEMS has a truly international Board. In addition, TIEMS International Group of Experts (TIGE), comprising all TIEMS Chapter Officers as well, results in totally 77 experts from 23 countries working as volunteers for TIEMS worldwide.

We are still missing a TIEMS Regional Director for Latin America and Caribbean, and an officer being the Chair of TIEMS Community Emergency Resilience Task Force Group. Those who think they can fill these positions on TIEMS Board, please, contact <u>TIEMS</u> <u>President</u>.

TIEMS also participate in two EU research projects:

- ASSET
 About Epidemics and Pandemics
- HERACLES
 Climate Change and Cultural Heritage

Reports with results from these projects are also included in below newsletter.

The ASSET project is in its third year, and will finish in 2017 with a meeting with European Parliament, putting forward the findings of the citizens consultations on particiaptory governance. The last physical meeting in the ASSET High Level Policy Forum will also put focus on and discuss the ASSET projects results, with questions raised to the ASSET HLPF members on three main topics:

- Participatory Governance Policy in European Public Health
- How to Improve Considerations of Ethical issues in the Influenza Pandemic Plans that Every EU Country Needs to Prepare and Update
- Vaccination Hesitancy and the Possible Option of Compulsory Immunisation

The HERACLES EU project is still only 6 months old, but we have been visiting the three case study sites in the project, and we have got the understanding of the importance of the cultural heritage preservation:

CRETE, GREECE:

- 1. Minoan Knossos Palace
- 2. Venetian coastal fortress of Koules

GUBBIO, ITALY

3. Medieval Wall and High Town

Have a good and interesting reading!

Editor's Message

This newsletter is the opportunity to reflect on a year's worth of learning. 2016 clearly marks TIEMS' transition from a forum to exchange Good Practices towards a network to promote Better Practices.

Nothing shows this transition more evidently than November's newsletter whose focus evidently is Medicine Emergency and the mainstreaming of better practices for capacity building. Indeed it's no secret to anyone here that we're in the post-expert paradigm: where all are required to keep an open mind and constantly learn, re-learn, and sometimes un-learn!

The finest example of the importance of our forum in the mainstreaming of better practices is provided by TIEMS-India. Here we see our colleagues being successful in contributing in substance to national forums on preparedness and response also by liasing with the 100 Resilient Cities Initiative.

No group is more active as a forum to exchange and promote better **practices** than our TEMC (TIEMS Emergency Medicine Committee) (see below)! In China, our members made a strong show of support to the medical community by demonstrating the benefits of community approaches to capacity building. The Harvard Medical - China Forum is an example of best-in-class forums to exchange better practices internationally. Our Chinese colleagues also report on the success of their unmanned arial vehicle forum: such technologies

multiply our reach and capabilities during response.

Our Iraqi-Chapter has shared with us the keys to their successful interinstitutional capacity building in emergency medicine. Kay Goss reflects on presidential leadership in emergency management. The ASSET project also share the best European research on ethical questions during influenza and pandemics and medical emergency management technology.

I'm also pleased to announce the first instalment of our partnership with OSDIFE, an observatory which reports on the latest **CBRNE** incidents around the world. Stay up to date with the latest news by reading our newsletter. Read more for special **deals** and the most relevant **events!**



Joseph Pollack

TIEMS Regular Newsletter Editor



The International Emergency Management Society

TIEMS - www.tiems.org

MISSION



TIEMS is a Global Forum for Education, Training, Certification and Policy in Emergency and Disaster Management. TIEMS is dedicated to developing and bringing the benefits of modern emergency management tools, techniques and good industry practices to society for a safer world. This is accomplished through the exchange of information, methodology innovations

and new technologies, to improve society's ability to avoid, mitigate, respond to, and recover from natural and manmade disasters.

TIEMS provides a platform for all stakeholders within the global emergency and disaster management community to meet, network and learn about new technical and operational methodologies. It also aims to exchange experience on good industry practises. The goal is to influence policy makers worldwide to improve global cooperation and to establish global standards within emergency and disaster management.

CHAPTERS - http://bit.ly/2gy7ACo

TIEMS is building an expert network worldwide, where chapters play an important role in establishing local TIEMS activity. TIEMS chapters are established in:

BE/NE/LUX, CHINA, FINLAND, INDIA, IRAQ, ITALY, JAPAN, KOREA, MIDDLE EAST & NORTH AFRICA (MENA), NIGERIA & WEST AFRICA, ROMANIA, USA, & UKRAINE A TIEMS Chapter is an autonomous entity within the TIEMS network. It shall establish local TIEMS activity and recruit TIEMS International and Local Chapter Members in the Chapter area.

The TIEMS Secretariat is available to the chapter for administrative support. The chapter is to report annually to the TIEMS Secretariat about chapter activities, plans and finances.

ACTIVITIES - HTTP://BIT.LY/1WCRYZJ

- International Conferences, Workshops and Exhibitions, focusing on different Emergency Management and Disaster Response Topics
- Research & Technology Development (RTD)
 Project Initiatives and Coordination and
 Participation in RTD Projects
- Task Force Groups
- International Education, Training and Certification Program - GENERATE



http://bit.ly/1pA3zy2

MEMBERSHIP - http://bit.ly/1LUXICI



As a member of the TIEMS, you are part of an international community of leaders and practitioners in emergency management, with diverse backgrounds in engineering,

science, government, academics, military, and industry - working together to make the world a safer place. Membership affords unique opportunities to Learn, Serve, and Network.

Learn: From the multi-disciplinary, multinational TIEMS community and through special TIEMS programs.

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

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

You are welcome to join us as a TIEMS Member

K. Harald Drager TIEMS President

TIEMS Directors and Officers 2016 -2017

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Chair of Community Emergency Resilience Task Force Group

NEWS FROM TIEMS WORLDWIDE

Importance of Presidential Leadership in Emergency Management

Kay C. Goss

With over 30 years working in emergency management -12 years in a state governor's office, almost 8 years at the Federal Emergency Management Agency (FEMA) as associate director in charge of national preparedness, training, and exercises, and 11 years in the private sector at Electronic Data Systems and Systems Research and Analysis International, it became apparent that presidential leadership has been quite important at all levels and for all sectors.



The first issue to consider in presidential leadership is governance – how presidents shape the lumbering federal bureaucracy to address the gravest

threats. Over recent decades, emergency management has become an increasingly important profession and the related government agencies, FEMA, states, tribes, and local governments, as well as institutions of higher education and professional nonprofit organizations, have responded rapidly by pushing forward on standards, certifications, and accreditations. Related developments from natural and technological hazards to pandemics and terrorism have forced this new focus on building this skills-based profession. The reasons include housing in flood- and fire-prone terrains, deferred maintenance on aging infrastructure, rapid development, climate change, and international threats of terrorism.

In the past, officials with local and short-term perspectives once were unwilling to learn much from disaster history or to plan ahead for the inevitable. This "disaster amnesia" sometimes causes the public to be perpetually surprised that the worst can and occasionally does happen. Thus, the need for the president, FEMA, Department of Homeland Security (DHS) appointees, and all of the agencies that support them to focus on and fully support the crucial roles they play and the extensive expertise that is required to lead in these times. Adequate funding is also a must.

The Increasing Expectations of Presidents

Many articles have been written on this topic through the years. One of the most comprehensive is from Naim Kapucu, Montgomery Van Wart, Richard Sylves, and Farhod Yuldashev, in a 2011 article, entitled "U.S. Presidents and Their Roles in Emergency Management and Disaster Policy 1950-2009." Although it was published more than five years ago, it still has points worth considering during this time of transition:

The major factors are the ability and willingness to appropriately distinguish the needs and priorities of disaster management apart from civil defense needs and priorities, the selection of well-qualified disaster management leaders with a background in natural and accidental disasters, and the quality of implementation of programs including administrative execution, number and level of presidential disaster declarations, and timely presidential involvement in catastrophes.

Using this framework, two presidents emerged as excellent, three as good, four as average, and two as poor. Interestingly, while some presidents learned from previous executive types of experiences, others did not. While some presidents learned from major catastrophes (focusing events) that

occurred just before or during their administrations, others were hard-pressed simply to recover from especially disruptive or new disasters and failed to improve the system as a result. A consistent finding is that the performance of presidents in emergency management has had a growing effect on their overall reputations by the public and experts. Before 1950, presidential roles were extremely modest and expectations almost nonexistent. After Truman and through Reagan, roles increased substantially and expectations were modest. From Clinton through Obama, the roles have continued to increase and expectations have become exceedingly high.

Looking at current areas in which presidential leadership matter the most, there are seven areas for consideration during this fragile period of transition: personal experience, knowledge base, appointments, vision, speech, personal time, and compassion.

Personal Experience

Presidents come from local areas, some of which have frequent disasters. Many presidents have been previous governors, members of Congress, mayors, county executives, or other officials who have personally experienced the importance and process of excellent emergency management. However, that is not a necessity, as every citizen who has experienced a disaster learns quickly that it is a job for solid, experienced, vigorous, and professional emergency managers.

Knowledge Base

Presidents often come to the job with a basic knowledge of emergency management due to these previous experiences. If not, they should take the time to be briefed early in their candidacies on the challenges of risk assessments, preparedness initiatives (planning, training, exercises, technology, standards, certification, accreditation, outreach), mitigation, prevention, protection, response (National Incident Management System, Urban Search and Rescue, Incident Management Assistance Teams, etc.), and recovery. Long-term and community-based recoveries include individual and public assistance, as well as efforts necessary to get the community's economy working again.

Appointments

Governance is key – that is, how the president shapes the lumbering federal bureaucracy to address the gravest threats. The early presidential appointments send a strong message about the understanding and respect that a president has for FEMA and DHS. Appointing people with strong related professional experience and recognized expertise to FEMA and DHS, known personally by the president, shows the president's focus on emergency management and homeland security. It also demonstrates an understanding of the nuanced intergovernmental, interagency, and interdisciplinary processes involved. FEMA refers to this as the "whole of community" organizing concept, which involves national, tribal, state, and local levels of government, the private and nonprofit sectors, and the public. Appointees that are active in organizations such as the National Emergency Management Association and the International Association of Emergency Managers can provide well-versed leadership in the profession.

Opportunities are available to potential appointees in the area of higher education. The FEMA Higher Education Program was launched in 1994 and now includes more than 300 degree and certificate programs, with another 150 such programs in homeland security. Additionally, an accreditation program has been developed: the Council for Accreditation of Emergency

Management Education, with a FEMA Focus Group providing guidance for these academic programs.

Knowledge of professional emergency management standards is helpful for related presidential appointees. An outstanding standards and assessment program is administered through the Emergency Management Assessment Program (EMAP), located in Lexington, Kentucky, as part of the Council of State Governments, endorsed by NEMA and IAEM. A majority of states and numerous localities, as well as a number of institutions of higher education, have had their emergency management programs accredited through this process. The National Fire Protection Association (NFPA), an international standards organization, also has recommended standards for emergency management and business continuity, as general guidance, but do not offer accreditation.

Vision

The president should reflect a strong vision of how FEMA and DHS will operate in "the new normal" in emergency management and homeland security, with many more natural disasters and human-induced incidents expected. There is no time for learning on the job. For example, William Jefferson Clinton's administration faced a series of disasters in his first term. In the first months of his first year, the administration faced the Midwest floods (1993); in the second year, the Northridge Earthquake (1994); in the third year, the Kobe Earthquake in Japan, in which Japan requested FEMA advice and counsel, then Oklahoma City Bombing (1995); and in subsequent years a historic Nor'easter storm, a huge hurricane coming up the east coast, numerous tornadoes, and flooding in almost every state.

Speech

The public speeches and press conferences that presidents have before, during, and after disasters have enormous impacts on the attitudes and feelings of disaster victims and survivors, as well as on the profession of emergency management or homeland security. It sets the tone for all those impacted and those in surrounding areas, as well as the nation as a whole. Increasingly, these events are covered by traditional media and social media worldwide. The Clinton Presidential Library and Museum, for example, houses 150 speeches the president delivered that mentioned emergency management.

Personal Time

Personal visits to disaster sites and to the responding agencies, like FEMA, DHS, Department of Justice, and the Federal Bureau of Investigation sends a strong message of deep caring and understanding. The importance of specific attention by the president to those most directly impacted cannot be overestimated.

Compassion

The public, in advance of a disaster, appreciates knowing that the president would be, to the extent possible, caring about disastrous events on every one in the country. This kind of soft power of outreach and understanding cannot be overestimated, but is often underestimated. Presidents with compassion tend to be more proactive during disasters. The public, as well as related officials, notice this and take their cues and comfort from such leadership.

In Closing

Disasters are frequent, high profile, and require effective presidential attention. When this does not occur, it is apparent to all. Press coverage will include, and potentially emphasize, any disorganization, oversight, flub, or false start. If presidents let disasters get ahead of them, it is almost impossible to catch up. Applying lessons learned from how past presidents managed disasters will ensure the effective recovery of communities in need and solidify the reputation of president in the eyes of experts and the public.

Kay C. Goss, CEM®, is president of World Disaster Management, U.S. President of The International Emergency Management Society, and part-time faculty at University of Nevada at Las Vegas and Metropolitan College of New York. Previous positions include: executive in residence at the University of Arkansas, senior principal and director of emergency management and continuity programs at SRA International (2007-2011); senior advisor of emergency management, homeland security, and business security at Electronic Data Systems (2001-2007); associate Federal Emergency Management Agency director in charge of national preparedness, training, and exercises, appointed by President William Jefferson Clinton (1993-2001); senior assistant to the governor for intergovernmental relations, Governor William Jefferson Clinton (1982-1993); chief deputy state auditor at the Arkansas State Capitol (1981-1982); project director at the Association of Arkansas Counties (1979-1981); research director at the Arkansas State Constitutional Convention, Arkansas State Capitol (1979); and project director of the Educational Finance Study Commission, Arkansas General Assembly, Arkansas State Capitol (1977-1979).

Can Citizens be Included in Epidemic Preparedness and Response?

Yes, and they demand to be!

John Haukeland, Project Manager at The Danish Board of Technology

More than 400 citizens were consulted on epidemic preparedness and response in late September across Europe. The citizens expressed a demand for more transparency and dialogue in both epidemic response and planning, while at the same time they provided policy-makers with thought-provoking insights with the other as; the Internet being the least trustworthy source of information yet the first source citizens consult.

In the wake of the 2009-2010 H1N1-pandemic (the swine flu) a web of mistrust between the public and health authorities was spun. National pandemic plans were usually based on a single scenario

that was more severe than the actual 2009 pandemic, and that was extrapolated from the severity of previous outbreaks like SARS and Avian flu (See Box1).

In effect the 2009 pandemic was nicknamed the false-pandemic or 'the pandemic there never was'.

	SARS	Avian flu	Swine flu
Transmissibility	Moderate	Human to Human	High
		rare	
Estimated death rate	10%	60%	<0,03%
Deaths (global)	774	393	18,500
At-risk groups	Older adults, those with underlying health problems	All	Initially, infants, pregnant women, those with underlying health problems; later waves affected older people more

However, national health authorities had declared a pandemic and bought vaccines for billions.

The ASSET-project should be EU's counter to this by engaging citizens in the debate of pandemic crisis prevention and management.

Method

The Danish Board of Technology (DBT) was asked to develop and test a participatory and inclusive method for engaging citizens. The method should convince the EU that citizen participation can be done within a field normally dominated by technical experts.

In fact, epidemic response and planning has clear normative components, involving obvious conflicts and dilemmas, combined with a well-documented scientific knowledge base, and a need for political action in the crisis situation and fulfilling all conditions for citizen participation.

We decided to develop a multi-site method, where the citizens received the same information prior and during the consultations at the same time across Europe. Their votes were reported in-real-time into a <u>webtool</u>, were all the results can be seen and analyzed. See Box2 for more information.

ASSET Citizen Consultation

- 8 consultations across Europe
- 400 citizens engaged, with 50 representative sampled citizens at each site
- They provided informed opinions differentiating it from a poll. The received a booklet in their native language prior to the event, saw brief information videos during the events, and discussed an hour with other lay citizen in small groups before voting on pre-defined questions
- The last session was an open session where citizens in their native language could write recommendation or comments to policy-makers.

For more information visit our website <u>here</u>

Results

The citizens were very satisfied with the process, and provided policy-makers with clear demands and thought-provoking insights.

While most analytical work still remains some trends are already now striking.

The citizens want more transparency in the work of health authorities, and are not satisfied with the level of information provided during epidemic threats. Actually less than half of the citizens are confident with information being withheld, even for security



Source: ASSET Webtool

reasons by health authorities. Same goes for the satisfaction level during an epidemic threat.



Figure 1: Result example from the webtool

Some of the more thought-provoking results from the consultation included vaccination and information channels. While half of the citizens found mandatory vaccination as an appropriate tool for public health authorities during epidemic threats, more than eight-of-ten answered that it should be mandatory for health care workers. This discrepancy is very interesting, and we will in the upcoming policy-workshop go more into detail. As mentioned in the lead paragraph, an insight that policy-makers cannot overlook is that the citizen deems the internet as the least trusted information channel, and yet it is the one they consult first. Research has showed that even if this insight, information read online has a subconscious effect on decision-making.

Finally, we organized an open session where the citizens were asked to write policy recommendations in their native language. In addition to their recommendations, they were asked to encircle the most important words from their policy recommendations. The words have been translated and mapped according to the citizens' priorities (Figure 2) through a co-hashtag analysis. What we can see from Figure 2 is that 'information', 'transparency' and 'citizens' are very central in the map, and important to the citizens. By investigating the full recommendations behind the keywords, we can explore the context behind the most popular recommendation. This analysis will be further developed in the months to come, by the DBT's research assistant Wafa El Ghiouane, who can be contacted if you want to know more about the analysis.

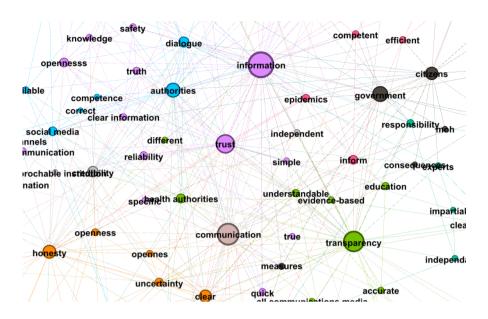


Figure 2: Co-hashtag analysis of policy recommendations

Way forward

The ASSET-project is a 4-year project, which will end in 2017. The citizen consultations and the high-level policy forum, which TIEMS facilitate, will be two of the most important legacies.

In the next months we will pen a policy report, which we will present for decision-makers in Europe at several events and policy-seminars during the next years.

Follow the ASSET web-site for more updates, http://www.asset-scienceinsociety.eu/

TIEMS 2016 Annual Conference in San Diego

Innovation and Urban Planning for Emergency Resilience in Large Cities September 13 to 15, 2016 in San Diego, California, USA



Our TIEMS 2106 Annual Conference was held September 13 – 15 2016 at the San Diego Central Library, with the collaboration and support of San Diego Mayor Kevin L. Faulconer, the City of San Diego Department of Homeland Security, and San Diego State University. Attendees from 11 countries and 9 US municipalities were engaged and enlightened by 20 presentations of exceptional quality and breadth, an 8-person panel on evolving emergency management challenges, and a special interactive workshop

featuring a crisis communication simulation.

Discussions and networking continued over three days of lunches and a Tuesday evening reception at our 9th floor Central Library meeting venue and terrace, overlooking the beautiful city of San Diego. The TIEMS Annual Gala Dinner was held on the San Diego Bay, overlooking the lights of the downtown skyline and Coronado Island, and on Thursday afternoon we took a tour of the San Diego State Visualization Center, exploring the innovative use of social media and other technologies to improve emergency preparation and response.



In addition to providing an exceptional opportunity to share experiences, insights, and knowledge from around the world, the conference gave us an excellent opportunity to see how San Diego and Tijuana have dealt with emergency management through innovative urban planning and very effective collaboration across departments and borders. We also found excellent opportunities for TIEMS collaboration with San Diego State University, including internship opportunities (which began during the conference, and we expect to expand), and helping TIEMS member organizations apply technical innovation to their emergency management activities.

The conference was made possible through the generous collaboration and support of City of San Diego Office of Homeland Security, particularly through the efforts of John Valencia, Executive Director, Tiffany Vinson, and Jeff Pack. They arranged for us to use the City of San Diego Central Library, which provided a beautiful facility and very responsive facilities and AV support from Sherwood Hartwell. We very much appreciate the sponsorship of Jack Zhang of **Beijing Harmony Technologies**, and Laixing Wang of **Xianheng International** and the International Emergency Rescue Equipment Center.

Congratulations to the following, who were awarded Best Paper Awards. Each was awarded a certificate and 120 Euros, generously donated by the **TIEMS China Chapter**. While there were many excellent presentations made at the conference, only authors who submitted full text papers were eligible for these awards. The winners:

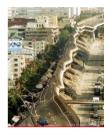
• TIEMS 2016 Best Paper Award – Importance to the Field: George M. Karagiannis, "Emergency Management Aspects of the European Migration Crisis"

- TIEMS 2016 Best Paper Award Practical Application: Jaroslav Pejcoch, "Stress Test Not Only for Banks and Nuclear Power Plants"
- **TIEMS 2016 Best Paper Award Creativity**: LI Xuanye, "Total Systematic Field Solution for Emergency Cases".

The TIEMS 2016 President's Outstanding Achievement Award was given to Carmelo DiMauro and Vittorio Rosato, for their outstanding and excellent work in arranging TIEMS 2015 Annual Conference in Rome, Italy.

