

European Civil Protection Forum



Partnership and Innovation http://ec.europa.eu/cpforum2015 | #EUCivPro





5th European Civil Protection Forum

Final Report*

Brussels, 6-7 May 2015

The European Civil Protection Forum is the largest recurring public event on European civil protection cooperation. The 2015 edition of the Forum gathered on 6-7 May close to 900 participants from the civil protection community, international and regional organisations, humanitarian aid partners, research and academia, as well as the private sector. The Forum generated a strong public interest in social media channels.

In addition to three plenary sessions and nine thematic panels, interest focussed this year on the special addresses from Rihards Kozlovskis, Latvian Minister for the Interior, Frans Timmermans, First Vice-President of the European Commission, Christos Stylianides, European Commissioner for Humanitarian Aid and Crisis Management, and Carlos Moedas, European Commissioner for Research, Science and Innovation. Moreover, in an official signing ceremony, the President of the Turkish Disaster and Emergency Management Authority, Dr. Fuat Oktay, signed with Commissioner Stylianides the agreement to join the EU Civil Protection Mechanism.

This year's exhibition featured innovative technology, projects, services and products for disaster management, such as situational awareness and early warning systems, forest fire prevention, satellite-based software and modelling, as well as practical applications for disaster management operations. Two scenario-based demonstration flights of Remotely Piloted Aerial Systems (RPAS) used in disaster management took place in the nearby Parc du Cinquantenaire.

In the margins of the Forum, on 6 May, the European Commission's Directorate-General for Humanitarian Aid and Civil Protection (DG ECHO) hosted a High-Level Roundtable with civil protection representatives of the EU Neighbourhood countries, discussing among 45 countries the objective of closer association with the EU Civil Protection Mechanism. Also, on 5 May, a joint event by DG ECHO and the Committee of the Regions gathered local, regional and national authorities from the Member States and EU policy makers to discuss new opportunities for cooperation in disaster management.

The Emergency Response Coordination Centre of the European Commission organised guided visits for interested participants.

^{*} This report was compiled by DG ECHO Civil Protection Policy Unit and does not represent the views of the European Commission, nor the speakers





Contents

OPENING AND WELCOME ADDRESSES	3
SIGNING CEREMONY FOR THE AGREEMENT ON THE PARTICIPATION OF TURKEY IN THE EUROPEAN UNION CIVIL PROTECTION MECHANISM	£
PLENARY PANEL I: PARTNERSHIP AND INNOVATION TO PROMOTE GROWTH AND JOBS	7
PANEL 1 - PLANNING FOR THE EXTRAORDINARY	g
PANEL 2: UNDERSTANDING RESILIENT CITIES	11
PANEL 3 EMPOWERING RESILIENT CITIZENS	14
SPECIAL SESSION - THE 2015 GLOBAL ASSESSMENT REPORT ON DISASTER RISK REDUCTION (GAR15)	16
PLENARY PANEL ON NEW PARTNERSHIPS	17
PANEL 4 LINKING INTERNATIONAL DISASTER MANAGEMENT ACTORS	20
PANEL 5 PARTNERING WITH THE PRIVATE SECTOR	23
PANEL 6: SCIENCE-BASED DISASTER MANAGEMENT	25
SPECIAL ADDRESS BY CARLOS MOEDAS, EUROPEAN COMMISSIONER FOR RESEARCH, SCIENCE AND INNOVATION	28
PLENARY SESSION INNOVATION IN DISASTER MANAGEMENT	30
PANEL 7: INNOVATION IN THE FIELD	33
PANEL 8 INNOVATIVE PARTNERSHIPS IN TRAINING	35
PANEL 9 CRISIS COMMUNICATION	37
AWARD CEREMONY TRAINING CERTIFICATES UNDER THE EU-CHINA DISASTER RISK MANAGEMENT PROJECT	39
SIDE EVENTS	40
EUROPEAN COMMISSION - COMMITTEE OF THE REGIONS JOINT EVENT "EUROPEAN REGIONS AT THE FOREFRONT OF DISASTER MANAGEMENT"	40
HIGH LEVEL ROUND TABLE "TOWARDS A CLOSER ASSOCIATION TO THE EU CIVIL PROTECTION MECHANISM"	45

OPENING AND WELCOME ADDRESSES

Frans Timmermans, First Vice-President of the European Commission,
Christos Stylianides, European Commissioner for Humanitarian Aid and Crisis Management,
Rihards Kozlovskis, Latvian Minister for the Interior

Commission First Vice-President Frans Timmermans opened the event with a powerful reflection on the value of the EU cooperation in the field of crisis management and highlighted the close link between disaster management and Commission President Jean-Claude Juncker's priorities on Growth and Jobs (see key messages below).