We look forward and invite you to next year's **2017 TIEMS USA Conference**, planned for June 12 – 16, 2017, at the University of Maine, Orono, Maine, USA!

This year we tested an additional way for the global emergency management community to participate in our conference – online streaming. Both audio and slide images were streamed for selected presentations, and recordings were made for future access. The test was successful, and a number of people around the world were able to virtually attend. We are now considering offering virtual attendance as an option for future conferences.





Tuesday's session was opened by TIEMS President **K. Harald Drager**, who welcomed attendees and provided a perspective on the evolving challenges in emergency management, emphasizing the importance of increased attention to preparedness, and TIEMS's role in improving preparedness through knowledge sharing, research and development projects, and education, training, and certification.

The next presentation was by **John Valencia**, Executive Director, City of San Diego Department of Homeland Security and **Gary Hayslip**, Chief Information Security Officer, City of San Diego. After welcoming us to their fair city, they provided an overview of San Diego's approach to security and emergency management, emphasizing close collaboration with Tijuana, Mexico as part of an expanded metro region. Gary provided startling statistics on cyber threats to the City of San Diego, and described extensive activities to minimize the impact of these threats.





We were next treated to a particularly moving presentation and performance by **Nathaniel Forbes**, Director of Forbes Calamity Prevention, on Food and Disasters: The Impact of Hunger. He used recorded accounts and videos, as well as spoken words, to convey to our minds and hearts our interconnectedness as a global community, and the sometimes heart-breaking local impacts of the global economy.

Kay Goss, CEM, President of TIEMS USA Chapter and CEO of World Disaster Management, described how international collaboration has made an impact on global preparedness, international cooperation, and the evolution of the practice and cultivation of the profession of emergency management.

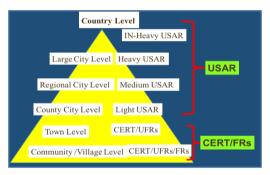




As noted throughout the conference, the world is rapidly urbanizing, and losses due to natural disasters and climate change are on the rise. **Dr. Josef Leitmann** of the World Bank made the case that investing in urban resilience would not only make our cities safer, but also prevent a reversal of the gains made in lifting our urban poor out of poverty.

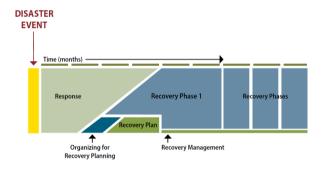
Dr. George Karagiannis of the Technical University of Crete presented a perceptive analysis of the emergency management response to the European migrant crisis. The disruptions caused by the extreme wave of immigration (since 2015, over one million immigrants have traveled through Greece) have exposed lack of preparedness, resource limitations, problems coordinating NGOs, and the strong influence of international politics on the situation.





Dr. Guosheng Qu, TIEMS Vice President, Professor and leader of Urban Search and Rescue (USAR) teams, presented a framework for emergency resilience for large cities, that complements USAR teams and First Responders with Community Emergency Response Teams (CERTs), a concept developed in Mexico and the US, and recently introduced in China. TIEMS is establishing a CERT Task Force Group, to help spread CERT throughout the global community.

The economic advantage of investments in planning and preparation versus disaster response is often cited, as is the challenge of motivating these expenditures when disasters are in a hypothetical future. **Matt Campbell**, FEMA National Coordinator for Community Planning and Capacity Building, presented examples of Post Disaster Recovery Planning, which has been able to create improved community



resilience using recent disasters to inform and motivate investments in preparation and planning.

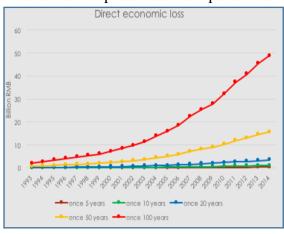


Wednesday's session was kicked off by **Carl Taylor** of XCH Global, who used his experience in analyzing disasters across the world to help us step back and observe a number of significant and important ways the unexpected crops up during disasters.

Of course disasters themselves are usually unexpected, however emergency managers are often surprised because of factors such as: mistaken beliefs of invincibility; surge requirements beyond worse fears; the critical role of media, and how often they get it wrong; and powerful symbols that seem trivial at first.

Next Ms. Li Yi of the National Disaster Reduction Center of China presented work performed by

Dr. Yang PeiGuo modeling urban vulnerability to floods, based on historical disaster loss data, correlated with rainfall measurements and social and economic data associated with affected areas. A case study of Beijing showed a strong correlation between rainfall measurements and loss rates, allowing a model to be constructed that estimated how maximum 2-day rainfall affected size of population impacted, missing and dead people, crop losses, collapsed or damaged houses, and overall economic loss.





Our next session was a special workshop organized by **Martin Masiuk**, Publisher of Domestic Preparedness Journal, on "What is the New Normal?" Evolving Management Challenges". This workshop featured panelists from the US Border Patrol, Coast Guard, San Diego Cyber Center, Harbor Police, and private industry, discussing challenges and operational approaches to deal with the new slants on terrorism, illegal immigration, and crime that are now part of our new normal.

TIEMS President **Harald Drager** convened the 2016 TIEMS Annual General Meeting. After introducing Board members present and a determination that a quorum of the TIEMS membership was present, previous minutes and annual budgets were approved, and elections were held for three directors that were up for election this year. Neil Dufty was re-elected Regional Director for Australia,



New Zealand, and Oceania; Jean-Paul Monet was elected Regional Director for Europe; and K. Harald Drager was re-elected President of TIEMS. Congratulations to all candidates!



Next, Gerry McCusker of Engage ORM led a special workshop in which we formed crisis communication response teams, which were presented with an unfolding crisis featuring a population primed by Hollywood disaster film advertisements, panicked social media messages, earthquake app hackers, and crisis communicators with a real challenge on their hands! The workshop provided an informative and chilling view of the "new normal" brought about by social media and cyber terrorism.

Dr. Murray Turoff, New Jersey Institute of Technology, presented the results of a survey he made of emergency management practitioners and academics, asking them to prioritize proposed courses for an academic degree in emergency management (EM) with a concentration in information systems. The responses to this survey not only ranked courses, but also provided the respondent's views on the state of EM as an activity and as a profession. Among the themes uncovered were: it is challenging to establish educational programs in EM; the importance of



organization and organizational collaboration in EM; the limitations of academic education versus experience; trade-offs in saving people versus property versus environment; the criticality of infrastructure protection; the importance of cascading effects; and the criticality and challenge of turning information from social media into intelligence.



Our next presentation made by **Brent Woodworth**, TIEMS USA Chapter Vice President and L.A. Emergency Preparedness Foundation, and **Eric McBride**, Assistant Chief of the San Bernardino Police Department. Assistant Chief McBride gave a detailed and revealing account of before and after two shooters entered the Inland Regional Center and killed 14 people and wounded 22 others. The account showed many examples of effective and heroic operation, and the opportunity in any situation like this, to learn new lessons. Brent related the crucial role his organization had

in engaging local business to support the work of the responders and victims, by proving needed logistical support.

Laixing WANG and Jed GAO, of Xianheng International Corporation and the International Emergency Rescue Equipment Center (IEREC), gave us an overview of IEREC in Hangzhou, China, an ambitious facility opened in November, 2014, that supports: academic and occupational meetings and exhibitions; community training, including disaster escape experience for school children; and exhibition of rescue equipment solutions including USAR, marine rescue, electric emergencies, high-speed train events, environmental protection, and airport rescue.









Thursday's session was opened by **Mark Benthien** of the Southern California Earthquake Center, Los Angeles. The Earthquake Center brings together over 700 scientists and students from more than 100 research institutions to synthesize research on earthquake system science. An important outreach

activity of the Center is the Great ShakeOut Earthquake Drills, which in 2015 reached more than 43 million people worldwide and 21 million people in the US. These drills are based not only on earthquake experience, but also on social science research into what motivates people to get prepared.

In our next presentation, **Xuanye LI**, from the Longyan Haidexin Automobile Co., explained his company's approach to a total systematic field solution for emergency cases. This approach works to insure success in dealing with emergencies by addressing: human safety and support; effective command, control, and information; adequate facilities; and sufficient material supplies. These needs are provided through a wide range of networked vehicles and subsystems offered by Haidexin, such as



their Integrated Detector Vehicle, Emergency Communication Vehicle, Mobile Command Platform, and Power Supply Vehicle.



Our next speaker was **Kevin Miller** from the California Governor's Office of Emergency Services, who discussed tsunami preparedness using "playbooks" incorporating evacuation lines based on *maximum potential tsunami flood elevation*, calculated using a model called FASTER. FASTER uses Forecasted Amplitude, Storm surge or existing ocean conditions, maximum Tidal height, forecasted Error potential, site amplified Run-up potential based on historical data, as well as local non-storm and non-tidal anomalies in sea level. This use of playbooks

standardizes response, which improves inter-organization collaboration, and because it takes into account real-time forecasts, it helps improve safety while reducing over-evacuation.

Our next presentation was by **Bin WEN**, who introduced the TIEMS China Chapter and described their activities. The TIEMS China Chapter was established in April of 2009, and has since held six annual conferences, the last of which had 650 attendees from government, academia, and industry. Bin Wen extended a warm welcome to everyone, to attend their 2016 Annual Conference ibeing held November 1-6, 2016, in Zhuhai, China. Bin Wen also described the China Emergency Response Alliance (CERA), started by



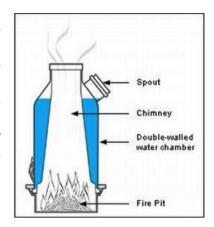
the Xinxing Cathay company, which is working with the TIEMS China Chapter to better link enterprises and government agencies in the field of emergency response.



TIEMS Secretary **Jaroslav Pejcoch** of T-Soft, next suggested we extend the idea of stress tests, already used for nuclear power plants and banks, to general emergency preparedness. He pointed out how a stress tests differ from the usual audits and checks, by introducing specific scenarios to gage the reaction of the people who will actually be responding to an emergency. The results of these stress tests go beyond just a graded result, by providing an assessment of routine

versus stressed operations, and enabling a fruitful conversation about how risk can be further mitigated and resiliency increased.

Our next speaker was **Arthur Nash**, University of Alaska Fairbanks, who gave us a fascinating look at the special concerns of emergency management in Alaska. In the last 25 years, Alaska has experienced coastal and arctic windstorms, river floods, evacuation due to land erosion, wildfires, volcanoes, and earthquakes. Because of extreme cold, foraging wildlife, remote communities, and other difficult conditions, special provisions for personal warmth, food/water, and self-sufficiency must be considered. This has led, for example, to cost-effective, efficient, innovative solutions for cooking and heat from biomass. Family and community preparedness is particularly important in Alaska, and community education is a key element of emergency resilience.



Our final presentation of the morning was by **Dr. Thomas Robertson**, TIEMS Regional Director for North America. Dr. Robertson reviewed the TIEMS Global Educational Network for Emergency Resilience and Training Excellence (GENERATE) initiative, whose goal is to create a network of educators, practitioners, and students contributing to and benefiting from an online platform for learning, certification, and sharing experiences. Design work has been underway for the initiative, organizational participants recruited,

and partial funding has been identified as part of on-going projects. TIEMS continues to seek partners and organizations who share the goals of GENERATE, to join us in this activity.

Our conference concluded with a tour of San Diego State University's (SDSU's) Visualization Center. **Dr. Eric Frost**, Director of SDSU's Graduate Program in Homeland Security and the Visualization Center, provided an overview of the work his program, with an emphasis on innovative use of remote sensing and social media to support homeland security. His graduate program has put together



in

impressive technical capabilities, and his students are eager to find internships providing interesting challenges and potential pathways to future work. TIEMS looks forward to working with SDSU, through internships and as a participant in our GENERATE initiative.

Summary of TIEMS DCEM 2016 Conference in Ukraine

October 7th, 2016, is the birthday of the new TIEMS chapter, namely, the TIEMS UKR Chapter in Ukraine. A group of the enthusiastic founders of this chapter decided to make a quick move after the final acceptance and organize the welcome event as soon as possible. Following the 1st TIEMS Conference on Disaster Control and Emergency Management Testbed Platform (TIEMS DCEM 2011), which was held on June 13-14, 2011, in Finland, and the 1st International Conference on Secure Society in Ukraine SESOCUKR 2014, which was held on November 18-21, 2014, the TIEMS Ukraine Chapter organized the 2nd TIEMS Conference on Disaster Control and Emergency Management (TIEMS DCEM) on October 12-13, 2016, in Ukraine.

The timeslot was not selected randomly. It was decided to run the conference at the same time on the same venue when and where the other annual major events on safety, security and defense took the place on October 11-14, 2016, in Kyiv, the capital of Ukraine. Those other events were the following: The XV International Exhibition Forum PROTECTION TECHNOLOGIES 2016, The X International Trade Fair FIRETECH 2016, The X International Aviation and Space Salon AVIASVIT-XXI, The XIII International Exhibition ARMS AND SECURITY 2016, The 2nd International Conference on Secure Society in Ukraine SESOCUKR 2016 as well as The XVIII National Conference "The Current State of Civil Protection in Ukraine: An Integration Roadmap to Europe".

Coincidently, the show celebrated the 100th anniversary of the first firefighting engine in Ukraine. The commemorative coin of 5 hryvna (limited edition by The State Treasury of Ukraine) and the commemorative stamps (limited edition by UkrPost) were exposed to public at the opening ceremony.

The conference was supported by The State Emergency Service of Ukraine (Ukrainian: Державна служба України з надзвичайних ситуацій; until 24 December 2012 the Ministry of Emergency Situations of Ukraine (Ukrainian: Міністерство надзвичайних ситуацій України)). Nowadays, The State Emergency Service of Ukraine is governed by the Ministry of Internal Affairs. The event was hosted by The Ukrainian Research Institute for Civil Protection in Kyiv.

The organization team involved the international experts from Finland, Lithuania, Norway, Estonia, USA, UK, Slovenia, Slovakia, Poland, Czech Republic, Belgium as well as a large number of Ukrainian experts. Their flexibility and contributions to the technical program were very much appreciated by the domestic organizers. The conference was by invitation only.

Figure 1. From the left the Minister of Internal Affairs Arsen Avakov, the Secretary of the National Security and Defence Council of Ukraine, a former acting President of Ukraine, Oleksandr V. Turchynov and the Minister of Defence of Ukraine General of the Army Stepan T. Poltorak are opening the entire show.



Figure 2. From the left the front row Major-General Vitaliy Kropyvnitskiy (Director-General of the Ukrainian Research Institute for Civil Protection), Major-General Mykola Chechetkin (Head of The State Emergency Services of Ukraine), Oleksij V. Takhtaj (Deputy Minister - Chief of Staff, Ministry of Internal Affairs of Ukraine) and Anatoli Tkachenko (the CEO of the International Exhibition Centre in Kyiv).

The second row Professor George Markowsky (TIEMS HQ, USA), Professor Andre Samberg (President of TIEMS UKR Chapter), Viktor

Zaivenko (Director of Cash Circulation Department of the National Bank of Ukraine).







Figure 3. The Brass Band of The State Emergency Service of Ukraine at the opening ceremony dedicated to the 100th anniversary of the first firefighting engine in Ukraine and the front side of the coin

Figure 4. Major-General Vitaliy Kropyvnitskiy (on the left) (Director-General of the Ukrainian Research Institute for Civil Protection) receives the award from Major-General Mykola Chechetkin (Head of The State Emergency Services of Ukraine) for the development of the light marine fire fighter boat for operation near the shoreline where traditional marine fire-fighting vessels and other equipment cannot reach.





Figure 5. Dr. Aleksander F. Nikulin (on the left) (Managing director, Ukrainian Scientific Park "Civil protection technology transfer center", Ukraine) receives the award from Major-General Mykola Chechetkin (Head of The State Emergency Services of Ukraine) for the best technical innovation in the field of quick cleaning up of oil spill in sea water.



Figure 6. Major-General Mykola Chechetkin (on the left) (Head of The State Emergency Services of Ukraine SESU) and Professor Andre Samberg (President of TIEMS UKR Chapter) in the headquarter of the SESU during the meeting of the strategic working group of the SESU and TIEMS UKR Chapter.

















Figure 7. Delivering the TEIMS certificates to the founding members of TIEMS UKR Chapter and the first two TIEMS institutional members in Ukraine by Professor Andre Samberg (President of TIEMS UKR Chapter) and Professor George Markowsky (TIEMS HQ, USA)





Figure 8. Oral presentations





Figure 9. At the exhibition: Medevac ambulance version of Antonov-148 airplane (the manufacturer the Antonov corporation, Ukraine)

The event brought together some 80 government officials, state owned research institutions, private enterprises and volunteer organizations to review the state-of-the-art of civil protection in Ukraine, expand capacity to address current and future development challenges and place national strategies in a global context. It also provided a valuable networking opportunity and set the stage for further cooperation among TIEMS UKR Chapter and The State Emergency Services of Ukraine.

The conference began with opening remarks by representatives of the Ukrainian Research Institute of Civil Protection, the Scientific Centre for Aerospace Research of the Earth of Institute of Geological Science of National Academy of Sciences of Ukraine, and the NATO Liaison Office in Ukraine. More than 30 oral presentations were delivered by various experts.

Professional development program manager lieutenant-colonel Ove Urup-Madsen from the NATO Liaison Office in Ukraine shared his experience and described the obstacles in the top management culture at the governmental level. He highlighted the need to strengthen the leadership capacity, expand the efficiency of training and fully utilize domestic professionals as a positive and transformative force for the future of the country. He also identified the following key factors needed:

- English language
- Electroning office and document management
- International advisors embedded in the daily work
- Step-by-step modular approach
- HR principles
- Invest in the youth but don't forget the seniors
- Patience and empathy

A number of good quality presentation touched on space-borne monitoring of radiation of such exclusion zones as Chernobyl. It has been reported that one of the main reasons of radioactive pollution are forest fires. The level of radiation in the atmosphere up to 10 km increases during those fires and would remain steady for a long period of time. Fire fighters are looking for rapidly deployable light-weight equipment which would allow large-scale monitoring. Interesting approaches were presented using UAV fleet (Unmanned aerial vehicle).

National experts and scientists expressed their increasing concern with regard to the natural disasters which are foreseen in the eastern part of Ukraine. The whole mining ecosystem of the Donbas region is affected in the following way. The Ukrainian government has stopped financing the coal mines located in the secessionist territories. The conflict has disturbed the coal-cokemetal vertical integration systems built there since 1991. Many of the system's components are located in the "gray zone" between government- and secessionist-controlled areas, as well as in the Russian side of the border. Because of the ongoing armed conflict, there is an estimation that only 23 mines of 82 active mines in the Donbas region remain in territories controlled by Ukrainian authorities. Many mining premises were flooded as a result of interruptions in electricity supply. The drawn out nature of the conflict has significant costs to local populations more saliently through destruction of local infrastructure and the degradation of the environment. With the intermittent collapse of the electricity supply across the entire conflict area, ventilation systems and water pumps in coal mines failed, resulting in the release of accumulated gases after

ventilation restarted. The often irreparable flooding of mines not only damages installations but also waterlogs adjacent areas and pollutes groundwater. Permanent or temporary flooding has been reported at more than ten mines, yet due to the lack of uninterrupted monitoring and fieldwork to assess the damage, the exact extent of the risks to environmental and public health is unclear. At the moment, relatively little is known about the direct chemical impact of the war on the environment and people. , large quantities of damaged military equipment and potentially hazardous building rubble will require disposal.

The Ukrainian Ministry of Defence also raised concerns that depleted uranium weapons may have been used in the fighting around Donetsk airport, and proposed to determine whether this was the case when conditions allowed. The conflict has also damaged the region's numerous nature protection areas, from armed groups occupying their administrative buildings to the impact of fighting and the movement of heavy vehicles within nature reserves. The restoration of large tracts of agricultural and other land for normal cultivation and use will require considerable effort too, and will be complicated by the presence of new minefields and unexploded ordnance. As is common for armed conflicts in heavily developed areas, a large proportion of the pollution impact may not come directly from the fighting but from damage to industrial infrastructure and to the disruption of everyday economic activities.

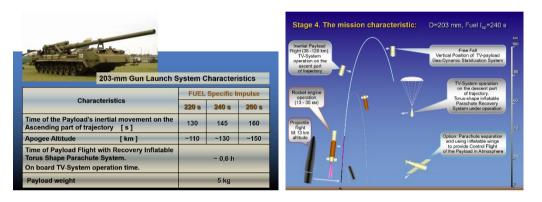
Dr. Evhen Yakovlev reported about the first results of the joint mission with The Directorate General for European Civil Protection and Humanitarian Aid Operations of the European Commission (DG ECHO) organized a four-day scoping mission between 4-7th of July 2016 to Solotvino (Ukraine), where the abandoned and neglected salt mine poses a significant contamination threat of the Tisza River and also threatens the livelihoods of those living in the region. The five-member scoping mission team was made up of British, Finnish, French, Hungarian and Latvian experts.

A few years ago, a significant amount of salt concentrate was measured on the Hungarian section of the Tisza River, which gave the situation at Solotvino an important cross-border element. The current state of affairs at the site requires quick and efficient measures that will provide secure housing to those living in Solotvino, and will also mitigate the negative cross-border environmental consequences of the Tisza River contamination.

In coordination of the Secretariat for the Danube Region Strategy Ministerial Commissioner of Hungary, the disaster management services of Ukraine and Hungary have requested the support of the European Commission in January 2016, in order to comprehensively map out of the cross border environmental emergency situation at Solotvino. The abandoned salt mines continuously contaminate the Tisza River with unknown quantities of salt, while the residential buildings of the area are also under constant threat because of the quickly forming craters (some craters can reach depths of 110-120 meters, and can form in matter of hours). (source: www.danuberegion.eu/communication/news/616578-eusdr-support-to-contain-the-emergency-situation-at-solotvino-salt-mine).



An exceptional presentation was given by Dr. Kanevskyi from High Technologies Institute Ltd. He introduced a prototype of sub-orbital gun launching platform.



In conclusion, the chair noted that readiness of the state to listen to experts is crucial. Despite the fact of ongoing reforms in the society, they cannot succeed if there is no balance and there is only a question of protecting the interests of the particular political groups and organizations. Cooperation is a must because the emergency preparedness and response system requires concerted efforts from all the relevant stakeholders. Also, it was pointed out that TIEMS is ready to support of the participation in collaborations for internationally harmonized standards.

The event was covered by 278 media representatives from 182 accredited media resources, including 15 foreign media such as the Press Agency of the Ministry of Defense of France, Jane's Defence Weekly, Associated Press, BBC News, Radio France Internationale, European Security and Defence Mittler Report Verlag, Lundi13, Phoenix Satellite Television Holdings Limited, Xinhua News Agency, Polskie radio, Polish Press Agency and others. The total number of exhibitors – 477 companies, including 45 companies from 16 foreign countries (China, USA, Switzerland, Sweden, United Arab Emirates, Belarus, Poland, Czech Republic, Italy, Israel, Great Britain, Belgium, Finland, France, Ireland). Over 18,000 professional visitors attended the exhibition throughout its duration. The representatives of approximately 100 companies from 24 countries (Canada, Sweden, Finland, France, Spain, Czech Republic, Poland, Lithuania, Latvia, Netherlands, UK, USA, Georgia, Belarus, Turkey, India, Pakistan, Kuwait, Egypt, Bangladesh, South Africa, Saudi Arabia, Bosnia and Herzegovina, Australia) were among the guests of the exhibitions.

The 5th Harvard Medical School BIDMC China Program Forum

Was held successfully in Changsha

From 15th to 16th October 2016, "the 5th Harvard Medical School BIDMC (Beth Israel Deaconess Medical Center) China Program Forum" was held successfully in Changsha Hunan province of China. This forum was organized by the International Emergency Management Society Emergency Medical Committee(TEMC) and The Harvard Medical School(HMS), supported by The Healthcare Family Planning Committee and The Xiangya Hospital of Central South University, undertaken by The Xiangya Hospital, The second Xiangya Hospital and The third Xiangya Hospital of Central South University. On the forum, the Harvard Medical University, TEMC and the Xiangya Hospital of Central South University signed tripartite cooperation agreements. Domestic and international scholars and experts had an extensive and in-depth discussion on win-win cooperation, classification on diagnosis and treat, medical association and medical collectivization development, etc.

President of the International Emergency Management Society Mr. K 'Harald Drager, Dean of External Education of HMS Mr. David Roberts, Vice President of Central South University Mr. Chen Xiang, Director of the Healthcare Family Planning Committee of Hunan Province Mr. Zhang Jian and TEMC Director Ms. Chen Ran participated in the opening ceremony and delivered their speeches. There were more than 20 international experts of UNESCO and HMS coming from U.S, Germany and Ireland, responsible officers of The Healthcare Family Planning Committee from provinces nationwide as well as more than 400 presidents and directors of cardiology, oncology and clinical laboratory from hospitals attending this forum.

Director of The Healthcare and Family Planning Committee of Hunan Province Mr. Zhang Jian expressed sincere thanks to the participating experts for the support and care they provided to The Healthcare Career of Hunan Province. Director Zhang Jian indicated that this time of forum in Changsha Hunan province will promote the international medical exchange of Hunan Province and vigorously promoting construction of "The Healthy Hunan".

Vice President of Central South University Chen Xiang representing his university expressed warm congratulations to the 5th Harvard Medical School BIDMC China Program Forum. He indicated that the forum was undertaken by The Affiliated hospital of Central South University, providing a great opportunity for the collision between Chinese and western medical thoughts. The "handshake" between the Harvard Medical School and the XiangYa Hospital will promote the world medical community development.

Dean of External Education of HMS Mr. David Roberts thought that the forum gathered together lecturers and participants from Harvard Medical School programs to discuss common interested topics, it is a hardwon opportunity and platform for China-US high end exchanges.

President of The International Emergency Management Society Mr. K'Harald Drager introduced basic situation of TIEMS, indicated that currently facing threats from many aspects like natural disasters and public health, it requires countries around the world working together to make the team bigger and stronger so as to deal with the situations. He sincerely hopes to have more discussions and cooperation with Chinese peers in the future.

Director Chen Ran of The International Emergency Management Society Emergency Medical Committee (TEMC) represented the organizer to welcome all the distinguished guests and appreciated the help and support provided by all parties for the forum. She wished the forum being successfully held and hoped to make the forum the "Mobile Home" for Harvard program participants and a win-win study share cooperation platform.

This forum contains one main forum and four sub-forums. These four sub-forums include Hospital Presidents Sub-forum, Oncologists Sub-Forum, Clinical Laboratory Sub-Forum and Cardiologists Sub-Forum.

On the afternoon of October 15, the main forum was hosted by President Zhou Shenghua of The Second Xiangya Hospital of Central South University, Secretary General He Chaoyang of The International Emergency Management Society Emergency Medical Committee and President Han Guangshu of Nanjing Drum Tower Hospital. With the witness of all the participating personnel in the main forum, Beijing Huatong Guokang Foundation Opening Ceremony and Beijing Huatong Guokang Special Fund Launching Ceremony were held. The chairman of the foundation was taken hold by director Chen Ran. All participating personnel in the main forum also witnessed the Harvard album (recorded program participants' learning experience) release ceremony of the 7th session of Harvard President Program, the 1st session of Harvard Cardiology program, the 1st session of Harvard Oncology program and the 2nd Harvard Clinical Laboratory program.

President Li Weimin of West China Hospital, Sichuan University, Director Wei Xiaochun of The Healthcare and Family Planning Committee of Shanxi Province, Dean David Roberts of External Education Faculty of Harvard Medical School, President K'Harald Drager of The International Emergency Management Society made special reports on healthcare group and diagnosis treat of classification, improvements on "healthy Jiangsu" in a global vision, discipline construction and personnel training under classification of diagnosis and treat as well as remote education and the responsibility system of The International Emergency Management Society.

On the morning of 16th October, The Harvard President Sub-Forum were hosted by the President Chen Yong of Beijing Chaoyang Hospital, Capital Medical University and president Tang Yonghong of The Second Hospital University of South China. President Zhou Shenghua of the Second Xiangya Hospital of Central South University, President Li Xingang of Qilu Hospital of Shandong University, the representative of President Wen Hao of the First Affiliated Hospital of Xinjiang Medical University, President Zhu Yimin of Hunan Provincial Hospital, president Sun Hong of the Xiangya Hospital of Central South University gave 5 high level theme reports respectively on research cooperation and win-win mode between hospitals under new circumstances regarding to classification of diagnosis and treat. In addition, Harvard President Sub-Forum held two spectacular summit dialogues, the involved interactive guests had a heated discussion on some issues that currently existed in hospital management.

The Harvard Oncology, Cardiology as well as Clinical Laboratory Sub-Forums were also carried out in full swing with strong communication atmosphere. Apart from previous participants in the Harvard Director Class Programme giving special reports, each Harvard Director Class Sub-Forum especially invited domestic and international well-known experts to share their experience with the attendees. Harvard Clinical Laboratory Sub-Forum invited the Chairman Zhang Man of Chinese Medical Doctor Association Laboratory Physician Branch, Doctor Joseph Cheng of National Institutes of Health of U.S to make special reports. Harvard Oncology Sub-Forum invited Rebecca Miksad, Director of Gastrointestinal Medical Oncology of BIDMC to give lectures for the Harvard students for the second time. Harvard Cardiology Sub-Forum especially invited Joseph Kannam, Director of Cardiology Fellowship of BIDMC, President Wang Jian'an of The Second Affiliated Hospital of Zhejiang University Medical School and Vice President Zhang Guogang of Xiangya Hospital of Central South University to make theme reports.

This forum confirmed the organizer of the 6th Harvard China Program Forum through fierce competition. Director Chen Ran and Professor David Roberts awarded crystal trophy of "the 5th Harvard China Program Permanent Host Unit" to The Second Xiangya Hospital of Central South University and "The 6th Harvard China Program Forum Undertake Unit" to the Nanjing Drum Tower Hospital which will be the organizer of next forum.

Since the establishment of Harvard China Program by HMS and TEMC in 2012, it has successfully held 11 sessions. Nearly 580 people from almost 30 provinces have already participated in the Harvard Training Program. Director Chen Ran of TEMC indicated that Harvard China Program has greatly promoted the exchange and cooperation between Chinese and American medical personnel in the medical and health related fields, and promote the common progress and development of the health industry in China and U.S. The forum not only provides a full exchange of opportunities for Harvard students, but also further enhances the friendship of the Harvard students. HMS China Program has become a high-end platform in which Chinese hospital administrators and academic leaders communicate ideas and work together in order to become more and more influential, thus providing continuous study opportunity for more and more hospital administrators.



Forum conference scene



Forum conference scene



Director of Healthcare and Family Planning Committee of Hunan Province Mr. Zhang Jian, delivered his speech on opening ceremony



Vice President of Central South University Mr. Chen Xiang, delivered his speech on the opening ceremony



Dean of External Education Faculty of HMS Mr. David Roberts delivered his speech on the opening ceremony



President of The International Emergency Management Society Mr. K. Harald Drager delivered his speech on the opening ceremony



Director of TEMC Ms. Chen Ran, delivered her speech on the opening ceremony



President of The Second XiangYa Hospital of Central South University Mr. Zhou Shenghua, delivered his speech on the opening ceremony



HMS, TEMC and XiangYa Medical School of Central South University signed the tripartite cooperation agreements



Beijing Huatong Guokang Foundation Namely Care for Medical Workers Specialized Fund Launch Ceremony



Album of Harvard Release Ceremony



Album of Harvard Release Ceremony



The Secretary General of TEMC Mr. He Chaoyang hosted the main forum



President of West China Hospital, Sichuan University Mr. Li Weimin delivered topic lecture on the main forum



Director of Healthcare and Family Planning Committee of Jiangsu Province Ms. Wang Yonghong delivered topic lecture on the main forum



Director of Healthcare and Family Planning Committee Mr. Wei Xiaochun delivered topic lecture on the main forum



President of Nanjing Drum Tower Hospital Mr. Han Guangshu hosted the main forum



President of Qilu Hospital of Shandong University Mr. Li Xingang delivered topic lecture on Hospital Presidents Sub-forum



President of Hunan Provincial People's Hospital Mr. Zhu Yimin delivered topic lecture on Hospital Presidents Sub-forum



President of Xiangya Hospital of Central South University Mr. Sun Hong delivered topic lecture on the Hospital Presidents Sub-Forum



President of Beijing Chaoyang Hospital, Capital Medical University Mr. Chen Yong hosted the Hospital Presidents Sub-Forum



President of the Second Hospital University of South China Mr. Tang Yonghong hosted the Hospital Presidents Sub-Forum



The Hospital Presidents Sub-Forum Summit
Dialogue (1st)

President of the First Affiliated Hospital of
Suzhou University Mr. Hou
Jianquan(left), President of Beijing
Chaoyang Hospital, Capital Medical
University Mr. Chen

Yong(central), President of the People's
Hospital of Henan Province Mr. Gu
Jianqin(right)



The Hospital Presidents Sub-Forum Summit Dialogue (2nd)
President of the Second Affiliated Hospital of South China University Mr. Tang Yonghong (first on the left), President of the People's Hospital of Guizhou Province Mr. Sun Zhaolin(second on the left), President of the People's Hospital of Zhejiang Province Mr. Huang Dongsheng(first on the right), vice president of Beijing Millennium Monument Affiliated Hospital of Capital Medical University Mr. Yan Yong (second on the right)



Dean of External Education of HMS Mr.
David Roberts and Director of TEMC Ms.
Chen Ran awarded crystal trophy of "the 5th
Harvard China Permanent Unit" to The
Second XiangYa Hospital of Central South
University



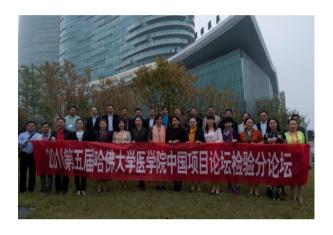
Dean of External Education of HMS Mr.
David Roberts and Director of TEMC Mrs.
Chen Ran awarded crystal trophy of "The 6th
Harvard China Forum Organizer" to the
Nanjing Drum Tower Hospital



Group photo



The Clinical Laboratory Sub-Forum



The Clinical Laboratory Sub-Forum Group Photo



The Cardiologists Sub-Forum Group photo



The Oncologists Sub-Forum Group photo

The 7th Annual Conference of TIEMS China Chapter

Held in Zhuhai, China November 3 – 4, 2016

From November 3rd to 4th 2016, The 7th annual Conference of the International Emergency Management Society(TIEMS) China Chapter was jointly held in Zhuhai by TIEMS China Chapter, China Emergency Rescue Equipment Industry Technology Innovation Strategic Alliance, Guangdong Provincial Government EMO and Zhuhai Government. As one of the important activities of the 11th China International Aviation and Aerospace Exhibition (hereinafter referred to as "Zhuhai Airshow"), this annual Conference focused on China's "Silk Road Economic Belt and the 21st Century Maritime Silk Road" and the military-civilian integration strategy, and further extended and enriched the content of the Zhuhai Air Show based on the Zhuhai Air Show Aerospace and Defense Theme, making it the highlight of the Air Show.

The annual Conference was co-sponsored by China Academy of Safety Science and Technology, Tsinghua University School of Public Administration, Beijing Harmony Technologies Co., Ltd. and other units.



As the co-organizers of TIEMS Zhuhai Conference, Beijing Harmony Technologies Co., Ltd. participated actively in this event

Emergency rescue industry is an emerging industry whose development is promoted by the Chinese government and worldwide. With the frequent occurrence of emergencies and the newly-released national policies, emergency industry has greatly developed in the past years. The China State Council Emergency Management Expert Group, the National Commission for Disaster Reduction, the National Development and Reform Commission, the Ministry of Industry, the Ministry of Public Security Fire Department, the China Earthquake Emergency Rescue Center, the National Safety Emergency Management Training Center, the Guangdong Provincial Government, the Zhuhai City Government, Tsinghua University Public Security Research Institute and other experts in the field of emergency and leaders of relevant departments in this field attended the Conference, and delivered opening speech as well as round-table forums. Nearly 300 Chinese and foreign emergency representatives gathered in Zhuhai to share the frontier theory of emergency management and discuss the development of emergency industry.



Opening Ceremony of the 7th Annual Conference of the International Emergency Management Society (TIEMS) China Chapter in Zhuhai on November 3rd, 2016



Conference Hall of the 7th Annual Conference of the TIEMS China Chapter in Zhuhai, November, 2016

The theme of this Conference is "risk, challenge, emergency and innovation". The Conference deeply discussed and exchanged the development of public safety science and technology, the development of emergency industry, the ability improvement of emergency and disaster management and the international exchange and cooperation, as well as the cutting-edge development of international emergency management through the 2-day pre-meeting training (November 1st to 2nd 2016), theme report, emergency rescue products exhibition and thematic roundtable forums.

Professor Shan Chunchang, President of TIEMS China Chapter, Professor Qu Guosheng, Vice-President of TIEMS and TIEMS China Chapter, Dr. Jack Zhang, Treasurer of TIEMS and Vice-President of TIEMS China Chapter, Chairman of the Z-park Industry Alliance of Emergency Management (ZIAEM) gave keynote speeches and hosted roundtable forums.



Prof Shan Chunchang (fourth from left), the Emergency Management Expert Group leader of China State Council, the Vice Director of National Emergency Disaster Reduction Committee of Experts, President of TIEMS China Chapter, Prof Qu Guosheng (second from left), Vice President of TIEMS and TIEMS China Chapter, Prof Fan Weicheng (third from left),

Academician of CAS and Tsinghua University, Mr. Yang Bin (third from right), General Manager of Xinxing Cathay International Group and Vice President of TIEMS China Chapter, Dr. Jack Zhang (first from right), Treasurer of TIEMS, Vice President of TIEMS China Chapter and President of Z-park Industry Alliance of Emergency Management (ZIAEM) attended the opening ceremony of the TIEMS Zhuhai Conference

Prof Gui Weimin, Counselor of Shaanxi Provincial Government, leader of Shaanxi provincial government emergency management expert group and Vice Chairman of TIEMS China Chapter, presided over the opening ceremony. Prof Shan Chunchang, Leader of the China State Council Emergency Management Expert Group, Vice Director of the National Emergency Disaster Reduction Expert Committee, President of the TIEMS China Chapter, Mr. Gao Yongtao, Director of the Emergency Management Office of Guangdong Province, Mr. Wang Qingli, Vice Mayor of Zhuhai government, as well as representatives from the Ministry of Industry and Information Technology, National Development and Reform Commission, and other Emergency Department heads addressed the Conference. Professor Fan Weicheng from Tsinghua University, Ms. Jia Qun, Vice Inspector of National School of Administration of Emergency Management Training Center, Qu Guosheng, Deputy Director of China Earthquake Emergency Rescue Center Science and Technology Committee, Zhang Pingyuan, Deputy Secretary of the State Safety Production

Emergency Rescue Command Center, and Zhang Quanling, Deputy Director of the Fire Department of the Ministry of Public Security, made keynote speeches at the opening ceremony.



Gui Weimin (middle). Government Counselor of Shanxi Province. Leader of Shanxi Provincial Government Emergency Management Expert Group and Vice President of TIEMS China Chapter, Zhang Oiang (left) Vice Dean of School of Social Development and Public Policy, Beijing Normal University, Vice President of TIEMS Chapter, China Jack Zhang Treasurer of TIEMS, Vice President of TIEMS China Chapter, Chairman of ZIAEM attended the Conference and took photos together.

Analyzing the accident cases such as the fight against "SARS", "Oriental Star" shipwreck accident, "Shanghai Bund" stampede accident, Group Leader of Emergency Management Expert Team of China State Council, Professor Shan Chunchang explained the topic of "Optimizing public relations and improving the level of social governance". Combined with accident cases, scientific analysis, lessons learned, how to deal with emergency response mechanisms, information communication, public opinion work, etc., he made deep analysis and explanation from a macro point of view.



Leader of the Emergency Management
Expert Group of the State Council, Deputy
Director of the Expert Committee of the
National Emergency Disaster Reduction
Committee, and President of TIEMS China
Chapter Shan Chunchang is making
keynote speech

Vice Director of China Earthquake Emergency Rescue Center Science and Technology Committee, Vice President of TIEMS and TIEMS China Chapter, Prof Qu Guosheng expounded the progress of international emergency industry from three aspects: new concepts, new trends and new challenges of international emergency management, pointed out the problems and gaps in emergency management in China, and provided ideas for solving the existing emergency management problems in China.



Vice Director of China Earthquake Emergency Rescue Center Science and Technology Committee, Vice President of TIEMS and TIEMS China Chapter, Mr. Qu Guosheng is making keynote speech The wonderful speeches of experts and leaders not only closely fit the theme of the Conference "risk, challenge, emergency, and innovation," but also spread the latest emergency management and industrial policy, sharing domestic and foreign advanced experience and ideas and enhancing interactions among the government, enterprises, universities and institutions.



The experts' keynote speeches and sparkling opinions have benefited everyone

As a high-level and multi-form emergency management annual event, the "Roundtable Forum" on November 4th is the highlight of this annual Conference. Participants discussed and exchanged the four topics of "Improving the urban public safety and emergency capacity", "Professional rescue and air-ground complicated SAR", "The first responder and individual protection" and "Application and innovation development of new technology". The roundtable forum of "Professional rescue and air-ground complicated SAR" hosted by the Vice President of TIEMS China Chapter, Chairman of Harmony Technologies, Dr. Jack Zhang attracted many Chinese experts in emergency industry: Yin Guanghui, Deputy Director of China Earthquake Administration, Peng Bibo, Director of Chinese People's Armed Police General Hospital, Xue Lan, Dean and Professor of Tsinghua University, Liu Tiemin, Director of China Academy of Safety Science and Technology, Wang Tong, Director of Beijing Labor Protection Office, Zhang Yongjun, Director of Dongguan EMO, Yang Bin, General Manager of Xinxing Cathay International Group, Dr. Yao Xiang in China Emergency Rescue Innovation Alliance, Li Jin, Commander of Beijing Public Security Fire Department, Zhang Qiang, Dean of Beijing Normal University as well as the experts from the United States Texas A & M University Emergency Training Center and China EU emergency management cooperation project.



Dr. Jack Zhang, Vice President of TIEMS China Chapter, President of the ZIAEM held the roundtable forum of "Professional rescue and air-ground complicated SAR"



Group photos of Vice Presidents of TIEMS
China Chapter such as Prof Xue Lan,
Director Liu Tiemin, Dean Zhang Qiang,
with Dr. Jack Zhang, Treasurer of TIEMS,
Vice President of TIEMS China Chapter and
President of ZIAEM.

In the forum of <u>Professional rescue and air-ground complicated SAR</u>, experts discussed China's future emergency management, focusing on the "Silk Road Economic Belt and the 21st Century Maritime Silk Road" and emergency industry development strategy, more than 200 experts and guests shared their wonderful ideas concerning the following aspects: how the international and domestic emergency specialization rescue and air-sea rescue and air-ground rescue could work better? The improvement of specialized rescue capability in China should learn from the international advanced technology and application examples especially in emergency training and capability drilling; Enhancing emergency response capabilities of new technologies (such as VR/AR, Al, and robots, etc.) needs to focus on practicability. The deep and heated discussion and information exchange brought benefits to everyone.