Commissioner Stylianides outlined the on-going work to strengthen the EU Civil Protection Mechanism as well as his priorities for the coming years to engage with the growing civil protection community.

Minister Kozlovskis highlighted the important contribution made by the EU Civil Protection Mechanism to date.



Key messages Frans Timmermans:

- The European citizens are united in their call for the EU to respond to disasters in a united and coordinated manner.
- The EU must embrace innovation and utilise new technologies.

The European Commission recently unveiled its plans to create a Digital Single Market. The EU needs more innovation and should embrace new technologies.

 Partnerships are vitally important. Europe must show to its partners that it is there to answer the call in times of need.

The European Commission considers the international partners and the NGO community important partners. We have to continue to nurture these partnerships in the future.



Key messages Christos Stylianides:

• Disasters have huge negative impacts on the economy, people and the environment. Evidence suggests disasters will be more frequent and intense in the future.

The average economic cost of disasters in Europe has been estimated at the level of ten billion Euros per year. No country can be fully prepared or can act alone against all risks, cooperation is imperative.

• The EU Civil Protection Mechanism enables Member States to successfully cooperate. Great progress has been made in strengthening the Mechanism.

The Emergency Response Coordination Centre (ERCC) is the operational heart of the Mechanism and has to date provided support in numerous disasters. Its role will further evolve, now being also the main EU contact point for Solidarity Clause emergencies. The new Mechanism legislation, in particular its innovative elements such as the voluntary pool, will improve prevention and preparedness and increase the efficiency, coherence, and visibility of the EU's response to disasters. Furthermore, the Mechanism will be also strengthened with the forging of the new partnerships, including most recently with Serbia and Turkey joining the Mechanism. The synergies between humanitarian aid and civil protection have been successfully used, as demonstrated during the recent Ebola crisis.

 The EU disaster management cooperation has an important role also on the international stage.

EU coordination played an essential role during the recent Conference on Disaster Risk Reduction in Sendai and should continue to lead the way in the implementation of the newly agreed framework. This coordination is also vital to ensure coherence between Sendai actions and the ongoing negotiations on financing for sustainable development, on the sustainable development goals and the new climate agreement.

 My key priorities for the coming years will be: (1) fully implementing the new civil protection legislation; (2) enhancing disaster knowledge; (3) investing in resilience; and (4) expanding the network of partner countries. For implementing the new legislation, the focus will be on assessing risks and capabilities; developing the voluntary pool; capacity building; and building closer partnerships with strategic partners, international organisations, and the health and foreign affairs communities to deal with new challenges such as pandemics and migration.

On disaster knowledge, the focus will be to improve data quality and partner with relevant actors from research, science and the private sector.

On building resilience, the focus will be on disaster prevention into investments in infrastructure, buildings, public health.

On expanding the network of partner countries, the focus will be on strengthening the involvement of the EU Neighbourhood countries.



Key messages Rihards Kozlovskis:

• Since its creation in 2001 the Mechanism underwent a significant transformation.

As a result of the Lisbon Treaty, civil protection is now a self-standing policy. The Lisbon Treaty also opened up new areas, notably the Solidarity Clause. As a result of the new Mechanism legislation there is now also a greater emphasis on prevention and preparedness. The latter was the focus of the Latvian Presidency, which took the opportunity to increase the public awareness and preparedness for disasters, particularly focusing on the special needs of persons with disabilities.

 European common efforts in disaster management are highly visible and a sign of solidarity and the success of the Mechanism cooperation.

The Mechanism has been activated a large number of times and has triggered EU response in an effective, efficient and coordinated way. By providing assistance in disaster situations, Europe has helped make a difference in the lives of millions.

SIGNING CEREMONY FOR THE AGREEMENT ON THE PARTICIPATION OF TURKEY IN THE EUROPEAN UNION CIVIL PROTECTION MECHANISM

The 2015 Civil Protection Forum was marked by the important signature of the agreement for the participation of Turkey in the EU Civil Protection Mechanism. Christos Stylianides, EU Commissioner for Humanitarian Aid and Crisis Management, signed the agreement together with Dr. Fuat Oktay, President of the Disaster and Emergency Management Authority of Turkey.