Many experts in China's emergency industry attended the Roundtable Forum of "Professional rescue and air-ground complicated SAR" including Yin Guanghui, Deputy Director of China Earthquake Administration, Peng Bibo, Director of Chinese People's Armed Police General Hospital, Wang Tong, Director of Beijing Labor Protection Office and Dr. Jack Zhang, Treasurer of TIEMS etc.



Group photo of TIEMS China Chapter: Yang Bin (Second row fourth from left), Liu Tiemin (Second row fifth from left), Xue Lan (Second row fourth from right), Jack Zhang (Second row second from right), Zhang Qiang, (Second row first from right) etc.

At the end of the Conference, the Academic Organizing Committee of the Conference presented the award to 10 authors of the best paper of the year 2016. As member of the editorial board of the paper, President, vice President of the TIEMS China Chapter like Shan Chunchang, Qu Guosheng and Jack Zhang etc. participated in the review of the collected papers and the evaluation of best paper of the year 2016.



As a member of the editorial board of the paper, Dr. Jack Zhang, Vice President of the China Chapter, participated in the evaluation of "Best paper of the year 2016"



The authors of "Best paper of the year 2016" in TIEMS Forum

TIEMS - India Chapter Update

by Kailash Gupta, kailashgupta@my.unt.edu, Sarthak Handa <u>sarthakh330@gmail.com</u>,
Neelay Srivastava <u>sarthakh330@gmail.com</u>,
and S. Priyadarshini <u>priyadarshini.nitk@gmail.com</u>



TIEMS-India Chapter Progress

TIEMS-India Chapter was registered on April 9, 2015, under the Rajasthan Public Trust Act, 1959, as reported in TIEMS Newsletter, Issue 24, July 2015. The progress of TIEMS-India Chapter till July 2015 was also reported in that issue. Issue 26, March 2016 carried reports of the progress made by TIEMS-India Chapter subsequently. This Newsletter picks up the thread and reports progress made by the TIEMS-India Chapter since April 2016.

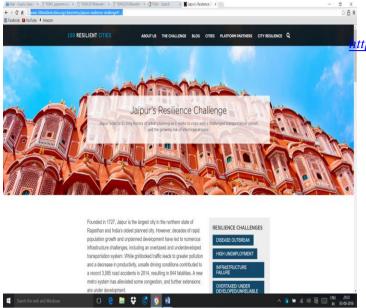
With persistent efforts of four years by TIEMS-India Chapter, Jaipur is now part of the 100 Resilient Cities pioneered by Rockefeller Foundation. One of the initiatives of TIEMS-India Chapter is Operation Resilience, which removes asymmetric disaster risk communications and helps citizens in providers and users of targeted risk communications to the affected persons. TIEMS-India Chapter members played different roles in 7th Asian Ministerial Congress on Disaster Risk Reduction, November 2 - 5, 2016, New Delhi. TIEMS-India Chapter had a booth in the DRR Exhibition held alongside AMCDRR, Nov. 3 - 5, 2016, and recruited new members. TIEMS-India Chapter made a presentation at the Silver Jubilee Hamfest India 2016, November 5-6, 2016, Abu hear Road. You may the radio interview taken during that time from https://archive.org/details/VisheshMulakatHAMKailashGuptaJaipur. TIEMS-India Chapter also made a presentation at the Workshop on Local Coping Mechanisms for Integrated Climate Resilience: Opportunities & Challenges for Urban Poor in Jaipur, October 18, 2016. TIEMS-India Chapter met National Institute of Disaster Management on Oct. 6, 2016. For details of these stories please read on.

Update 1

TIEMS-India Chapter Proactively and Pro Bono, Persuaded Jaipur City to Apply and Got It Selected as Part of 100 Resilient Cities Pioneered by Rockefeller Foundation

TIEMS Newsletter – Issue 26 – March 2016 reported on pages 23 and 24 that TIEMS – India Chapter is working for four years proactively and pro bono, and persuaded Jaipur Mayor to support the application prepared by TIEMS–India Chapter for 100 Resilient Cities (100RC) pioneered by Rockefeller foundation. Letter of Support of the Mayor of Jaipur City for the 100RC Challenge application prepared by the TIEMS–India Chapter was also published on page 24 of that issue. Further, we had reported that a senior leader of 100RC team will meet the Jaipur Mayor and Dr. Kailash Gupta of TIEMS–India Chapter on April 11 to ensure a mutual understanding of the 100RC process, views of resilience, and the partnership they work to forge with their network members. A disguised and dignified way to conceal selection process.

In preparation for the selection process, TIEMS—Invited Mehul Patel, Analyst, 100RC, Surat on April 4 & 5, 2016 for meeting with Mayor and Commissioner of Jaipur City. Indian city Surat was selected as a resilient city in the 2013 first round of selection process. Kailash went to Delhi on April 5, 2016 to meet Kamlesh Yagnik, Chief Resilience Officer (CRO), 100RC, Surat.



Jaipur on 100 Resilient Cities website ttp://www.100resilientcities.org/cities/entry/jaipu
rs-resilience-challenge#/-_/

As scheduled, a meeting of Vikram Singh, Regional Director, Asia & Pacific, 100RC Singapore Office was held with Nirmal Nahata, Mayor, Rakesh Sharma, Additional commissioner, D K Meena, Superintending Engineer and others of Jaipur Municipal Corporation (JMC), along with Kailash Gupta of TIEMS-India Chapter on April 11, 2016. Mr. Vikram Sing and Dr. Kailash Gupta also met C S Rajan, Chief Secretary; Manjit Singh, Principal Secretary, Local Self Government Department of Government of Rajasthan; and Ashutosh A T Pednekar, Commissioner, JMC on April 12, 2016 in the process of selection of Jaipur city.

Kailash also went to Surat on April 18-19, 2016 for attending Steering Committee Meeting on Preliminary Resilience Report of Surat. During his visit to Surat, Kailash met Surat Mayor, Municipal Commissioner, and team of TARU Leading Edge Pvt. Ltd., who are helping in preparing resilience strategy. In addition, Kailash met Dr Vikas Desai of Surat Climate Change Trust, who had originally prepared Surat city application for 100RC.

Jaipur's selection as one of the 100RC in a tough completion from cities around the world was announced on May 25.

A Press Release issued by 100RC is given below.

PRESS RELEASE

100 Resilient Cities – Pioneered by The Rockefeller Foundation, selects Jaipur as winner of the 100 Resilient Cities Challenge

Jaipur part of final group of cities selected in highly competitive global grant process

Jaipur will soon appoint a Chief Resilience Officer to lead local efforts in building a comprehensive Resilience Strategy

Jaipur, May 25, 2016 – Jaipur Mayor, Nirmal Nahata, welcomed an announcement today from 100 Resilient Cities – Pioneered by The Rockefeller Foundation (100RC), selecting Jaipur to join the 100RC Network to build urban resilience. Jaipur is among the final cohort of cities invited to join the worldwide 100RC Network. As a member of 100RC, Jaipur will gain access to tools, funding, technical expertise, and other resources to build resilience to the challenges of the 21st century. Mayor Nahata said entrance into the 100RC Network will help Jaipur fight the resilience challenges like road traffic fatalities and injuries, traffic congestion, and cleanliness.

As the number of people living in urban areas grows from 50 percent today to an estimated 70 percent in 2050, cities around the world face huge deficits in preparedness for rapid growth and natural and man-made disasters. 100RC's new member cities are joining an elite international group proactively preparing to face any challenge that lies ahead.

Mayor Nahata said: "Jaipur's selection to join the 100 Resilient Network is not only a significant honor but will give Jaipur the tools to support a better Jaipur today, tomorrow and for future generations to come. Our research based application was pro bono prepared by The International Emergency Management Society – India Chapter. It recognized Jaipur's commitment to make it a healthy (clean, pollution - including sound pollution free), happy (art, culture, sports, festivals, celebrations), peaceful (social inclusion, communal harmony), and efficient (uninterrupted electricity, water, telephone, and Internet; participatory governance) city to live and visit." Nahata continued, "As a new member of 100 Resilient Cities, we can work with the best in the private, government and non-profit sectors in developing and sharing tools to plan to and respond to the resilience challenges ahead."

"We are so proud to welcome Jaipur to 100 Resilient Cities," 100RC President Michael Berkowitz said. "We selected Jaipur because of its leaders' commitment to resilience building and the innovative and proactive way they've been thinking about the challenges the city faces. We're excited to get to work."

"For us, a resilient city has good emergency response and meets its citizens' needs," Berkowitz continued. "It has diverse economies and takes care of both its built and natural infrastructure. It has effective leadership, empowered stakeholders, and an integrated planning system. All of those things are essential for a resilient city."

Momentum from 100RC's two earlier challenges made this year highly competitive, spanning over 90 countries across six continents. Jaipur was chosen from more than 325 applicants on the basis of their willingness, ability, and need to become resilient in the face of future challenges. The application process showed each city's unique vision for resilience, a long-term commitment to building resilience in a way that connects silos of government and sectors of society, and specific attention to the needs of poor and vulnerable citizens. Applicant cities also demonstrated the willingness to be leaders in urban resilience, sharing learning experiences and becoming a model for other cities across the globe.

Member cities were selected upon the recommendation of distinguished judges from around the world, including: A. Eugene Kohn, Chairman of Kohn Pedersen Fox Associates, Acha Leke, Director at McKinsey & Co Africa, Co-Founder of African Leadership Network, Ann Fudge, Vice-Chair and Senior Independent Director of Unilever, Charlotte Petri Gornitzka, Director-General of

Swedish International Development Cooperation (SIDA), Dan Doctoroff, CEO of Sidewalk Labs, Dr. Judith Rodin, President of the Rockefeller Foundation, Kai-Uwe Bergmann, Partner at the Bjarke Ingels Group, Michael Kocher, General Manager at Aga Khan Foundation, Nachiket Mor, Former Director and Current Board Member, Reserve Bank of India and Senior Advisor to the Bill & Melinda Gates Foundation, and Nena Stoiljkovic, Vice President, Global Partnerships at the IFC.

Selected cities are now part of a global community of cities working together to build urban resilience. In the months ahead, as part of the 100RC Network, Jaipur will be eligible to receive grant funding to hire a Chief Resilience Officer, who will lead the citywide resilience-building process and engage stakeholders from across different government agencies, public and private sectors, and various communities to incorporate diverse perspectives and knowledge. Jaipur will also receive technical support to develop a Resilience Strategy that reflects the city's distinct needs, and the support and services they need as they work towards implementing that strategy. Each new network member will gain access to a variety of 100RC Platform Partners in the private, public, academic, government, and nonprofit sectors. Partners offer tools and services valued at over \$180 million USD at no direct cost to 100RC members, in areas such as innovative finance, technology, infrastructure, land use, and community and social resilience. Finally, the cities will be linked together in a global network so they can learn from each other's challenges and successes.

CONTACT:

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100RC: Media@100resilientciites.org

APCO Worldwide: asharma@apcoworldwide.com

About The International Emergency Management Society (TIEMS) – India Chapter

TIEMS is a global forum for education, training, and policy in emergency & disaster management. It is dedicated to developing and bringing the benefits of emergency management tools, techniques, and industry practices to society for a safer world. TIEMS provides a platform for all stakeholders within the global emergency and disaster management community to meet, network and learn about new technical and operational methodologies. It also aims to exchange experience on good industry practices. For more information, visit: www.tiems.info

About 100 Resilient Cities—Pioneered by The Rockefeller Foundation

100 Resilient Cities - Pioneered by The Rockefeller Foundation (100RC) helps cities around the world become more resilient to social, economic, and physical challenges that are a growing part of the 21st century. 100RC provides this assistance through: funding for a Chief Resilience Officer in each of our cities who will lead the resilience efforts; resources for drafting a Resilience Strategy; access to private sector, public sector, academic, and NGO resilience tools; and membership in a global network of peer cities to share best practices and challenges. For more information, visit: www.100ResilientCities.org.

Following the selection of Jaipur city as one of 100RC, Nirmal Nahata, Mayor, JMC and Kailash Gupta, Point of Contact for 100RC signed 100RC Understanding of Mutual Commitment and sent to 100RC.

An Orientation Meeting was held on Oct. 21, 2016, with the participation of Vikram Singh, Regional Director & Saurabh Gaidhani, Program Manager, Asia Pacific, 100 RC, V Saravana

Kumar, CEO, Jaipur Smart City Limited (JSCL), team of consultant who are executing smart city project and Kailash Gupta. It may be mentioned that Smart City is a project of the Government of India in equal partnership with state governments to make 100 Indian cities 'smart.' In the first phase 20 cities were selected and Jaipur stood third in the rank.



Vikram Singh of 100 Resilient Cities making a presentation at the Jaipur Municipal Corporation, October 21, 2016

There will be another Orientation Meeting with 100RC, Mayor, Commissioner and officials of JMC, CEO and team of JSCL, and TIEMS-IC team. Subsequently, there will be an Agenda Setting Meeting for two days with different stake holders, which will be facilitated by TARU and TIEMS-India Chapter. A Chief Resilience Officer will be selected by JMC, whose salary for minimum two years will be paid by the 100RC. CRO will prepare a Resilient Strategy for Jaipur over a nine month period with the help of TARU, 100RC partner organizations, and other stake holders. The partner organizations will also help in implementation of resilient strategy. The network of 100 CROs will help in peer learning to make Jaipur resilient.



Vikram Singh (middle) of 100 Resilient Cities presenting The Resilient Dividend: Managing Disruptions, Avoiding Disasters, and Growing Stronger in an Unpredictable World by Judith Roden, President, Rockefeller Foundation, October 21, 2016, to Saravan Kumar (left), CEO, Jaipur Smart Cities Limited. Kailash Gupta of TIEMS-India Chapter is on the right

Update 2

A Compelling Case for 'Smart and Resilient' Cities: TIEMS-India Chapter Initiative

On 18th September 2016, an otherwise peaceful Bangalore city, got caught in the frenzy of a political riot. Roads were blocked, shops were forced shut, protesters were out on streets and for most of us - life came to a standstill.

Rumours became the primary source of information for civilians. City control room started getting information about violence and utility disruption, one phone call at a time. The information asymmetry, on that day, took its toll on everyone. It became apparent that the communication system in even the country's most vibrant tech city is not designed to tackle crisis situations. As irony had it, on that fateful day, a pizza delivery app on your phone could have sent you a notification or a message, but the city administration had no way of reaching out to you.

This isn't the first time that Bangalore has witnessed a crisis. Control Room for Chennai flood was set up in Bangalore last year. There was an unprecedented willingness to help, from all parts of the community - civilian groups, NGOs, startups, businesses and city administration. But, the city's ability to respond was severely bottlenecked by the lack of coordination systems designed around community participation during crisis.

In such situations, society pays a significant human and capital cost for its delay in restoring normalcy.

In wake of the recent experiences, several volunteers from Ashoka Foundation (Bangalore) teamed up with TIEMS India chapter to re-imagine how a present day city should respond to disaster from ground up. The initiative was named - **Operation Resilience**.

Months of intensive research led us to four fundamental hypothesis:

- 1. Disaster Management systems that will be put to use once in 10 years, suffers from low perceived value: Systems designed for coordinated response should be part of daily workflow of the key response agencies, so that a crisis situation leads to nothing but a scaled up usage of existing systems.
- 2. An integration platform that ties together essential city services and business incentives as part of the design will have higher uptake: As an example, a unified platform for ambulance services can bring economic benefit for participating agencies on a day to day basis. Such a platform can later be leveraged during crisis situations.
- 3. Standalone initiatives that have: low cost, short deployment timeframe and high perceived value in public eye gets readily accepted by city administration: While building a chain of initiative around every essential vertical (healthcare, logistics, etc.), quick wins can be leveraged to build momentum around the resilience movement.
- 4. *Open source and agile information architecture of base platform is ideal:* A global platform that suits the context of cities across the world will require that the base platform is a neutral open source entity that draws strength from partner integrations.

The foundation of a city's resilience relies upon its ability to connect *civilians* and *response* agencies during crisis. Tapping into the present-day communication channels to establish a

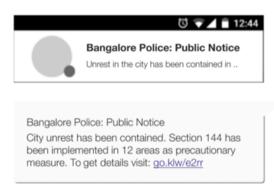
proactive two-way information exchange between *public* and *response agencies*, is the first step forward towards realising the vision of a unified platform that aggregates the supply and demand of all stakeholders.

A crisis alert system can provide city the ability to direct public to a Crisis Portal via SMS or notifications on a partner app that people already use. Crisis Portal will be a makeshift mobile

website which delivers concise actionable information to affected civilians, while giving response agency an opportunity to crowd source on-ground information or seek volunteers at scale.

From tactical perspective, a crisis alert system ticks all relevant boxes on our hypothesis list:

It can be built as a stand-alone initiative, with low cost, short deployment time, high perceived value for public and open source integration framework. It's also an initiative that can scale for all forms of crisis - small (fire accidents) or big (disasters).



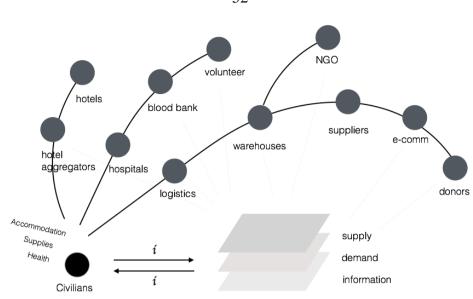
Once this simple information exchange system gets operational - the focus will shift on integrating supply and demand of stakeholders - one vertical at a time.



With this understanding behind us, a concept demonstration model was prepared and presented for 'Operation Resilience' at the 7th Asian Ministerial Conference on Disaster Risk Reduction, New Delhi between 2nd - 5th November. The event was organised by the Government of India in collaboration with the United Nations International Strategy for Disaster Reduction (UNISDR).

The event witnessed Ministerial sessions, Technical discussions and exhibition/ stalls from over 70 agencies in Disaster Risk Reduction space. The event acted as a strong platform to seek inputs on the ambitious vision of Operation Resilience.

Delegates from various agencies including National Disaster Management Authority (NDMA), acknowledged the need for such a platform and shared their valuable feedback on taking this initiative forward. It was noted that most present day crisis alert systems offered in the market, lacks the ability to aggregate and crowd source information from the people on-ground.



Where to start?

We are looking to build upon the concept and pilot Operation Resilience in Pune and Jaipur. Both the cities are covered under the India's 'Smart City' programme and '100 Resilient City' programme, and can act as a great testing ground for innovation around Disaster Risk Reduction initiatives.

We are passionate about the profound and positive impact Operation Resilience can have in building resilience for urban cities. To share your feedback or express your interest in building this vision with us whether as a pioneer city, DRR expert, regulator, user group or any other stakeholder, please contact us at *kailashgupta@my.unt.edu* or *sarthakh.2013@iitkalumni.org*.

Operation Resilience Demonstration Website: www.operationresilience.com

Update 3

TIEMS-India Chapter Participates in 7th Asian Ministerial Conference on Disaster Risk Reduction 2016, New Delhi, November 2-5, 2016

About two-third of the world's population lives in Asia and 80% of disasters occur in this region. Risks and vulnerabilities go beyond national boundaries. Regional platforms provide an opportunity to address trans-boundary issues around disaster prevention and preparedness by providing leadership, by addressing disaster risks and building the resilience of communities and nations. In Asia, the regional platform mainly consists of the Asian Ministerial Conferences on Disaster Risk Reduction (AMCDRR). Established in 2005, the AMCDRR is a series of conferences jointly organized by different Asian countries and the United Nations Office for Disaster Risk Reduction (UNISDR).

The 1st AMCDRR was organized in 2005 by the Government of People's Republic of China in Beijing to facilitate the implementation of Hyogo Framework for Action (HFA 2005-2015). First conference set the stage for regional implementation of DRR in Asia and formalized the ministerial conferences in order to create and sustain the political commitment for implementation and monitoring of the HFA.

In 2015, representatives from 187 countries adopted the 'Sendai Framework for Disaster Risk Reduction 2015-2030'. It seeks a reduction in disaster risk globally and substantial reductions in disaster losses including mortality, numbers of people affected, economic losses and damage to critical infrastructure. The Sendai Framework is a development framework that catalyzes the attainment of the UN Members' Sustainable Development Goals. The 7th AMCDRR was the first Conference after the advent of the Sendai Framework hosted by the Government of India and UNISDR. AMCDRR was inaugurated by the Indian Prime Minister Narendra Modi on November 3, 2016.

The AMCDRR had the following structure:

- i. Ministerial Sessions (3)
- ii. Technical Sessions (6)
- iii. Featured Events (3)
- iv. Thematic Events -(22)
- v. Summary Plenary
- vi. Opening Ceremony
- vii. Closing Ceremony
- viii. Commemoration of the 1st World Tsunami Awareness Day
- ix. Film Festival and Award Ceremony
- x. Pre-conference Events -(21)
- xi. DRR Market Place (Exhibition Booths) (See Update 4 below)
- xii. Field and Cultural Events
- xiii. Children painting competition



Indian Prime Minister Narendra Modi and Disaster Risk Reduction Ministers of the Asian Countries after the inauguration of the AMCDRR



Indian Prime Minister Narendra Modi and Home Minister Rajnath Singh at the AMCDRR AMCDRR had participation of about 7,500 delegates from 61 Asian countries. Participants included from different strata of the society, including states, district administration, Mayors, village levels, non-profit organizations, and businesses. World's first tsunami awareness day was celebrated on November 5, 2016. There was also a short film competition on DRR.



A plenary session in progress at the Vigyan Bhawan



Delegates listening to a presentation in a plenary session



Indian Prime Minister and Home Minister looking at the finals of the on-the-spot painting competition on disaster risk reduction by schoolchildren from across India.

Many sessions were live broadcasted for people around the world to listen and see. The recording of the sessions may be seen at https://www.amcdrrindia.net/webcast/.

Many members of the TIEMS-India Chapter were session organizers, moderators, panelists, speakers, or delegates at the AMCDRR. India had also hosted the 2nd AMCDRR, November 7-8, 2017, Ashoka Hotel, New Delhi. Kailash Gupta was Indian Representative of International Association of Emergency Managers at the 2nd AMCDRR. In the last nine years the AMCDRR had grown many fold. 2nd AMCDRR was held at the auditorium of Ashoka Hotel. For the 7th AMCDRR, even the plenary hall of the India's most prestigious convention center, Vigyan Bhawan

was small for opening ceremony. For the opening ceremony a big *pandal* (hall) was created between Maulana Azad Road and Rajpath in the Rajpath Lawns. The number of delegates has also grown many fold. This proves growing awareness, importance, and participation of different stakeholders in DRR in one of the most disaster prone areas of the world.

The outcome of the conference is the following political declaration – consolidating the political commitment of governments towards preventing and reducing risk as well as strengthening resilience by accelerating implementation and monitoring of the Sendai Framework in the region:

Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) 2016

New Delhi Declaration - 2016

We, the Ministers, and Heads of Delegation to the AMCDRR:

Recognize the opportunity to build on past achievements by reaffirming our commitment to disaster risk reduction and resilience.

Re-emphasize that the Sendai Framework for Disaster Risk Reduction is complementary to the 2030 sustainable development agenda.

Remain concerned by the increasing level of risk and impact of disasters on the people and economies of the region.

Recognize the urgent need to accelerate the implementation of the agreed global frameworks; it is our primary responsibility to put in place national and local level strategies to ensure the achievement of the seven global targets of the Sendai Framework.

Commit to the principle of a people-centred and whole-of-society approach and the need to strengthen national and local multi-stakeholder platforms, enhance participation and partnership of the major groups and stakeholder groups, and further support the coordination role of UNISDR.

CALL ON ALL GOVERNMENTS AND STAKEHOLDERS TO:

- 1. Pursue with a sense of urgency the paradigm shift from disaster management to disaster risk reduction.
- 2. *Ensure* that policies and practices reflect an understanding of disaster risk. More specifically, collect and share risk information for pre-disaster risk assessment, risk prevention and reduction through development, and appropriate preparedness for effective response to disasters.
- 3. Strengthen national and local governance of disaster risk reduction to ensure coherence among policies, institutional arrangements across sectors, with representation of stakeholders in line with national circumstances and policies. Increase public and private investment in capacity building, science and technology, innovation, critical infrastructure and services, to contribute to achievement of community resilience.
- 4. *Increase* investment in disaster risk reduction for resilience including in multi hazard early warning systems and dissemination channels; contingency planning that engages all people to further strengthen disaster preparedness. In this regard, reaffirm that an effective and meaningful global partnership and further strengthening of international cooperation, including fulfillment of respective commitments and official development assistance by developed countries are essential for effective disaster risk management.

- 5. *Encourage* meaningful participation and support representation of women, children and youth, and persons with disabilities in leadership role for disaster risk reduction.
- 6. *Improve* preparedness for disaster recovery by strengthening institutional frameworks, establishing standards, and enhancing capacities to ensure that disaster recovery integrates risk reduction measures to build back better.
- 7. *Use* the International Day for Disaster Reduction and World Tsunami Awareness Day to raise awareness, promote better understanding of risks and develop tools to address them.
- 8. *Adopt* indicators of the Sendai Framework being developed by the UN General Assembly Open-Ended Intergovernmental Working Group (OEIWG) and ensure that they are anchored in national priorities and aligned with the indicators of the 2030 Agenda for Sustainable Development.
- 9. *Collaborate* for promoting disaster resilient infrastructure involving governments, multilateral development agencies, financial institutions, private sector and major infrastructure investors in Asia.
- 10. *Strengthen* inclusive collaboration at the local level to build on community initiative, knowledge and resources, and leverage national policies and programmes to achieve resilience.
- 11. *Promote* application of science & technology, and research for evidence-based disaster risk reduction policies, practices and solutions, including through international cooperation.
- 12. *Enhance* regional cooperation including strengthening the role of Intergovernmental Organizations for coherent implementation of the Sendai Framework and the 2030 sustainable development agenda, fostering innovative partnerships, and North-South, South-South and Triangular Cooperation in all areas related to disaster risk reduction.

RESOLVE TO:

- 1. *Timely* implement the actions recommended in this New Delhi Declaration- 2016, deliver on our commitments and share the progress in the next Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) in 2018;
- 2. *Mobilize* governments and partners to deliver on the 'Asia Regional Plan for Implementation of the Sendai Framework';
- 3. *Recognize* the role of UNISDR in coordinating and facilitating regional efforts to support the implementation of the Sendai Framework;
- 4. *Call* on all major groups and stakeholder groups to deliver on their Voluntary Statements of Action and periodically report on progress.

Acknowledge global and regional meetings and initiatives hosted by governments in the region including Japan (3rd World Conference on DRR), Thailand (International Conference on implementation of health aspects of the Sendai Framework and First Asia Regional Conference on Science and Technology for DRR), Bangladesh (First World Conference on Disability and Disaster Risk Management), Iran (Asia Pacific Disaster Information Management Center), Malaysia (Asia Pacific Conference on Resilient Culture Heritage) and Vietnam (Asia-Pacific Regional Conference on Gender and DRR).

Appreciate the leaderships of the governments of the People's Republic of China, the Republic of India, the Federation of Malaysia, the Republic of Korea, the Republic of Indonesia and the Royal

Thai Government in hosting previous AMCDRR and the progress in implementing the Declarations of these Conferences.

Express our sincere gratitude and appreciation to the Government and people of India for their gracious hospitality in hosting and organizing the AMCDRR 2016, with technical support from UNISDR, and look forward to the AMCDRR 2018 in Ulaanbaatar, hosted by the Government of Mongolia.

ADOPTED on 5 November 2016, in New Delhi, India.

Update 4

TIEMS Booth at the DRR Marketplace (Exhibition) of 7th Asian Ministerial Conference on Disaster Risk Reduction 2016, New Delhi, November 3-5, 2017

The DRR Marketplace or Exhibition was organized for governments, UN agencies, international and national NGOs, media, private sector, local communities, local authorities, and other interested stakeholders, to showcase good practices in DRR, to introduce models of local capacity, achievements, and initiatives in local-level disaster risk reduction.

In recognition of the DRR work being done by TIEMS, Government of India and UNISDR had allocated a booth at the DRR Exhibition of 7th Asian Ministerial Conference on Disaster Risk Reduction 2016, New Delhi, November 3-5, 2017. The air conditioned booth was of size of approximately 4 meter width X 3 meter depth X 1.5 meter height with having the facilities of two tables for interacting with visitors, one glass circular table for meetings, five chairs, spotlights, waste bin, power socket, carpet, and fascia board with The International Emergency Management Society printed on that. The DRR Exhibition was divided in two Exhibition Halls – Exhibition Hall 1 and Exhibition Hall 2. There were nearly 85 Exhibition Booths, with TIEMS Booth Number 76 in Exhibition Hall 2.

As soon as the booth was allotted to TIEMS, a team started preparing for the booth design, interior decoration, display posters, audio-visual display material, design and printing of brochures, and membership forms. Exhibition event management companies were are also identified and contacted for preparation of the exhibition equipment, accessories, material, and human power to manage the booth. TIEMS International Group of Experts was also requested for the exhibition material for distribution to the visitors. In addition, TIEMS-India Chapter member were also requested for help in the exhibition.

Sarthak Handa, coordinator of Operation Resilience (see Update 2) designed and got posters on Operation Resilience and on TIEMS printed in Bangalore and brought to the Exhibition. Kailash and Sarthak worked on the TIEMS brochure and both got them printed in Bangalore and Jaipur.

Sarthak and Kailash reached the Exhibition ground on Nov. 2, got security passes, visited the booth site and planned for the booth setting up. On Nov. 3, Sarthak and Kailash set up the Booth in the morning of Nov. 3 and were ready to receive the visitors. The Exhibition timings was from 9 am to 6 pm for delegates and 6 to 8 pm for public on Nov. 3 & 4, and 9 am to 3 pm for delegates and 3 to 6 pm for public on Nov. 5. Mr. Prem Bihari Goswami, a member of TIEMS-India Chapter came from out of Delhi and volunteered at the booth for two days.

There were number of visitors at the TIEMS booth. They were given TIEMS brochure, membership form, and explained about TIEMS activities. Sarthak was showing live demo of the Operation Resilience. Many people gave feedback to improve the beta testing system. Some of the people who showed keen interest and gave valuable suggestions to improve the system include, apart from

others, Santosh Kumar, Executive Director, National Institute of Disaster Management; R K Jain, Member-Secretary, National Disaster Management Authority (NDMA); and Vinod Menon, Ex-Member, NDMA. Ashwin Naik, Resident Fellow and Leadership Group Member of Ashoka Innovators for the Public, who is guiding Sarthak interacted for two days with many delegates and exhibitors for understanding the needs and consider workable solutions.

The Exhibition provided an opportunity to Kailsah for reinforce the pre-existing relationships with DRR professionals and networking with others. TIEMS recruited many new members.

Update 5

TIEMS-India Chapter Makes a Presentation at the Silver Jubilee Hamfest India 2016, November 5-6, Abu Road on DRR, 7th Asian Ministerial Conference on DRR, and TIEMS

The Silver Jubilee Hamfest India 2016 was organized by Mount Abu International Ham Radio Club (MHRC) with call sign VU2BK at Brahma Kumaris, Manmohini Complex, Shantivan, Abu Road in Rajasthan state on November 5 – 6, 2016. In 25 years history of Hamfest, this is for the first time that Hamfest was held in geographically largest north-west state of India. HAM activity in India is largely concentrated in south India. MHRC was started in 2013 and has already produced about 200 amateur radio license holders. Hamfest had registration of 482 amateur radio operators and short wave listeners (people interested in amateur radio but have not yet received a license to operate radio station).



Kailash Gupta, VU2KIZ & KG6SQR making a presentation in a technical session at the Silver Jubilee Hamfest India, Abu Road on November 6, 2016

Kailash Gupta of TIEMS-India Chapter was at AMCDRR till Nov. 5 and from there went straight to the Hamfest. Kailash has Indian call sign VU2KIZ since 1989 and US call sign KG6SQR. Kailash in his presentation narrated how he got interested in amateur radio when Dr Kurien, now a silent key, of Chingavanam, near Kottayam in Kerala state, where Kailash was working, in 1975 took to his shack and showed amateur radio operation.

Kailash was part of the 10 member HAM operators team, which was first to reach devastated sites with their radios, antennas, batteries, wires, and other equipment after the January 26, 2001, earthquake. In that earthquake about 25,000 people died. Kailash was at state EOC at Gandhinagar and there was total failure of control and command system. International disaster management experts were pouring at the EOC. However, nobody was knowing what to do. Kailash thought if this is happening here, what would be happening in villages, where about 70% of Indians were living. In that experience Kailash got his calling of becoming disaster manager from business manager.

Kailash completed Level I, II, and III of the Amateur Radio Relay League Amateur Radio emergency Communication Courses in December 2003. Kailash was President of the North Dakota State University Amateur Radio Club during 2004 to 2006.

In his presentation Kailash gave debriefing of AMCDRR and introduced TIEMS-India Chapter to delegates. He also distributed TIEMS brochure and recruited many TIEMS members. During his stay he used the club station and made a few air contacts also.

Kailash was interviewed by the local Bhramkumaris community 91.4 FM Radio station Madhuvan. His interview was broadcasted twice. The recoding is available at https://archive.org/details/VisheshMulakatHAMKailashGuptaJaipur.

Update 6

TIEMS-India Chapter makes a Presentation at the Workshop on Local Coping Mechanisms for Integrated Climate Resilience: Opportunities & Challenges for Urban Poor in Jaipur, October 18, 2016

Mahila (= women) Housing SEWA Trust (MHT) is an autonomous organization promoted by the Self Employed Women's Association (SEWA) in 1994 with the vision to realize the right to shelter and dignity for all. MHT mission is building sound housing and living environments for poor women in the informal sector. MHT's programs address basic civic and housing infrastructure needs, including water, sanitation, drainage, solid waste management, roads, electricity/ energy, low-income housing and secured land tenure. MHT facilitates access to information and financial, legal and technical services in housing, water and sanitation, energy, housing finance, climate change, urban planning, construction related livelihood sectors with a focus on improving the quality of lives and livelihoods of poor women.

MHT is one of the eight winner of the Global Resilience Partnership Challenge, a joint initiative of Rockefeller Foundation, USAID, and Swedish International Development Agency. The challenge aims to build the resilience capacity of women from slum communities to take the lead in action against the most pressing climate-related risks facing their communities. Jaipur is part of seven South Asian cities MHT is implementing the project.

MHT sought TIEMS-India Chapter help in organizing the Workshop on Local Coping Mechanisms for Integrated Climate Resilience: Opportunities & Challenges for Urban Poor in Jaipur, October 18, 2016, at Hotel Hilton. The aim of the Workshop was to create institutional partnerships for joint action and bring together multiple stakeholders. TIEMS-India Chapter with the Convener invited Mayor Nirmal Nahata to inaugurate the Workshop, which he did. Pawan Arora, Director cum Joint Secretary, Local Self Government Department, Government of Rajasthan and Malashree Bhargava, DRR Specialist, OCHA, Indonesia were also invited for making a presentation.



Panel discussion on Emerging Challenges and Innovative Approaches for Climate Resilience during the Workshop on Local Coping Mechanisms for Climate Resilience: Opportunities & Challenges for the Urban Poor in Jaipur, November 18, 2016 Kailash made a presentation on New Initiatives in Climate Resilience in Jaipur. He recalled his association with SEWA, as Project Coordinator of the International Fund for Agriculture Development funded Livelihood Security Project for Earthquake Affected Rural Households in Gujarat (known as JEEVIKA) in 2002. He talked about Rockefeller Foundation, Rockefeller Foundation President Judith Rodin authored 2015 book Resilience Dividend, 100 Resilient Cities pioneered by Rockefeller Foundation, Jaipur cities selection as one of the 100 Resilient Cities, role played by TIEMS-India Chapter in selection of Jaipur, and the benefits poor in Jaipur are likely to get in becoming climate resilient. MHT and TIEMS-India Chapter agreed to work together in Jaipur for Global Resilience Partnership Challenge and 100 Resilient Cities.

Update 7

TIEMS-India Chapter meets Prof Santosh Kumar, Executive Director, National Institute of Disaster Management, Ministry of Home Affairs, Government of India, New Delhi, October 7, 2016

Kailash Gupta, Managing Trustee, TIEMS-India Chapter met Prof Santosh Kumar, Executive Director, National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Government of India, New Delhi, on October 7, 2016. Prof Santosh Kumar at the outset asked Kailash, what he has been doing after completing PhD in 2013. Kailash explained about developing and teaching an elective course in disaster management for the first time in the fifty years history of Indian Institute of Management, Ahmedabad; registering TIEMS-India Chapter under Rajasthan Public Trust Act, 1959 and its activities, including getting Jaipur selected as one of the 100 Resilient Cities, and disaster management partnership with the world's largest free Jaipur Literature Festival.

Kailash asked about Prof Santosh Kumar's recent activates. Prof Santosh Kumar informed that South Asia Association of Regional Cooperation (SAARC) Disaster Management Centre has restarted with him as Executive Director. NIDM Extension Centres have been set up in Gujarat and Andhra Pradesh, and construction has started in NIDM campus. He also informed about starting a disaster management program with Jawarlal Nehru University, New Delhi. An initial telephonic and email communication was established with Prof. Amrita Singh of JNU for collaboration with TIEMS-India Chapter.

After discussing about the preparation for the AMCDRR, the main point of the meeting that is TIEMS-India **NIDM** and Chapter co-hosting the Workshop Disaster Management Education: Challenges & Opportunities was brought up. NIDM agreed to the proposal in principal. However, due to NIDM's pre-occupation with AMCDRR, it was unable to hold in 2016. Further, NIDM has to seek approval of the Ministry of Home Affairs, since the proposed Workshop is not in the approved program for financial year 2016-17. TIEMS-India Chapter suggested to have the Workshop on Friday February 10, 2017. That time the climate in Delhi will be good and being the second Friday of the month, it will help people in traveling whose organizations, like Banks and some government offices have holiday on second Saturday of the month.

TIEMS - Iraq Chapter, Summary of Activities During 2015

Preface

The year 2015 is the year of disasters because of the severity of the terrorist attacks, which affected large areas of Iraq, resulting in the loss of three provinces (Anbar, Salahuddin and Mosul), accompanied by military operations in areas which have resulted in the displacement of thousands of citizens, residents of these areas to the central and northern Iraq. This displacement require the need for more effort and money, services, and resources to house displaced people and providing services to them. That was a real test to assess the efficiency and effectiveness of our emergency medical services system and challenge.







Field visits

A team from TIEMS - Iraq chapter and the Iraqi Society of Emergency Medicine; visited the camps of displaced people and in collaboration with the Ministry of Health and some international organizations to assess health and environmental situation giving medical and consultation advices to provide the required medical care to save lives and promote health among people living in those camps.

We have many camps for displaced people who flee from violence and conflict, Kurdistan region, Baghdad, Babylon, Karbala and other scattered here and there within the cities.







Capacity building is our target

We are always keen dedicate efforts to build capacity of emergency care providers and first responders in order to improve their knowledge, skills and understanding the priorities of lifesaving procedures anywhere anytime.

In collaboration with International NGOs, we conducted training courses on first aid and improving the capabilities of first responders of some NGOs that working in the field, the training courses included theoretical and practical hand -on skill stations focusing on how to save lives.







Some of the civilian societies in Iraq requested training courses for their members and responded to their requests by developing training program depends on their members cultural and academic backgrounds. Most of those meet our goal in assistance of community and giving help to people in need especially during crisis and mass gathering events focusing on displaced people who flee from violence and armed conflicts in Iraq.

Future promising EM leaders!

Many of medical colleges contacted us to develop training program for medical students to improve their abilities to deal with emergency situations, respond and manage critical threats to save lives.

We organized two training courses to Medical college students of Diwaniyah (350km south of Iraq) included theory and practice on skills of resuscitation and trauma care.







The training courses involved skill station on Advanced Trauma Life Support (ATLS), Advanced Cardiac Life Support (ACLS), Advanced disaster life support (ADLS), communication skills and Administrational skills.

The training courses in Diwaniya encourage the dean of medical college of Mustansriya to get involved by conducting training course for medical students and make partnership with us to develop continuing training program of studying year 2016-2017.







The nursing institute of Baghdad was also involved in our training program, agreement was made to develop training courses on emergency care nursing and develop a training curricula for studying year 2016-2017.

Primary Emergency Medical Care project

A draft of Primary Emergency Medical Care project was sent to ministry of health and approved and endorsed by minister of health to adopt long term program of capacity building of those working in primary healthcare centers to improve their capabilities and skills to deal with mass casualties and emergencies of variant causes. The project aims to minoring the time for response and performing emergency skills of lifesaving and decrease the number of patients and injuries received in Hospital Emergency Departments in order to focus more on real emergencies and those with life threats.

The implementation of this project is supposed to be considered during 2017 in three stages beginning in Baghdad, the capital, and after that to cover all centers in Iraq.

Partnership with ISEM

The Iraqi Society for Emergency Medicine (ISEM) was established in August 2013 and most of its members and board are belonged to TIEMS-IRAQ chapter that make it important and very possible to make active and fruitful partnership to lead emergency medical services in Iraq.

And because of both societies share same aims, targets, vision and mission to improve emergency management and dedicated to improve the preparedness and response against disaster, that's why they are now good partners.

Mass gathering events

Iraq has many mass gathering events every year and the most important of them are those of religious events particularly two of them are more famous (Arbainya of Imam Hussein in Kerbala and Annual memorandum of Imam Kadhim in Baghdad).





Why?

More than 12 million of Muslims celebrate every year by walking on feet to Kerbala (80 km south of Baghdad) where holy shrine of Imam Hussein (grandson of prophet Mohammed) who led a revolution against injustice and killed with his family and followers in the year 680.

And to visit holy shrine of Imam Kadhim(grandson of Imam Hussein) was in prison and killed by the government because of his revolution against injustice in the year 1270.

These events bring more challenges to the local governments and federal government where all resources must prepared to ensure safe and healthy events consuming a lot of emergency and security resources.

We always participate within team of emergency responders during those events by active participation in providing emergency care and advice with hundreds of medical teams.





Unfortunately, every year there are many terrorist attacks with mass capsulitis along the way of pilgrims walking, worsen the situation and increase the challenge.





Disaster Management and International Health Regulations

Participation in workshop with Ministry of health and Kurdistan regional government on disaster management and implementation of the international health regulations, the workshop was held in Erbil 2015 .the workshop program included topics concerning preparedness and response to disasters of different causes.





Another workshop on same topic was held in Basra (south of Iraq), in collaboration with ministry of health and Basra health directorate in 2015.