Claus Sørensen, European Commission Director-General for Humanitarian Aid and Civil Protection (DG ECHO) congratulated also Serbia for having recently signed an agreement for participation in the EU Civil Protection Mechanism.

As part of the Mechanism, the new members will have access to important cooperation opportunities, including joint civil protection trainings and exercises, participation in prevention and preparedness projects, and of course closer operational cooperation.





"This decision marks our intention and hope for an active and long-lasting cooperation in the Civil Protection Mechanism in developing better disaster management and humanitarian relief systems, in view of the long list of humanitarian issues pending throughout the world."

Fuat Oktay, President of the Disaster and Emergency Management Authority of

"Turkey will be a valuable partner in our common goal to prepare better for disasters and to respond jointly and effectively when a crisis strikes. In a world increasingly prone to disasters, we need to act together, each contributing its expertise, capabilities and experience. This is exactly what the Civil Protection Mechanism is about".

Christos Stylianides, Commissioner responsible for Humanitarian Aid & Crisis Management

PLENARY PANEL I: PARTNERSHIP AND INNOVATION TO PROMOTE GROWTH AND JOBS

The first plenary panel of the European Civil Protection Forum placed the disaster management agenda in the context of the EU policy on growth and jobs. Speakers discussed the nexus between disaster management and economic growth, looking into issues such as the contribution of investments in prevention, technological developments and innovation, the role of the EU Cohesion Policy, the projects supported by the European Investment Bank, and



examples partnering of authorities with the private sector. Speakers also addressed the followup of the Sendai conference on disaster risk reduction, where resilience was identified as one of the main drivers for growth, innovation, and job creation.

Key messages:

Disaster risk management fosters economic growth and makes perfect economic sense.

As pointed out by Margareta Wahlström and Monica Scatasta, disasters have a major impact on the economy as well as on the well-being of citizens. As economies are globalised and increasingly structured around complex global supply chains, the economic shocks of a disaster ripples out to economies and businesses on the other side of the world. All speakers agreed that to address the alarming trends of disasters, risk prevention and risk management policies are essential to ensure sustainable development and economic growth. Prevention and risk management make also good economic sense. Investments in disaster risk management will likely provide high rates of return and also extended indirect economic benefits. They can be a means of promoting jobs. Monica Scatasta mentioned the "paradigm shift" needed to make sure that all projects are resilient. EIB's portfolio reflects this increased interest in disaster risk management.

• The EU regional funds support disaster risk management initiatives and resilience building at the level of € 1 billion per year.

Walter Deffaa invited civil protection authorities and regional funds managing authorities to join forces to take up the opportunities offered by regional funds to support resilience. Under the current EU funding programming period, more than €7 billion have been allocated to risk prevention and management. As it is essential that all investments are

resilient against destruction from disasters, i.e. disaster-proof, risk assessments have become an ex-ante conditionality for the allocation of funds. Deffaa underlined the need to develop a strategic approach to this resilience and to develop projects that provide long-term solutions and integrate environmental-friendly and innovative approaches.

New partnerships and business practices are urgently required.

Margareta Wahlström stressed that as recognised by the Sendai framework for disaster risk reduction, it is imperative that public and private actors all work closer together, including civil society organizations, academia, scientific and research institutions. Businesses have to integrate disaster risk considerations into their normal management practices. Ministers of finance have to be on board. Partnerships can help to promote mutual learning between authorities through for instance peer reviews among interested States. Monica Scatasta and Walter Deffaa pointed out, how innovative investments in equity and funds, or project loans, could be efficient tools to stimulate and catalyse private capital on resilience. All speakers recognised the need to support a stronger science—policy interface and to promote investments in innovation and technological development.





"If you invest in disaster response, you can get up to a 10% return on your investment. Why don't we apply this rational view?"

Margareta Wahlström, Special Representative of the United Nations' Secretary-General for Disaster Risk Reduction and Head of UNISDR

"The money is there to be used but there are strings attached. The money will only be used once there is a strategic framework in place."

"Civil protection authorities should make their voices heard. This involves a dialogue — I call it a 'rapprochement' of two different groups."

Walter Deffaa, Director-General for Regional and Urban Policy, European Commission

"In terms of financial instruments, we have been working with municipalities to set up more resilient urban areas."