Chemical Hazards

Another challenges appeared! Fires in sulfur plant during military operations by terrorists led to the contamination of the environment and subjected civilians to damage caused by the inhalation of gases rising from the fire with a lack of vision due to gas clouds cover the sun.



Upcoming TIEMS Event in Iraq

In collaboration between TIEMS and The Iraqi Society for Emergency Medicine organizing the international conference on Emergency& Disaster Medicine 29th -31st March 2017 in Erbil-Kurdistan region of Iraq.

www.isemiraq2017.com

The conference includes sessions and training workshop.



REPORTS FROM EU PROJECTS

ASSET Report on Ethics in Influenza Pandemic Planning

Eva Benelli & Alessandra Craus, Zadig S.r.l (www.zadig.it)

Influenza pandemics are unpredictable but recurring events that can have severe consequences on human health and socio-economic life to global level. For this reason, the World Health Organization (WHO) has recommended all countries to prepare a pandemic influenza plan and to keep them constantly updated, following its own guidelines [1]. The WHO guidance – revised in 2009 to help policymakers to balance individual and community interests when dealing with national influenza preparedness plans – stresses the importance of ethical principles such as equity, utility/efficiency, liberty, reciprocity and solidarity. Any measure that limits the individual rights and civil liberties (such as isolation and quarantine) must be necessary, reasonable, proportional, equitable, not discriminatory, and not in violation of the national and international laws. For such purposes, WHO has developed a framework of detailed ethical considerations, in order to ensure that overall concerns (such as protecting human rights and the special needs of vulnerable and minority groups) are addressed in pandemic influenza planning and response [2].

In 2008, WHO published another document aimed at providing a more comprehensive analysis of the ethical and policy issues [3], and emphasizing that every public health interventions must be implemented within the context of internationally recognized human rights, according to the Siracusa Principles [4].

WHO has highlighted that guidelines included in these documents should be used from all countries to develop or update national influenza preparedness and response plans, in conjunction with the WHO checklist for influenza preparedness planning published by WHO in 2005 [5].

Experts from the ASSET project conducted a study on this issue, performing a semantic analysis of national pandemic plans developed by ten European Union/European Economic Area (EU/EEA) countries (Austria, Croatia, Czech Republic, France, Hungary, Iceland, Ireland, Italy, Spain, United Kingdom) and one by Switzerland, member of European Free Trade Association (EFTA), including EU and WHO documents [6]. All documents were accessed through the ECDC official website, whenever a translation in English was available [7].

The semantic analysis was based on two keyword lists: in a first, generic list, keywords represent areas of possible ethical interest; in a second, more specific list, keywords are more precisely related to ethical issues actually addressed in each one of the national plans. Aim of the research was to assess and compare the occurrence rates of each keyword within both lists, in order to evaluate the relevance of ethical issues and the application of ethical principles in the development of national preparedness and response plans.

The results of the semantic analysis are shown through data visualizations that allow to describe a complex theme and to share it easily on the web graphics ASSET analysis shows that ethical issues have not been addressed in most national influenza pandemic plans. They are mentioned in some, like in the Italian and Spanish, while ethical concerns have been discussed more extensively in the French, English, Swiss and Czech pandemic plans. However, only UK, France and Switzerland dedicated a specific section – also included in the index – to ethical questions as regards the management of an influenza pandemic.

In all national plans examined there are issues which are considered ethical. For instance, in the list of keywords generically connected to ethics, the words isolation and quarantine are mentioned in all documents examined, but mostly as measures aimed at limiting the spread of the disease. However, only some of the plans consider the ethical implications of these measures which limit personal freedom, such as the necessity of a transparent communication and the respect of personal needs and human rights.

Similarly, the word borders would also require ethical consideration, especially when a document states that an individual coming from a country at risk should be subjected to screening, facing, for example, the risk of stigma.

Although the particular human rights may be limited in exceptional circumstances, the focus on the dignity of the human being must always be a priority [6].

The semantic analysis of a number of national influenza pandemic management plans in Europe showed little concern for ethical aspects and a lack of true discussion of ethical issues in most with the exception of the UK, French, Swiss and Czech plans [6].

The relative abundance of national guidelines, international policy documents, technical reports and scientific papers that discuss fundamental rights issues and different types of ethical considerations in pandemic preparedness and response reveals the importance and the need to place those issues in the right context and the right proportions. Beyond WHO guidelines and documents, the CDC has also developed ethical guidelines in 2007, as a foundation for decision making in preparing for and responding to pandemic influenza. In these, the Ethics Subcommittee in a first section addresses general ethical considerations and in a second section deals with particular ethical issues in pandemic influenza planning such as social distancing and restrictions on personal freedom procedures [8].

The Forum on Microbial Threats of the US Institute of Medicine (IOM) in 2007 has prepared a workshop summary on Ethical and Legal Considerations in Mitigating Pandemic Disease, highlighting that many of the proposed disease mitigation strategies may have unintended – and often undesirable – consequences, such as adverse economic effects or the restriction of civil rights and civil liberties. Through this meeting, participants explored lessons learned from past pandemics, identified barriers to equitable and effective responses to future pandemics, and examined opportunities to overcome these obstacles through research, policy, legislation, communication, and community engagement [9].

On April 2015 in the framework of the EU co-funded project ASSET, experts published an Ethics, law and fundamental rights report, for contributing to the accomplishment of a major objective of the ASSET project, which is the establishment of baseline knowledge on Science-in-Society related issues about pandemics. This report identified and drew attention to the various ethical, legal and fundamental rights implications in situations of public health emergencies, such as epidemics or pandemics. Ethical considerations should not be seen as part of a problem, but rather as part of a solution with shared values for both individuals and key stakeholder groups within society. Policy and decision makers should take into account ethical considerations to inform and colour all aspects of pandemic planning for preparedness and response. More importantly, national governments and local authorities should strive to cultivate a "culture of ethics" across the entire spectrum of societal actors and stakeholders who are likely to be involved – and make or act upon decisions – at different phases of a pandemic [10].

But despite awareness of the relevance of ethical issues, they are still underestimated in national influenza pandemic plans. In fact, our study shows that some of them, like the Italian and Spanish

plans, just mentioned them while other MS plans discussed them in more details. Only 4 national plans (United Kingdom, France, Switzerland and Czech Republic) among those available in English on the ECDC website, have a dedicated section to this topic, including ethical issues among the main principles of a pandemic management plan. This is even more relevant since the analysis revealed multiple areas of possible ethical interest within the different plans, as data visualisations have clearly demonstrated.

This analysis has some limitations, such as the inability to examine all EU/EEA MS national pandemic plans as they were not all available in English and the fact that not all pandemic plans examined are updated in accordance with WHO guidelines revised in 2009. Also, this semantic analysis has used some keywords that are not always matching with the context in which they may occur in the documents examined.

Despite these limitations, however, this work may represent a useful tool to guide future development of influenza pandemic plans. Exceptional circumstances such as public health emergencies in case of epidemics and pandemics must not provide a reason for planners and policy makers to ignore fundamental human rights and ethical issues that can arise at different phases of a pandemic. It aims at encouraging discussion on the necessity to update all national pandemic plans in order to properly address ethical and other SiS issues, such as gender and participatory governance, which have also proved to be of great relevance in case of epidemics and pandemics [6].

References

- 1. World Health Organisation. Pandemic influenza preparedness and response: a WHO guidance document; 2009.
- 2. World Health Organisation. Ethical considerations in developing a public health response to pandemic influenza; 2007.
- 3. World Health Organisation. Addressing ethical issues in pandemic influenza planning Discussion papers; 2008.
- 4. Siracusa Principles [Internet]: Human Rights Library (University of Minnesota). [updated 2015 October 10]. Available from: http://hrlibrary.umn.edu/instree/siracusaprinciples.html
- 5. World Health Organisation. WHO checklist for influenza pandemic preparedness planning; 2005.
- 6. ASSET project. Ethical issues in national pandemic influenza plans; 2016. Available from: http://www.asset-scienceinsociety.eu/reports/page2.html
- 7. European Centre for Disease Prevention and Control. Influenza pandemic preparedness plans. [updated 2016 August 30]. Available from: http://ecdc.europa.eu/en/healthtopics/pandemic_preparedness_plans.aspx
- 8. US Centers for Disease Control and Prevention. Ethical Guidelines in Pandemic Influenza. Recommendations of the Ethics Subcommittee of the Advisory Committee to the Director; 2007. Available from: http://www.cdc.gov/od/science/integrity/phethics/panFlu Ethic Guidelines.pdf
- 9. Stanley M. Lemon, Margaret A. Hamburg, P. Frederick Sparling, Eileen R. Choffnes, and Alison Mack, Rapporteurs. Ethical and Legal Considerations in Mitigating Pandemic

Disease. Workshop Summary of the Forum on Microbial Threats, Institute of Medicine, the National Academy Press, 2007. Available from: http://www.asset-scienceinsociety.eu/resources/scientific-literature/ethical-and-legal-considerations-mitigating-pandemic-disease

10. ASSET project. Ethics, law and fundamental rights; 2016. Available from: http://www.asset-scienceinsociety.eu/sites/default/files/d2.4_ethics_law_and_fundamental_rights_report.pdf

HERACLES EU Project News

HERACLES



European Union Framework Programme for Research and Innovation HORIZON 2020 GA no 700395

Funding 6.564.313.75 Euro Starting date 1st May 2016

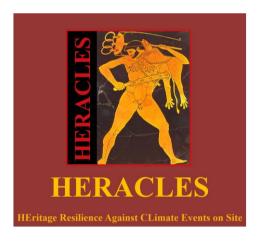
CASE STUDIES

CRETE, GREECE:

- 1. Minoan Knossos Palace
- 2. Venetian coastal fortress of Koules

GUBBIO, ITALY

3. Medieval Wall and High Town





Quick overview of the HERACLESs project

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

HERACLES will develop a system exploiting an ICT platform to collect and integrate multisource information to effectively provide complete and updated situational awareness and support for improving CH resilience, including new solutions for maintenance and conservation and to define the materials able to be integrated in the platform for proper maintenance, remediation and restoration actions.

Heracles will elaborate climate forecast models to anticipate problems and to back up the required solutions, exploiting operational protocols for overall CH risk cycle management which include proper remote geo sensing for mapping and preventing geo-hazards. Moreover Heracles will back up all the progress and exploit results to other scenarios through an established advisory board that includes relevant personalities.

The strength of HERACLES solutions is their flexibility in evaluating a large quantity of different information that can be changed and tailored to specific CH assets needs, guaranteeing a general applicability.

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

HERACLES envisages effective technological transfer of outcomes to large companies, SMEs and end users.

HERACLES expects wide audience awareness through suitable dissemination, communication, education and training activities to share vision and progresses obtained to different communities.

Horizon 2020 Call: H2020-DRS-2015

Topic: DRS-11-2015

Mitigating the impacts of climate change and natural hazards on cultural heritage sites, structures and artefacts



Welcome address from Prof. Filippo M. Stirati, Major of Gubbio.

Contact

emrs@european-mrs.com pad@mlib.cnr.it www.heracles-project.eu

Scope

Develop eco-innovative solutions to help mitigate the effects of climate change and natural hazards on cultural heritage sites, structures and artefacts taking into account the values they hold for people and respecting their historic and cultural integrity. Effective adaptation strategies, systems and technologies for better risk management vulnerable heritage materials and for mitigating damage to cultural heritage assets. Innovative environmental assessment methodologies, integrated monitoring technologies and systems, improved noninvasive and non-destructive methods of surveying and diagnosis including wide area surveillance, costeffective conservation and restoration techniques, risk management, disaster prevention and quick damage assessment when catastrophes occur.

KICK OFF MEETING, 26TH - 27th OF MAY 2016, GUBBIO, ITALY

52 Delegates from the 16 partners that constitute the HERACLES Consortium and the EU representative met in Gubbio, Italy on the 26th and 27th of May for the Kick off Meeting to discuss the project workplan for the manifold activities of HERACLES.

After the welcome address from the Gubbio Tawn Hall Major (*Filippo Stirati*) and the Umbrian Region Authority (*Anna Ascani*), the end users (Ephorate and Gubbio) presented their requirements from the project and the EU representative (*Christophe Coudun*) explained the H2020 contractual framework.

After an the overall workplan presentation by the coordinator (*Giuseppina Padeletti*), workpackages leaders presented in detail the workflow and workpackages.

At the end of the first day a field trip was organized to evaluate the different monuments that the Town of Gubbio would like to see addressed. The visit incuded the medieval City walls, the Consul's Palace, the Town Hall and the Palace of the Dukes of Montefeltro, where we were able to evaluate the state of limestone, travertine, sandstone, plasters, binders and mortars used in the monuments and subsequent restorations that suffer of increased deterioretion due to climate change effects coupled with pollution. The excelent dinner offered by CVR allowed for a healthy discussion to strengthen and expand the internal network of project participants generating new ideas and concepts.

During the morning of the second day workpackage presentations continued before preparation for the next actions and concluding remarks. Suggestions were made for immediate arrangements concerning increased communication lines between different WPs according to interconnections evidenced during the KoM and a reminder of the first deliverables to be met in the forthcoming months. Dissemination actions already accomplished were also divulged such as actions durig the E-MRS 2016 Spring Meeting.



Outside Gubbio Town Hall

E-MRS 2016 Spring Meeting



Banner and Heracles stand, Lille Grand Palais, 2nd -6th May 2016, France

The E-MRS annual spring meeting is the largest conference on material science and engineering in Europe. The event attracted more than 2700 scientists from all over the globe who presented more than 4000 papers spread over 31 parallel symposia and 3 thematic workshops. Moreover, a scientific exhibition hall with more than 73 booths attracted the presence of a corresponding number of companies presenting their recent technological advances in all fields of materials science and applications. The Heracles project partners that were present for the spring meeting had the opportunity to communicate the project objectives and its goals to this large scientific community. A display banner was produced and presented together with printed information material listing the project scope and target work.

Participation in the "EUROPE in MOTION" workshop

E-MRS 2016 Spring Meeting thematic workshop aiming to show to the International Materials Community that Europe is very present in key and cutting edge topics at scientific and technological levels through a number of initiatives, such as platforms, networks, committees from industry, research institutions and academia.

Symposium FF participation in the E-MRS spring meeting

During the works of Symposium FF on "Sustainable knowledge and preservation of Cultural Heritage for future generations" a HERACLES Project communication took place by the coordinator (G. Padeletti) showing the activities

related to HERACLES expertise/partners. The project coordinator was one of the Symposium FF organizers on "Sustainable knowledge and preservation of Cultural Heritage for future generations". Heracles Stand at E-MRS 2016 Spring Meeting

Presentation of the Heracles consortium

The Consortium is constituted by 16 entities from 7 countries.



The Consiglio Nazionale delle Ricerche (CNR), Italy, has a duty to promote research activities for the scientific, technological, economic and social development of Italy. Institutes involved are: the Institute of Nanostructured Materials, ISMN (chemistry, materials science and nano-technologies applied to CH), the Institute for Electromagnetic Sensing of the Environment, IREA (remote sensing, diagnostics and monitoring environmental risks) and the Institute of Research on Population and Social Policies, IRPPS, (demography & migration, welfare, social policies, higher education and dissemination of knowledge and information technology). https://www.cnr.it



e-GEOS, Italy, an ASI/Telespazio, is a leading international player in the geospatial business. e-GEOS offers a complete range of products and services in the Earth Observation and in the geo-spatial application domains, based on both optical and radar satellites as well as on aerial surveys. As the European hub for VHR (Very High Resolution) data, e-GEOS grants unique access to the COSMO-SkyMed and distributes also GeoEye-1, IKONOS, Radarsat, QuickBird and WorldView and IRS satellites. http://www.e-geos.it/



Leonardo, Italy, is a global high-tech company and a key player in the Aerospace, Defence and Security sectors. Experts in international information management, sensors and systems integration. In leveraging collective strengths, and capitalizing on the synergies across major business areas, Leonardo exploits world-class systems, ICT and smart services to deliver robust, high-integrity mission-critical solutions across different sectors and domains. http://www.leonardocompany.com

THALES

Thales, France, is a world leader for critical information systems, with activities in aerospace (with all major aircraft manufacturers as customers), defence, and security (including ground transportation solutions). It provides its customers with all the key functions in the critical information loop, from detection and processing to transmission and distribution. Thales develops its strategic capabilities in component, software and system engineering and architectures through its R&T organisation. https://www.thalesgroup.com



Fraunhofer, Germany, is a leading organisation of institutes of applied research in Germany, undertaking contract research on behalf of industry, the service sector and the government. Fraunhofer IOSB core expertise comprises information and knowledge management, software architectures and object-oriented systems, signal and image processing, optronics and image exploitation, system technologies, modelling and optimisation. http://www.iosb.fraunhofer.de



ARIA Technologies SA, France, is a consulting and software development company, fully dedicated to the study of the atmospheric environment. ARIA is a leading supplier of computerized modelling systems for the purpose of managing air quality resources and offers a wide range of tools at all spatial scales, from building scale to continental scale. The technical solutions offered by ARIA are in daily operation in several countries worldwide, for studies and for the management of air quality resources. http://www.aria.fr/



SISTEMA GmbH, Austria, offers products and services based on Remote Sensing analysis techniques for environmental monitoring and soil management. R&D activities in direct contact with Universities, Research Centers, Customers and End-users mainly focus on meteo-climatic data processing, climate data services, solar radiation mapping, multi-spectral and multi-temporal analysis, geo-spatial data infrastructures implementation for time series access and visualization and standardization of processes. http://www.sistema.at



CVR, Italy, is a SME for the design, development and production of glues, plasters, plasterboards, mortars, gypsum and cement based materials for innovative and sustainable constructions. Smart products for the construction, the renovation and the historical preservation of buildings represent a key business of CVR. Through cooperation with academic institutions, CVR became market leader for hi-tech production systems and sustainable, smart and energy efficient materials for building and urban improvement. http://www.cvr.it/



Uninova, Portugal, is an institute devoted to the development and application of new technologies. CEMOP has expertise is thin-film technologies and development of advanced materials. CENIMAT is devoted to R&D+ Innovation in advanced materials science & engineering, nanomaterials and nanotechnologies, including semiconductors, biotechnology, polymers, thin film coatings, dielectrics, metals, ceramics and composite materials, covering all the scientific & technological aspects of processing and characterization. http://www.uninova.pt/



TIEMS, Belgium, is a Global Forum for Education, Training, Certification and Policy in Emergency and Disaster Management, dedicated to developing and bringing the benefits of modern emergency management tools, techniques and good industry practices to society for a safer world. This is accomplished through the exchange of information, methodology innovations and new technologies, to improve society's ability to avoid, mitigate, respond to, and recover from natural and man-made disasters. http://tiems.info/



European Materials Research Society (E-MRS), France, has as mission to promote advocacy and outreach of advanced materials science and technology towards industry and policy makers, to provide reports on education and research prospective on advanced materials to assist or help national, European authorities and industries, encouraging discussions among researchers and key players of science and technology, to establish strong links with other scientific societies worldwide. http://www.european-mrs.com/



The Foundation for Research and Technology Hellas (FORTH), Greece, is one of the largest research centres of Greece. The Institute of Electronic Structure and Laser (IESL) is the main laser research centre in Greece, including atto-science, micro/nano-electronics, polymer science, materials science and astrophysics. IESL pioneered in the use of advanced laser technology in diagnostics and conservation, laser cleaning and analysis of works of art and monuments. The Institute of Applied and Computational Mathematics (IACM) specializes in research on numerical simulation and monitoring of environmental, engineering and physiological processes. http://forth.gr/



The Department of Chemistry at the University of Crete, Greece, was founded as a research-driven entity with a vibrant and strong research environment that has succeeded in attracting the highest quality researchers and is having ever-increasing success at bringing in a diverse range of funding. the department has devoted much effort to establishing collaborative relationships with other institutions both at the national and international level, maximizing its international profile, exchanging knowledge, disseminating its findings, and building a growing network of productive research relationships. http://eilotas.chemistry.uoc.gr/uocchem/



The Ephorate of Antiquities of Heraklion (EphAH), Greece, is responsible for the Antiquities from the Prehistoric to the Ottoman Period in the District of Heraklion in Crete. The responsibilities of EphAH span from Archaeological research and studies to architectural preservation and surface conservation interventions on the monuments that belong to its supervision. EphAH is responsible for the two unique monuments of different archaeological eras to be studied in HERACLES: a) The Palace of Knossos (located to the South-East of the city) and b) The Venetian Sea-Fortress of "Koules" (Rocca a Mare) in Heraklion port (located to the North of the city). http://www.culture.gr



Gubbio, Italy, is the capital of a municipality, among the largest in Italy (the seventh "commune" in Italy). The town is located in the middle of a wide territory located approximately 200 km North from Rome and 200 km South East from Florence. The historic city centre has many medieval buildings and major monuments: an urban space miraculously intact in its plant with churches, convents, palaces, public and private buildings, ancient walls, squares, streets, fountains, shop-houses, orchards and gardens. Gubbio is responsible for one of analysed the **HERACLES** the sites to be in project. http://www.comune.gubbio.pg.it/



The University of Perugia and the researchers affiliated to the Department of Civil and Environmental Engineering, and to the CIRIAF Interuniversity Research Center on Pollution and Environment "M. Felli" of the Department of Engineering have renowned expertise in carrying out continuous structural health monitoring and rapid post-earthquake and post-disaster assessment of historic constructions using techniques such as vibration measurements, automated operational modal and statistical process control analysis. http://www.unipg.it



Sbandieratori Gubbio – Traditional flag throwers of Gubbio kindly arranged a show for HERACLES at the KoM

Improving and Harmonizing Healthcare Processes Across Europe

PULSE Platform for European Medical Support during major emergencies

Reinhard Hutter, Hans Kühl

The Challenge

Challenged with deadly threats such as pandemic diseases, large scale accidents or natural disasters and major terrorist attacks, it is crucial for the European Health System (EHS) to remain in an excellent state of preparedness supported by first-class planning and decision support tools.



Notwithstanding the application of international agreements (WHO, EU) the current state of affairs is characterised by the response of a multitude of organisations, services and stakeholders acting on national, regional or local level, regulated by nation specific rules of law using legacy and proprietary systems and procedures.



Within this general framework, the European Commission tasked a European consortium of analytical, industrial, healthcare and research organizations to analyze and demonstrate capabilities for improvement and harmonization, by creating the PULSE project, on "Development of decision support tools for improving preparedness and response of Health Services involved in emergency situations"

The PULSE Project (http://www.pulse-fp7.eu)

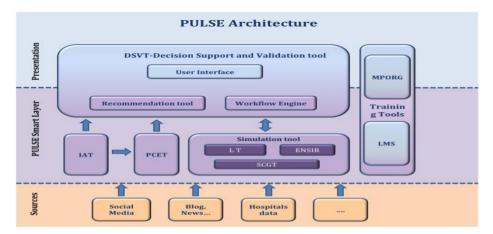
In order to mitigate national inadequacies and to improve communication, coordination and harmonization across Europe, an IT platform including a set of innovative functional tools has been designed integrated, demonstrated and validated to enhance planning and decision support in the areas of:

- Intelligence Information Gathering,
- Treat and Risk Analysis, Warning & Alerting,
- Operational picture Generation & Situational Awareness,
- Tasks and Resources Planning,
- Training and Exercising,
- Knowledge Management.

Via these supporting functions, the main objectives of the PULSE system should be achieved, which are timely access of decision makers to key data, better inclusion of social media, advanced training techniques, reduction of bureaucratic effort, and ultimately, optimum triage, and assignment of victims to and treatment in hospitals.

An Innovative Platform and Tools

Architecture and main components of the system are depicted below.



DSVT Decision Support and Validation Tool
IAT Intelligence and Analysis Tool
PCET Post Crisis Evaluation Tool
LT Logistics Tool
SCGT Surge Capacity Generation Tool
ENSIR Event Evolution for Bio-events
TT Training Tools
MPORG Multi Player Online Role Game (used as TT and for Demo support)
LMS Learning Management System
APP Smartphone APP

The overall platform offers flexible and adaptive operational picture generation, controls interoperation between the individual tools, and sets a standard for interoperability with other systems via the application of common web-based interfaces.

Testing, Demonstration, Evaluation

The whole system was demonstrated and evaluated through being implemented and demonstrated in two realistic scenarios: An interactive tabletop exercise in Italy with a scenario of a serious viral disease evolving across Europe, and a live exercise in Ireland with mass casualties caused by a crush in a Stadium. These scenarios were deliberately chosen in order to test the system in essentially different environments in terms of threats, timeframe and dynamics, type and numbers of affected people, services and resources required. This way, the PULSE system proved its effectiveness, performance and benefits to both, the health services and society. It proved its flexibility and usability across a wide spectrum of public health activities and demonstrated the capability to serve as a standard across Europe. It was also evaluated with respect to its societal and ethical acceptance, compliance to legal and political settings, and —to some extent- its economic value.

Summary and outlook

Measured over a total of 82 diverse evaluation criteria, the PULSE platform, having demonstrated its benefits and overall applicability, was rated very positive by the participants. Despite this obvious requirement for such a system and the improvement potential of the PULSE system for European health services operations, due to health systems being so heterogeneous across Europe, it may be a long and tedious way until such a system will be introduced at a significant scale, let alone becoming a standard in Europe. From a scientific and technical point of view, the results should be encouraging.

4R for Resilience: A 3 years CIP Project for Improving Resilience in Europe

"The management and operation of critical infrastructure systems will continue to depend on cyber information systems and electronic data. Reliance on the power grid and telecommunications will also continue to increase, as will the number of attack vectors and the attack surface due to the complexity of these systems and higher levels of connectivity due to smart networks. The security of these systems and data is vital to public confidence and safety. Even though cyber sabotages have been infrequent [...] In the future we will observe an increase in attacks on data brokers, on physical infrastructure, and on telecommunication networks, such as global denial of service attacks on all connected services. New forms of CI such as social media platforms will become a prime target for cybercriminals". EuroPol Report

Here is the future of cyber-threat environment described by the European agency in charge of tracking the offenders. It is not optimistic just realistic. To face these threats, the European Essential Service for Members States citizens shall take up several huge challenges such as reliable detection networks, risk analysis, local and global mitigation strategy establishment and awareness improvement in a more and more interconnected digital world. In that aim, the European Commission, through the new Research Program Framework Horizon 2020, wanted to fund innovative projects to increase the resiliency of Europe, especially for Critical Infrastructure. Based on two previous projects MICIE and CockpitCI, ATENA project aims to consolidate the know-how of previous projects, to improve the innovative ideas especially by taking into consideration the Gas and Water distribution security issues and to develop a tools suite in line with market expectancies.



A tools suite for Resilience based on 4R Concept

Relevance: extensive comprehension of CIs, specific models to predict IACS and CI efficiency, reaction strategy design based on the concept of situation assessment-reconfiguration, new technologies (Industrial Automation Control System security devices, risk predictor and Decision Support Systems (DSS), Fog-Computing).

Risk: dedicated risk assessment methodology and real-time process focused on Critical Infrastructure.

Reliability: Smart Validation Concept based on integration of user requirements, uses case modelling, advanced emulation of CIs, availability of historical data, remote access to the real equipment and resources.

Responsiveness: Implementation of 2 security control loops: a static, off-line, long-term one (to assess and protect) and an on-line, short term one (to daily operate and quickly react).

The first six months of the project will be dedicated to the establishment of the State of Art on Security of Essential Services, threats panorama etc., to the collection of stakeholders' expectancies in terms of security and to the definition of the functional requirement for the future ATENA security system in order to draw up a reliable roadmap for the project in terms of development, test and marketing strategies.

Rendezvous is taken in three years to know if the consortium has met the challenges but before three years to communicate innovations results and to provide awareness and training activities regarding cybersecurity topics.

Regarding the Consortium: The consortium has been established to include both end-user, industrial partners, research centres and private companies, all experts in network security, IACS security, modelling approach and real-time software development. Therefore, the ATENA consortium get together thirteen, harmonious European partners coming from 8 different countries, in Europe and Israel. Each of them is expert in one or several security fields. Most of them were already involved in the previous European FP7 projects CockpitCI and MICIE. The consortium includes industrial partners (Leonardo and Sapienza SL), end-users (IEC, CREOS and SWDE), SMEs (itrust and Multitel), Research Centres (ENEA, IBS and CRAT) and Universities (University du Luxembourg, University of Roma Tre and University of Coïmbra).

More information on www.atena-h2020.eu



International Conferences

China Southeast Asia & South Asia Fire Safety and Emergency Rescue Technology Expo

Kunming, China, 9 – 11 November 2016

Sandro Bologna, TIEMS IPC Chair

China (Kunming) Southeast Asia & South Asia Fire Safety and Emergency Rescue Technology Expo, organized by Yunnan Fire Protection Association, China Council for the Promotion of International Trade Yunnan Sub-Council, was held at Kunming on November 9 – 11, 2016.

"Innovation, Cooperation, Exchange, Harmony" was the theme for this year, aiming to candidate the Yunnan Province for the strategic task "One Belt One Road". The Bangladesh-China-India-Myanmar Economic Corridor.

The Expo was organized over 30.000 m2, with about 500 exhibitors and 50.000 visitors. There was a very formal opening ceremony of the Expo, see picture.

In that framework was organized the 2nd "Global Intelligence Safety" International Safety Forum, lasting two days, with presentations from expert of different countries. TIEMS was represented with the presentation "Prepare TODAY for Tomorrow", see picture. Several presentations where specific to Fire prevention and Firefighting. The common topic of increasing preparedness and awareness was touched by several presentations, together with the introduction of the new technologies. How a Smart City could help in the Firefighting through the correct use of all the information that can be made available to the Fire Fighters. TIEMS presentation was appreciated, perfectly in line with the needs of increasing preparedness and awareness through education and training.

The Forum was organized into a dedicated space within the Expo but not separated from the Expo, with a simultaneous translation between English and Chinese. That organization has favored the exchange between people visiting the expo and the speakers at the Forum, see picture, but it was a dispersive environment and it did not help the discussion at scientific level. In fact, there was no scientific discussion at the end of any presentation, as usually expected in a conference. Due to unexpected weather conditions it also was rather cold.

Of course, each working day was followed by a social dinner with very spicy Chinese foods, see picture.

Contacts have been established with the responsibles of different South Asia Associations in the sectors of Emergency Management, Fire Protection, Safety and Disaster Management.



Opening Ceremony



TIEMS Presentation



Picture among some of the speakers in front to one of the many stands



Social dinner

Unveiling Ceremony of Xianheng International UAV Planes 75' Shop

Successfully Launched in Hangzhou, China

On Oct. 18th, 2016, the world's first UAV Planes 7S' shop unveiled the nameplate in Hangzhou, bringing the whole new driving experience of drones to users from fire service, rescue teams, surveying and mapping agencies, armed forces, anti-flood agencies, local municipal governments. The drones' store, sponsored by the IEREC (International Emergency Rescue Equipment Center), Xianheng International Corporation and guided by experts from TIEMS and BEIHANG University, established its own research center and team. President and vice president of the International Emergency Management Society Mr. K. Harald Drager and Mr. Guosheng were invited to join the activity. Medias from local government and emergency rescue equipment development industry broadcasted the event, which drew great attention nationwide.



Unveiling Ceremony at the UAV Planes' 7S Store



Guests and Experts at the UAV Planes' 7S Store

During the ceremony, President Mr. K. Harald Drager awarded the nameplate of "Research Institute of Family Emergency Self-Rescue Technology at Xianheng International Emergency Rescue Equipment Center" to the agency.



Speech from K. Harald .Drager



Nameplate Entitling from TIEMS President

Vice governor of Hangzhou Municipal Government joined the ceremony and awarded the center as "UAV Planes' Technology Practice Base".



Nameplate Entitling from Municipal Government

China Jiliang University and Xianheng International Corporation Signed the joint corporation at the ceremony, and company leaders from both parties joined the ceremony.



After the opening ceremony, President of Xianheng Corporation had a short discussion with TIEMS President about promoting cooperation between two parties.



UAV' Air Show



President Mr. K. Harald .Drager and President Wang Laixing



Ribbon Unveiling Ceremony



Vice President Qu guosheng with Mr. WANG Laixing

The store demonstrates nearly 20 high-ranking UAV planes of various levels and related facilities, providing a full and three-dimensional display. It offers both real and simulation experience, which gives people a direct contact with the products.

It provides professional integrated solutions to meet the needs of customers in different industries: direct marketing of solutions for the exclusive market (consumer) and overall sales for the industry market, sales of UAV related facilities such as UAV command vehicle and intelligent warehouses for power, fire, emergency, rail, public security and other industries.

Aviation lovers and those who want to enter the UAV flight industry can all get professional trainings in the 7S store and obtain a legal flight license. It provides one-stop services from UAV sales to trainings, and truly helps to popularize the aviation industry. Now everyone can go to the store and have fun, and it guides customers' demands.



UAV Planes' Air Show



UAV Planes' Experience



UAV Planes' Forum

Announcement from the World Border Security Congress



21st-23rd Mar 2017 Casablanca, Morocco



Dear Colleague,

We are delighted to announce the World Border Security Congress will be held in Casablanca, Morocco, 21st-23rd March 2017.

The 2017 World Border Security Congress, supported by the *Organization for Security & Cooperation in Europe (OSCE)*, *International Security Industry Organisation*, *National Security Resilience Consortium and International Association of CIP Professionals*, is the 5th global border event to be organised by Torch Marketing and KNM Media and its first on the African continent.

Morocco is an exciting country to host the 2017 World Border Security Congress as it faces a unique set challenges, yet shares many common challenges with the rest of the world. As conflicts in the Middle East and Africa continue unabated the migration crisis shows no sign of slow-ing. With the effective closure of migration routes through the Balkans the crisis has shifted once again to the coasts of Morocco and other North African countries, becoming the point of departure for thousands of migrant and refugee boats heading for southern Europe.

With its proximity to territory held by Islamic State, terrorism poses a real threat to Morocco the great-er Maghreb region as well as the nearby southern European states. So effective border security and co-operation is key to all international partners in the region and the world.

The World Border Security Congress is a high level 3 day event that will discuss and debate current and future policies, implementation issues and challenges as well as new and developing technologies that contribute towards safe and secure border and migration management.

CALL FOR PAPERS

Abstract Submittal Deadline – 31st July 2016

If you are interested at speaking at this exciting, high level conference, the Call for Papers is now open for submitting your abstract for the World Border Security Congress. We need to continue the discussion, collaboration and intelligence sharing. The World Border Security Congress is the only multi-jurisdictional transnational platform where the border protection, management and security industry policy-makers and practitioners convene annu-ally to discuss the international challenges faced in protecting borders.

Save the Dates - Join us at the World Border Security Congress in Casablanca, Morocco, 21st-23rd March 2017 www.world-border-congress.com

Neil Walker, Director - World Border Security Congress T: +44 (0) 7725 318601 | F: +44 (0) 872 111 3210 | E: neilw@world-border-congress.com

Report on World CBRNe Events









Department of Electronic

WORLD



Event -Report identifying spending within the Detection Devices Market published.

Summary – following the increasing susceptibility nations of nations to the likelihood of global terrorist attacks, the overall CBRNe Detection Devices Market is expected to reach US \$9.8 billion by the year 2022, an increase from the US \$2.2 billion invested in 2015.

Source: h Reported: 12/09/2016

Superbugs

Event – Global effort to rid the world of drug-resistant infections.

Summary – The 193 countries of the United Nations have agreed a landmark declaration to rid the world of drug-resistant infections or "superbugs", this initiative is intended to prevent 700,000 deaths a year during the next six years.

Event - First nine months of Zika virus transmission worldwide.

Summary - The European Centre for Disease Prevention and Control (ECDC) has provided information on the Zika virus dissemination during the first nine month





Reported: 30/09/2016

Event - U.S. bombers fly over South Korea to show force in response to the latest North Korean nuclear test.

Summary -2 U.S. B-1 bombers flew over South Korea in a show of force and solidarity with its ally, following North Korea's nuclear test in the previous week. The U.S. will remain open to dialogue with Pyongyang in talks about ending its pursuit of nuclear weapons.

Source: http://www.re

Reported: 13/09/2016

Event - Japan, U.S., and South Korea enter discussion about the recent North Korean nuclear test.

Summary - Foreign Minister Fumio Kishida, U.S. Secretary of State John Kerry and South Korean Foreign Minister Yun gyung-se have met in the sidelines of the U.N. General Assembly to discuss a coordinated response to the fifth North Korean nuclear test. The Japan, South Korea and the U.S. have defined their relationship as fundamental for regional peace and stability in Asian security.

Source: http://www.japantimes.co.jp/news/2016/09/19/national/japan-u-s-south-korea-condemn-nuke-test-north-korea/#.WAH_WcnPoV

Reported: 19/09/2016



Event - Iran accuses the United States of not complying with their nuclear agreement.

Summary - Iran's President Hassan Rouhani has accused the U.S. for having failed to adhere to obligations under the agreement, which implemented many economic sanctions on Iran in exchange for verifiable pledges of peaceful nuclear work.

Reported: 21/09/2016

Non-proliferation

Event - Six non-nuclear countries urged the U.N. to work toward an agreement to ban nuclear weapons.

Summary - According to a copy of the text sent to the U.N. General Assembly by Austria, Brazil, Ireland, Mexico, Nigeria and South Africa, these six non-nuclear countries asked diplomats to draw up a treaty banning nuclear weapons.

Source: http://www.washingtontimes.com/news/2016/sep/28/non-nuclear-states-advance-push-for-un-treaty-to-b/

Reported: 28/09/2016

AFRICA

Sudan, Darfur



Event – Growing concerns about chemical weapons exploitation on civilians.



Summary – According to an Amnesty International investigation also based on satellite imagery, Sudanese government forces have repeatedly used chemical weapons against civilians, killing and wounding hundreds of people including children in Darfur. At least 30 likely chemical attacks have taken place in the Jebel Marra area in 2016 to date.

Source: https://www.amnesty.org/en/latest/news/2016/09/sudan-credible-evidence-chemical-weapons-darfur-revealed

 $http://www.ansa.it/sito/notizie/mondo/africa/2016/09/29/amnesty-in-darfur-usate-armi-chimiche_41b39868-19fe-49e5-ad38-dbd5e005470d.html (approximately approximately app$

Reported: 29/09/2016

Anthrax

Event - New Pathogen able to cause Anthrax-like disease discovered in Africa.

Summary – A novel strain of the Bacillus cereus, usually less threatening and a more widespread relation of the Bacteria that is responsible for anthrax, has been discovered in Africa where researchers from the Robert Koch Institute in Berlin have identified that it has seemingly evolved a similar lifecycle to Bacillus anthracis.

Source: http://www.iflscience.com/health-and-medicine/new-pathogen-discovered-in-africa-causes-anthraxlike-disease/ Reported: 08/09/2016



Yellow Fever

Event - The World Health Organization reports the Yellow Fever situational update in Africa.

Summary – According to the latest situational report by WHQ, 4 new cases of Yellow Fever have been laboratory diagnosed, 2 of which have been discarded due to recent vaccination history. In addition, a second case of Yellow Fever has been confirmed in Sud Ubangui province of the Democratic Republic of the Congo where the pre-emptive vaccination has concluded.

Source: http://www.who.int/emergencies/yellow-fever/situation-reports/16-september-2016/en/ Niger, Tahoua Reported: 16/09/2016

Rift Valley Fever

Event - The World Health Organization publishes the latest Rift Valley Fever situational report in Niger.

Summary – 64 human cases including 23 deaths have been reported in <u>Tchintabaraden</u> Health District in <u>Tahoua</u> region between August 2 and September 22, 2016. There is no national or local capacity to test the infected specimens and, FAO, OIE, and WHO are coordinating and reporting on animal and human health

Source: http://www.who.int/csr/don/29-september-2016-rift-valley-fever-niger/en/

Reported: 29/09/2016

Surveillance

Event – The World Health Organization carries out an initiative for disease surveillance, alert and response in Northeastern Nigeria.

Summary – The new initiative implemented by the WHO, referred to as EWARS, consists of an Early Warning Alert and Response System for disease surveillance, alert and response procedures linked to early detection and containment of disease outbreaks in humanitarian emergency settings in Borno, Yobe, Adamawa and Gombe states.

Source: http://www.afro.who.int/en/nigeria/press-materials/item/9014-who-trains-health-workers-on-early-warning-and-alert-system-in-borno-state.html

Reported: 12/09/2016



Healthcare

Event - Infectious diseases continue to pose a major public health threat in South Sudan.

Summary – According to Dr. Abdulmumini Usman, WHO Representative to South Sudan, the World Health Organization and partners are taking every opportunity to provide people with health care services to protect them from multiple outbreaks including cholera, malaria, measles, suspected hemorrhagic fever, and kala-azar.

Source: http://www.who.int/features/2016/south-sudan-multiple-disease-outbreaks/en/

Reported: 30/09/2016

Reported: 21/09/2016

Uganda

River Blindness

Event – Eradication of river blindness in Uganda nears.

Summary – According to Frank Richards, director of the River Blindness Elimination Program at the Carter Center, Uganda is close to eliminating river blindness from the country, which would represent the largest number of human beings declared free of river blindness under the current guidelines.

Source: http://www.humanosphere.org/global-health/2016/09/uganda-scores-major-victory-against-river-blindness-nears-eradication/ Reported: 02/09/2016

Kenva. Mombasa

Petrol Bomb

Event – Attack on Mombasa's main police station with knife and a petrol bomb.

Summary – Under the pretext of reporting a stolen phone, three women stabbed one officer and set fire to a Mombasa police station, before they were shot dead. Two officers were taken to a local hospital with wounds.

Source: http://www.aljazeera.com/news/2016/09/kenya-female-attackers-killed-police-station-160911151409114.html Reported: 11/09/2016



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VBIED

Event - Military convoy targeted in deadly suicide attack.

Summary — General Mohamed Roble Jimale and several Somali soldiers have been killed after their military convoy was hit by a heavy blast caused by a car loaded with explosives alongside an industrial road. The Al-Shabab group has claimed responsibility for the attack.

Somalia, Mogadishu

Source: http://www.aljazeera.com/news/2016/09/somalia-general-killed-mogadishu-car-bomb-attack-160918115946615.html Reported: 18/09/2016

ASIA

Report

Event – Annual report on Chinese chemical incidents.

Summary – According to a Greenpeace report, China's chemicals industry is the largest in the world, and almost 232 chemical incidents have been registered from January to August, killing 199 people and injuring 400 others.

China

Source: http://www.nytimes.com/2016/09/22/world/asia/chemical-accidents-china-greenpeace.html?_r=0





Weapons

Event – Concerns about an IS chemical rocket attack on American troops.

Summary – According to the U.S. military, Islamic State militants may have fired a chemical rocket at American troops based in Iraq, without injuring any soldiers. The Pentagon has confirmed that an initial test of the remnants of the weapon used, returned a positive test for a mustard agent deployed through an imprecise and crude device.