Monica Scatasta, Head of Division Water & Waste Management, European Investment Bank



PANEL 1 - PLANNING FOR THE EXTRAORDINARY

Sharing international experience on large-scale disasters

This panel focused on how international players plan and prepare for extraordinary disasters and for disasters with cascading effects. Speakers discussed what lessons have been identified from previous such events in Europe and world-wide, and how this relates to the disaster preparedness undertaken at various levels (local, regional, national, EU and international).

Key messages:

 Hazards and risk scenarios are not fully foreseeable – our response systems must be flexible to adapt to the most unexpected cases.

The panellists agreed that - by definition - it is not possible to have full preparedness for what is unprecedented, complex, unforeseeable or even "unthinkable". The answer is the development of robust strategies and flexible systems that can withstand or adapt to circumstances. Mr Tachi explained the Japanese practice adopted after the triple Fukushima disaster, to prepare at two-levels: (i) specific plans covering concrete risk scenarios, and (ii) generic strategies that can be used in any large-scale emergency; the latter is broad and encompasses measures ranging from the definition of land use to mass evacuations of populations.

• We need to think and prepare for extraordinary emergencies, and plan accordingly.

Although it is not possible to foresee the "unthinkable", it is still necessary to prepare. Mr Velasquez emphasised the added value of investing in this because of the transferability of knowledge and experience, which is useful in even the most different scenarios. It is not just the final plan itself that yields benefits but also the planning process as such. This also applies for hazards and threats with a low probability of occurrence but high impact. Furthermore, one should also think of cascading effects and think of cases when the regular response systems will not be available or useable. Mr De Brouwer underlined the importance of conducting 'stress tests' on our structures and mechanisms to know our vulnerabilities and address them (akin to stress tests applied to the banks).

There is work to be done at all levels – local, regional, national, EU and international.

The panellists agreed that the first response is always primarily local, yet work needs to be done at all levels, including at the national, EU, regional and broader international levels. Mr Velasquez underlined the importance of integrated thinking covering all the levels from the top all the way to specific players such as business entities and individual managers, who often do not think about themselves as emergency managers before a crisis happens. Equally, when local or national capacities are overwhelmed there is a need for support from the EU and international levels. This applies also for sharing experiences, lessons learned and joint prevention and preparedness measures, which are often usefully undertaken in broader partnerships.

Pooling and sharing resources in disaster management is mutually beneficial.

Mr Dervodel underlined the importance of partnership, as no country or region can be prepared for the worst, but everybody shall be prepared to request and ensure Host Nation Support for incoming external assistance. For instance, in the case of an unprecedented ice sleet phenomenon in 2014, Slovenia received some 140 power generators and various teams of rescuers from the EU countries. Mr De Brouwer outlined measures that are being undertaken at the EU level to strengthen the joint preparedness, including the development of the European Emergency Response Capacity in the form of a 'voluntary pool' and the so-called 'buffer capacities' in addition to the existing national response capacities.

The EU's has a role in complementing national disaster management capacities.

Mr De Brouwer underlined that the role of the EU is to support Member States, and also to supplement and top up their capacities where useful; this is not meant in the sense of taking over or replacing actions at the local and national levels. It was noted that the EU shall step up its work on the Voluntary Pool, buffer capacities and filling capacity gaps when useful. The EU shall furthermore look seriously into inter-linkages amongst the various policies/areas in particular relevant for the risk from cascading effects.

Awareness at political level of the costs of non-action is ever more crucial.

It is difficult to engage politicians in the investment for prevention, where the costs are immediate but the benefits not directly tangible. Making politicians more aware of the risk and cost of not-investing, however, can make the whole difference according to Mr Meyer-Minnemann and Mr Velasquez.





"'Extraordinary' can be used as an excuse for not having prepared. We have to prepare."

Kenichiro Tachi, Japan/MLIT

"Planning for the extraordinary is possible. It's not easy. It's hard, it's costly, but possible; and it's not only the plan as such, which will yield significant benefits, but also the planning process itself."

Andrew Velasquez, Regional Administrator of Region V, Federal Emergency Management Agency, USA



PANEL 2: UNDERSTANDING RESILIENT CITIES

Disaster-proof infrastructure for urban communities

The panel discussion on 'Understanding resilient cities: Disaster-proof infrastructure for urban communities' of the Civil Protection Forum focused on the role and importance of regions, cities and municipalities in building urban resilience to disasters and climate change. Speakers introduced a number of city and municipality level examples of resilience building and disaster risk prevention in urban contexts, looking into issues such as the central role played by local communities and efficient risk communication, the contribution of disaster management



investments technological developments and innovation, and the partnering with the private sector. Speakers also addressed the links between disaster risk management and climate change adaptation developing resilience in urban settings.

Key messages:

 Local municipalities, cities and their citizens are the consciousness of the risks we face in urban settings: ensuring involvement of and good communication with the local communities is vital.

The experiences of different urban contexts across Europe were presented to illustrate the different approaches to build the resilience of urban areas in the face of natural and man-made disasters. Christian Kromberg introduced how the City of Essen in Germany has recently increased its attention to disaster risk reduction through actions by the City Council at local level. Kazim Gökhan Elgin talked of a paradigm shift in Turkey, with concrete examples of infrastructure retrofitting, research initiatives and training programmes to illustrate Istanbul's advanced initiatives to improve the city's resilience to earthquakes and other disasters. Cristina D'Angelo offered an insight into the planning and preventive work carried out by the Civil Protection authorities of Rome in managing the risk linked to mass population movements.

Testimonies of local experiences in developing the resilience of urban areas to

disasters all underlined the central role played by local municipalities, local networks of relevant authorities and citizens in urban settings. Good communication and awareness at a local level were identified as important dimensions to understand and develop resilient cities and other forms of urban areas.

• There is a need to promote investments and incentives for businesses to contribute to making urban areas more resilient.

The importance of investments in technology and innovation for disaster risk management and the role of the private sector in contributing to the resilience of urban areas were stressed time and again by the panellists. Pedro Crespo provided a private sector insight into the ways and extent to which the private sector can and should contribute to urban resilience through prevention, preparedness for and response to disasters.

The point was also made that the public sector cannot act alone: there should be incentives for business and investments in the management of disaster risks, alongside greater emphasis by the private sector itself for a need for investment in this sector. Jack Radisch of the OECD underlined the need for public authorities to promote incentives for businesses and individuals to support disaster risk management including volunteering activities. Further discussions with participants addressed the case of maintenance as an example in which the financing for improved resilience and preventive measures in urban areas cannot just come from public funding, illustrated with some concrete examples (i.e. private foundations bearing external costs of public prevention initiatives in the Essen area of Germany).

• Climate change adaptation is a strong driver for urban planning and development and contributes directly to the prevention of disaster risks in urban contexts.

Humberto Delgado Rosa highlighted that cities regroup many people, infrastructure and heritage, which makes these urban areas potentially vulnerable to the impacts of climate change. In this regard, adaptation to climate change is vital to address the risks of climate challenges and, in turn, prevent and prepare for the risk of disasters.

A number of EU initiatives for climate change adaptation focus on the urban dimension: the Mayors Adapt initiative has received a lot of enthusiasm at city level and the EU's Climate ADAPT platform regroups all information of climate change adaptation including in an urban dimension. Climate change adaptation and disaster risk prevention are also addressed through many funding opportunities in both the LIFE programme and structural funding at regional level.

The issue of good communication with citizens for the adaptation to climate was addressed in discussions with the participants, which underlined the need to build a positive narrative and communicate effectively with citizens on adapting and

understanding climate-related challenges.



"When you say to a citizen that you must protect your home, he or she will pay attention"

Humberto Delgado Rosa, Director for Mainstreaming Adaptation & Low Carbon Technology, Directorate-General for Climate Action, European Commission



"Measures such as governments giving economic incentives to consumers to act in a different way can be a good thing"

Jack Radisch, Project Manager High Level Risk Forum, OECD

PANEL 3 EMPOWERING RESILIENT CITIZENS

Developing a Culture of Safety and Resilience

This panel discussed opportunities and challenges for better preparing citizens to face natural or man-made disasters. The discussion featured concrete examples for the achievement of this objective, including appropriate training and communication to citizens about resilience. All panellists agreed on the need to effectively embed resilience education as of primary school level. Special groups, including people with disabilities and foreigners should be able to receive targeted advice in an easily accessible form. Sharing of experience among countries should also be supported, possibly via a centralised Internet platform.





Key messages:

 Resilience and disaster preparedness education should be an integral part of all school curricula.

Speakers agreed that, in general, information in educational curricula about natural disasters is not standardised, while this type of education should be mandatory in order to support resilient citizens. An example from Greece was presented on teaching precautionary measures. In Georgia, disaster risk reduction education is embedded in the school curricula and a new subject for primary education will touch widely upon civil protection issues. Financing was mentioned by the speakers as a barrier in some countries to introducing this type of education. Examples were brought to the discussion of innovative and low cost solutions that are being in use in the form of computer games and disaster simulators. Prevention and preparedness projects co-financed by the EU were mentioned as one of possible sources of funding.