Source: http://www.bbc.com/news/world-middle-east-37436152

Reported: 22/09/2016

Weapons

Event - Concerns on chlorine attacks likely carried out by Syrian government forces in Aleppo.

Summary – New evidence shows the Syrian Government has used chemical weapons in two recent attacks against civilians, killing 5 people and wounding dozens.

Source: http://www.middleeasteye.net/news/hrw-un-should-sanction-individuals-responsible-syria-chemical-attacks-1867244896

Reported: 28/09/2016

Syria, Aleppo





Event - Taiwan announces a new Bureau for chemical regulation.

Summary - Following several major food contamination scandals that hit Taiwan, a new bureau for the implementation of the Toxic Chemical Substances Control Act (TCSCA) in the country has been issued within the EPA.

Taiwan

Hong Kong



Event - 47 cases of cases of Legionnaires' disease (LD) registered in Hong Kong.

Summary - According to the Hong Kong Centre for Health Protection (CHP) of the Department of Health, a total of 47 LD cases, including 46 community-acquired cases and one institutional death case, have been reported in 2016, to date. There were 66 cases registered in the region during 2015 and 41 cases in 2014.

Reported: 26/09/2016 Source: http://outbreaknewstoday.com/hong-kong-

Southeast Asia



Zika Virus

Event – CDC issues special travel considerations especially related to pregnant women in Southeastern Asia.

Summary – The Centers for Disease Control and Prevention (CDC) issued Zika virus-related special travel considerations for 11 Southeastern Asian countries, including Brunei, Myanmar, Cambodia, Indonesia, Laos, Malaysia, Maldives, Philippines, Thailand, East Timor, and Vietnam. The level of risk for Zika virus infection in these countries is unknown to date.

Source: http://outbreaknewstoday.com/zika-in-asia-cdc-says-pregnant-women-should-postpone-travel-to-11-countries-24351/

Sri Lanka

Malaria

Event - Sri Lanka declared Malaria free.

Summary - The World Health Organization has officially declared Sri Lanka as a malaria free nation. That achievement has been possible thanks to an anti-

Taiwan

Salmonella

Event - Several Salmonella cases reported due to food poisoning.

Summary - Following 140 cases of Salmonella linked to roast duck, Health officials from the Miaoli County Public Health Bureau have fined and temporarily closed a shop after lab results which confirmed the shop's duck meat was contaminated by salmonella bacteria.

Reported: 21/09/2016

The Philippines, Batangas City

Dengue

Event - 68 Dengue fever cases reported in Batangas City.

Summary - According to the Batangas City Health Office (CHO), 68 Dengue fever cases have been reported in the city during August, while more than 100,000 cases, including 422 deaths have been registered in the whole country through mid-August.

Source: http://outbreaknewstoday.com/batangas-city-reports-68-dengue-fever-cases-in-august-51310/

Reported: 25/09/2016

Reported: 12/09/2016

Reported: 29/09/2016

The Philippines, Pangasinan

Event - The Philippines ranks number 10 among countries with human rabies deaths.

Summary - The Philippines province of Pangasinan has reported 14,390 animal bite cases and 14 human rabies deaths during the first six months of 2016. The same province saw 19,037 animal bite cases and 19 human rabies deaths in all of 2015.

Source: http://outbreaknewstoday.com/pangasinan-reports-14-human-rabies-deaths-in-1st-six-months-anti-rabies-act-to-be-strictly-imple

Reported: 25/09/2016

Vietnam, Ho Chi Mihn City

Event = 35% increase in Dengue fever cases reported in the Vietnamese Ho Chi Mihn City.

Summary - More than 11,300 Dengue fever cases have been reported this year in the Ho Chi Mihn City, which represents an increase of 35 % compared to the same period last year, and the trend is expected to continue for the next several weeks due to Vietnam's peak Dengue season.

Reported: 29/09/2016

Vietnam, Kien Giang

Event - H1N1 influenza outbreak at a garment factory in the southern Vietnam.

Summary - According to the Ho Chi Minh City Pasteur Institute, 117 of nearly 1,000 employees tested positive for H1N1 influenza, prompting health officials to ask the factory to take preventive measures against further spread. Reported: 26/09/2016

ak-at-vietnam-factory-51385/ Source: http

Event - North Korea nuclear activities poses a serious threat to the regional balance.

Summary - Following the latest earthquake due to North Korea nuclear tests, the South Korean government has expressed an intention for militarily intervention against its neighboring country in case of further tests. Beijing has expressed its official dissent on the matter for the first time. Further concerns are growing since North Korea may soon acquire ICBM (Intercontinental Ballistic Missiles) supplemented with nuclear warheads

Source: h Reported: 15/09/2016 Japan



Decommissioning

Event - Japan proposes decommissioning of a nuclear facility already offline.

Summary - The Japanese government announced that it would start the decommissioning of the Monju nuclear reactor. Dismantling would cost around one trillion yen (\$ 9.84 billion). Reported: 29/09/2016

Source: http://www.reuters.com/article/us-japan-nuclear-idUSKCN1200C4

Iran

Event – Iran warns the international community that enduring sanctions could threaten the nuclear deal.

Summary - The head of the Iranian Atomic Energy Agency warned that the nuclear deal signed by Iran and the 5 world powers may be at risk due to continuous sanctions

iazeera.com/news/2016/09/iran-warns-enduring-sanctions-threatening-nuclear-deal-160926173350502.html Reported: 26/09/2016 Source: htt

Iran, Bushehr

Event - Cooperation between Russia and Iran to work on nuclear plants.

Summary - Russian and Iranian firms work on two additional reactors at Iran's nuclear power complex on the Gulf coast at Bushehr.

Source: h

North Korea



Event - The North Korean government requests recognition as a legitimate nuclear weapons state.

Summary – With five nuclear tests, North Korea is trying to be recognised as a legitimate nuclear weapons state, the government considers the national nuclear policy important in the defence of its borders and for continued independence.

a-as-nuclear-weapons-state-kcna-says/7834620?section=v Source: http://ww

Reported: 11/09/2016

Reported: 10/09/2016

Proliferation

Event - Chinese company may have supported North Korea's nuclear proliferation.

Summary - The United States have issued economic sanctions against a Chinese company for allegedly supporting the North Korea nuclear weapons programme. According to a report published by the Asan Institute for Policy Studies in Seoul and the C4ADS in Washington, the Dandong Hongxiang Industrial Development and the North Korea could have traded 530 million dollars between 2011 and 2015.

Reported: 26/09/2016

Event - Car bomb explodes in the center of Kabul.

Summary – A car bomb hit the center of Kabul, just hours after a suicide attack killed at least 24 people near the Ministry of Defence, and wounded 91 others including several senior security officials.

Iraq, Bagdad

Afghanistan, Kabul

Source: http://w

Reported: 05/09/2016

Event = 3 people killed and 15 injured following two explosions in Baghdad.

Summary - The first explosion occurred near commercial buildings in the Adhamiva district, killing one person and wounding 7 others, while the second bombing has shook the Mahmoudiya district, killing 2 people and wounding further 8 people.

The Philippines, Davao

Source: http://rudaw.net/english/middleeast/iraq/13092016

Reported:13/09/2016



Event – IED explodes killing 14 people and wounding dozens.

Summary - According to local authorities, a bomb exploded injuring 70 people and killing other 14. The jihadist group Abu Sayyaf, which is active in the south of the country has claimed responsibility for the attack that took place at the Davao market.

Turkey, Van

Source:ht

Reported: 05/09/2016

Event – 48 people injured following a vehicle explosion against police.

Summary – A vehicle exploded in the southeastern province of Vanagainst near a police station, close to the building of the Justice and Development Party, or AK Party. The building directly hit by the attack and a nearby hotel, were seriously damaged. Fire fighters were called to the scene to extinguish fires caused by the explosions.

Source: http://www.upi.com/Top_News/World-News/2016/09/12/48-injured-in-vehicle-explosion-targeting-Turkeys-police-government/887147367719

Reported: 12/09/2016

EUROPE Russia, Norilsk



Event - Investigation ordered following a possible pipeline leak into Daldykan river.

Summary - Russian authorities have ordered an investigation when the <u>Daldykan</u> river turned red. Some suggested iron ore in the ground had changed the river's colour, but others said industrial waste was a more likely reason since the river runs near to the Nadezhda metallurgical factory, which is the world's largest producer of nickel and palladium.

Source: https://www.theguardian.com/world/2016/sep/07/investigation-ordered-russia-daldykan-river-turns-red-norilsk

Reported: 07/09/2016



Incident

Event - Four people hospitalized after an incident at a water treatment plant.

Summary – A suspected chemical leak could be the cause of the hospitalization of four people who were suffering from breathing difficulties after an incident at a water treatment plant in Billingham. Two ambulances and two vehicles from the hazardous area response team were dispatched to the scene, which Cleveland Fire Brigade also attended.

U.K., England, Billingham

Source: https://www.thesun.co.uk/news/1717664/four-people-taken-to-hospital-with-breathing-problems-after-suspected-chemical-leak-at-

Reported: 02/09/2016

Event – A study highlights a great number of blood donors with Hepatitis E.

Summary - Having analysed many samples collected from 2011, a research published on the Europe's Journal on infectious disease epidemiology, prevention and control showed how it could be easy to spread Hepatitis E through blood donations, providing a basis for developing screening strategies.

Source: http://eurosurv

Reported: 01/09/2016



Event - First imported case of Middle East Respiratory Syndrome coronavirus since 2014.

Summary - A 67-year-old tourist from Saudi Arabia has been diagnosed and hospitalized in Salzburg due to MERS-Cov. According to the World Health Organization, the MERS-CoV affected 1800 people, including 640 deaths since 2012. Reported: 12/09/2016

Austria, Saltsburg

Source: http://outbrea

Zika Virus

Event - 978 imported cases of Zika virus registered in France.

Summary - According to Sante Publique France, nearly 1000 imported cases of Zika virus have been reported from January to the first middle of September. Reports include 30 pregnant women, 10 cases of sexual transmission and 5 cases of neurological complications.

France

Romania

West Nile Virus

Event - Increase of West Nile Fever cases.

Summary – The West Nile Virus, which is transmitted by mosquitoes to humans, affected 40 people, including 4 deaths in many areas of Romania during last four months of the year.

Source: http://en.publika.md/romania-registers-40-cases-of-west-nile-virus-infection-in-four-months_2627624.html

Russia

Public Health

Event - Safety measures against anthrax spread.

Summary - 250,000 reindeers will be culled to December this year in Russia with the aim at reducing the risk of anthrax outbreaks.

Source: http://www.dailymail.co.uk/news/article-3798248/Santa-s-slay-Russia-slaughter-250-000-reindeer-Christmas-animals-amid-anthrax-outbreak-fears.html?ITO=1490&ns_mchannel=rss&ns_campaign=1490 Reported: 20/09/2016



Spain, Madrid

Crimean-Congo Hemorrhagic Fever

Event - Two suspected cases of hemorrhagic fever reported in Madrid.

Summary – The local Health Department has commenced investigation into two cases of suspected hemorrhagic fever. Symptoms suffered by two infected women suggested that Crimean-Congo Hemorrhagic Fever, a disease generally transmitted to people from ticks and livestock animals, would have affected them.

Source: http://outbreaknewstoday.com/crimean-congo-hemorrhagic-fever-acquired-locally-reported-in-spain-78426/

http://www.alnerindico.com/es/noticies/sanidad/sanidad-investiga-dos-nosibles-nuovos-casos-fiehre-hemograpica-crimea-congo-madric

Reported: 03/09/2016

Reported: 11/09/2016

Public Health

Event – Urgent vaccination campaign for students at university and college.

Summary – Following the death of a 19-year-old student at the Northumbria University due to meningococcal meningitis W, British Health Officers have been recommending a vaccination campaign in order to avoid further cases.

U.K., England

Source: http://outbreaknewstoday.com/england-freshers-urged-to-get-meningitis-vaccine-northumbria-university-student-dies-43930/ Reported: 30/09/2016



Escherichia coli O157 outbreak

Event - The Escherichia coli O157 outbreak continues.

Summary –20 confirmed cases of Escherichia coli O157, including a child's death have been reported in Scotland. Following an extensive investigation, the unpasteurized blue cheese is considered the most likely reason behind the recent outbreak.

U.K., Scotland

Source: http://outbreaknewstoday.com/scotland-e-coli-outbreak-update-20-cases-one-death-68102/

Belarus

Energy

Event - Belarus will proceed the Ostrovets nuclear plant construction.

Summary -Belarus received pressure from Lithuania, which asked for new stress tests before continuing the Ostroyets nuclear plant building activities. According to the Minister of Natural Resources, Belarus will not give up to nuclear energy improvement and it will proceed with the construction of the plant.



Source: http://www.ilvelino.it/it/article/2016/09/14/bielorussia-min-risorse-naturali-non-fermeremo-costruzione-impianto-nu/343c9ec2-a121-4150-8c46-fc191fdbcfa7/ Reported: 14/09/2016

United Kingdom, England, Sellafield

Safety

Event – The owner of the Sellafield complex, together with the country's nuclear regulator, dismiss safety concerns raised in a BBC documentary.

Summary – Following a BBC documentary that highlighted dangerous conditions and a lack of personnel at the Sellafield nuclear power plant, the head of the plant stated that the plant was completely safe and security represents a priority.

Source: http://www.world-nuclear-news.org/RS-Seliafield-refutes-safety-concerns-raised-in-BBC-documentary-0609165.htmlReported: 06/09/2016

Belarus, Minsk



Hoax Event – Bomb alert on a flight from Minsk to Milan.

Summary – Following a phone-call from Italy, a plane bound for Milan was evacuated while a search for explosive device was undertaken. No device was found and the aircraft left the airport with a delay of some hours.

Source: http://milano.repubblica.it/cronaca/2016/09/01/news/milano_aereo_minsk-147006119/

Reported: 01/09/2016

Terrorism

Event – Three women and a man arrested suspected of terrorism.

Summary – According to local authorities, 4 radical Islamists have been arrested whilst planning an attack at the Gare de Lyon train station. The operation started when one of the suspected terrorists' car was found full of gas cylinders.

France, Paris

Source: http://www.repubblica.it/esteri/2016/09/09/news/terrorismo_una_delle_tre_donne_fermate_in_francia_aveva_giurato_fedelta_all_isis-147427964/ http://www.corriere.it/esteri/16_settembre_08/parigi-tre-donne-arrestate-auto-bombole-gas-notre-dame-pianificavano-attentati-imminenti-8f6097e4-7603-11e6-8af7-7197ea220eb4.shtml Reported: 09/09/2016

LATIN AMERICA

Chileungunu

French Guiana

Event – Research on how to detect Chikungunya Virus circulation using sugar-baited traps in French Guiana.

Summary – According to a study published on the PLOS Journal, as there is no specific treatment or vaccine against Chikungunya Virus, the best prevention strategy is to limit exposure to mosquitoes through individual and collective protection measures. The proposed technique would allow advanced identification through sequencing of captured insects.



Source: http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0004876

Reported: 08/09/2016

Malaria

Event – Malaria spread is expected to reach 350,000 cases in Venezuela by the end of this year.

Summary – According to the Observatorio Venezolano de la Salud (OVS), nearly 150,000 malaria cases have been reported through August 2016, which represent a 72 %increase during 2015. Venezuela has been reporting between 3,000 and 5,000 malaria cases a week, and experts expect that the total amount of infections will reach 350,000 cases by the end of 2016.

Source: http://outbreaknewstoday.com/venezuela-observatorio-venezolano-de-la-salud-projects-350000-malaria-cases-by-years-end-97898/ Reported: 19/09/2016

NORTH AMERICA



New Technology

Event - The U.S. Navy awards a decontamination technology license to a Virginia-based business.

Summary – The United States Navy has provided a revolutionary decontaminant technology, which would be able neutralize a variety of substances, from toxic industrial materials and chemicals to chemical warfare and biological agents in few minutes to the Virginia-based First Line Technology in order to permit the manufacture and distribution of lifesaving technology to the military and first responders.

Source: http://www.cbrneworld.com/news/u.s. navy transfers decontamination technology to virginia small business f#axzz4KVD9jSfC

Reported: 14/09/2016

Wort Nilo vieus

West Nile virus

Event – First death due to West Nile Virus reported in Manitoba in three years.

Summary – According to the Manitoba Health, Seniors and Active Living, a 70 years old female tested positive for West Nile virus (WNV) after passing away. It is believed the individual was exposed to WNV in the Southern Health–Santé-Sud region in mid-August.

Source: http://outbreaknewstoday.com/canada-west-nile-virus-death-reported-in-manitoba-1st-in-three-years-78297/

Reported: 30/09/2016



Training Activity

Event - Real-world training with the Transport Isolation System (TIS).

Summary – The 375th Aero-medical Evacuation Squadron has performed a training activity to familiarize with the Transport Isolation System (TIS), which allow the unit to safely transport numerous patients with infectious diseases without harming the aircrew or aircraft.

U.S.

Source: https://globalbiodefense.com/2016/09/02/ebola-transport-isolation-system-training/

Reported: 02/09/2016

Training Activity

Event - Duke University led a five-state infectious disease training for first responders.

Summary – Through its network of five training sites, the Duke Infectious Disease Response Training (DIDRT) program consortium provides training in occupational settings that carry the potential for increased exposure to contaminated materials or infected individuals with a focus on hands-on learning and a train-the-trainer model.

U.S., Arizona

Source: https://globalbiodefense.com/2016/09/06/training-first-responders-infectious-diseases-safety/

Reported: 06/09/201

Anthony

Event - A new study demonstrates the presence of anthrax spores from Soviet autopsy specimens.

Summary – The new study published by the journal majo represents a precise and detailed examination of the anthrax strain used in past Soviet weapons development. Scientists from the Translational Genomics Research Institute (TGen) and Northern Arizona University (NAU) have been able to demonstrate the presence of anthrax spores using DNA sequencing methods to generate the anthrax genome sequence from the victims of the 1979 anthrax outbreak in Sverdlovsk. Russia.

U.S., Kansas

Source: https://globalbiodefense.com/2016/09/08/soviet-anthrax-pathogen-genome-generated-autopsy-specimens/

Reported: 08/09/2016

Research

Event - A Bio-security Research Institute study finds that Culex mosquitoes do not transmit Zika virus.

Summary — According to Dana Vanlandingham, lead author and assistant Professor of virology in the College of Veterinary Medicine, discovering that <u>Culex</u> mosquitoes do not appear to transmit <u>Zika</u> virus constitutes an important result for controlling <u>Zika</u> virus in Florida and preventing its spread to other parts of the country.

U.S., Minnesota, Hopkins

Source: http://medicalxpress.com/news/2016-09-culex-mosquitoes-transmit-zika-virus.html#nRlv

Reported: 22/09/2016

3

diannaires' disease

Event – Five confirmed cases of Legionnaires' disease in people who live or work in Hopkins.

Summary – According to the Minnesota Department of Health (MDH), 3 of the 5 people who became ill due to Legionnaires' disease between the end of August and the beginning of September have been hospitalized, while two others were hospitalized and have been recovered. Minnesota typically sees 50 to 60 cases of Legionellosis each year. More than 60 cases have been reported in the state so far this year, mirroring a national increase in cases in 2016.

Source: http://www.swnewsmedia.com/shakopee_valley_news/news/public_safety/legionnaires-disease-outbreak-investigated/article_7a1fb5e5-b4b7-5002-9e33-26fb347d0868.html Reported: 09/09/2016

U.S., Massachusetts

New Technology

Event – New paper-based diagnostic device to detect viral threats has been developed.

Summary – Following a project led by the Massachusetts Institute of Technology, a team of researchers has created a portable diagnostic platform that allows rapid, specific and low-cost detection of the Zika virus at clinically relevant concentrations.

Source: https://globalbiodefense.com/2016/09/02/low-cost-paper-based-diagnostic-zika-virus/

U.S., South Dakota



New Virus

Event – Researchers discover a new Virus named Influenza D.

Summary — As proposed by the South Dakota State University (SDSU) researchers who discovered it, the International Committee of Taxonomy of Viruses recently approved naming a new virus, influenza D. The main goal will be to determine whether influenza D, which has 50 percent similarity to human influenza C, can cause problems in humans.

Source: https://globalbiodefense.com/2016/09/02/new-virus-officially-named-influenza-d/

Reported: 02/09/2016

New Technology

Event – New non-radioactive, hand-held explosive threat detector launched on the market.

Summary – The new Smiths Detection's TRACE-PRO™ is a non-radioactive, hand-held explosive threat detector, which now has the additional capability to detect and identify <u>Irigations Triperoxide</u> (TATP), the type of explosive used in the terrorist attack in Brussels in March 2016.

Source: http://www.cbrneworld.com/news/smiths_detections_trace_pro_now_identifies_the_explosive_tatp#axzz4KVD9jSfC+ Reported: 14/09/2016



U.S., New York City

Explosion
Event – 29 people injured in New York's Chelsea neighborhood due to intentional explosion.

Summary – According to a law enforcement source, the blast occurred at 23rd Street and 6th Avenue in Manhattan was caused by an explosive device intentionally left in or near a dumpster, and Police have increased security across New York's five boroughs as a precaution.

Source: http://edition.cnn.com/2016/09/17/us/new-york-explosion/index.html

Reported: 18/09/2016

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Next TIEMS Newsletter

The next TIEMS Regular Newsletter is planned for March 2017.

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Next issues of TIEMS Newsletters are planned for March 2017 and contributions are welcome. Please, contact one of the editors or TIEMS Secretariat if you have news, articles of interest or like to list coming events of interest for the global emergency and disaster community or like to advertise in this issue.