Appropriate training and education on disaster preparedness can help in saving lives.

Japan put a strong emphasis on safety, which is embedded in the school legislation mostly related to crime, traffic accident and disaster prevention. However, 2011 tsunami has changed the agenda from safety towards resilience. Discussions revolved around examples from recent tsunami disasters which proved that students managed to save their lives

based on their knowledge of disaster response. Speakers referred to the example Nepal earthquake to showcase how citizens with knowledge of disaster management can save lives, even without necessary equipment and to stress the importance of cooperation and building knowledge at local level.

• Communication to citizens on disaster risk reduction should be further encouraged.

Discussions revolved around existing challenges for public authorities in communicating with the public about resilience and disaster risk reduction, as this is not always seen as a priority for the population. The Member of the European Parliament stressed that in the past 5 years disaster risk reduction has become a high profile question in the European Parliament resulting in 3 resolutions on this topic. He was of the opinion that disaster preparedness education should be a part of school curricula.

• Groups with special needs including people with disabilities should be taken into account in disaster management procedures.

Ádám Kósa, Member of the European Parliament, made the point that there are additional challenges for people with disabilities for receiving education and information on disaster preparedness. It would be important to implement an EU strategy on disaster risk reduction programmes with shared responsibility at EU and national levels. Suggestions on the way forward for including specific needs of disabled persons in disaster management procedures were discussed in the workshop organised by the Latvian Presidency of the Council of the EU held in the first half of 2015.

Tourists were mentioned in the discussion as another example of a group with specific needs in the area of disaster preparedness. Tourists face a common challenge during a stay in foreign countries. Discussion revolved around the need to ensure that civil protection trainings reflect issues of groups with special needs and local communities.

SPECIAL SESSION - THE 2015 GLOBAL ASSESSMENT REPORT ON DISASTER RISK REDUCTION (GAR15)

"Making Development Sustainable: The Future of Disaster Risk Management"

Margareta Wahlström, Special Representative of the United Nations' Secretary-General for Disaster Risk Reduction and Head of UNISDR presented key highlights and findings of the GAR15 report which draws attention to the economic impacts of disasters. There is huge potential of reducing current losses and thus fostering sustainable development. The GAR illustrates the long-term economic impact of disasters showing that the Annual Average Losses of disasters, estimated at around 300 billion dollars per year, are higher than the GDP of some high-income economies like New Zealand, and exceeding the investment in water and sanitation in large countries like China or India. Annual Average Losses indicate also the costs of future disasters. Data from the report shows how the accumulation of wealth globally in the last decades has contributed to increasing the exposure to risk. Climate change is a significant factor for magnifying risks and should be considered in countries' planning.

Among the key underlying drivers of risks that need to be tackled in the years to come, Margareta Wahlström highlighted growing inequalities, poverty, urbanizing risks and mispricing of risk, stressing that pricing should be considering real data from the reinsurance sector. She emphasized also the positive achievements in risk management over the last decade related to improved investments in early warning systems and generally to better disaster preparedness, awareness and institutional capability.

Margareta Wahlström concluded that further attention needs to be placed on appropriate disaster risk management to counter the rising trends in disaster losses. While the GAR15



report makes no specific recommendations, prepared the ground for the discussions at the Disaster Risk Reduction Conference in Sendai and supports the Sendai outcome recommendations. Risks should be effectively managed and included in

"The constant mispricing of risk is a serious driver of risk itself"

Margareta Wahlström, Special Representative of the United Nations' Secretary-General for Disaster Risk Reduction and Head of UNISDR



PLENARY PANEL ON NEW PARTNERSHIPS

This second plenary panel of the Civil Protection Forum discussed the role of traditional and new partners, as well as new trends and prospects for partnering in disaster management. Speakers reviewed factors changing the partnerships in disaster management and identified challenges and opportunities for extended collaboration and innovative initiatives. Panellists



focused on the role of science and industry in disaster management cooperation, and on the importance of building inclusive multi-sectoral and multistakeholder approach cooperation.

Key messages:

• Interoperability and multi-stakeholder engagement are instrumental in a changing landscape of disaster management.

Florika Fink-Hooijer referred to the need of joining forces and seeking efficiencies and synergies in a context where emergencies are becoming more complex and more actors need to be involved. She stressed that new drivers for expanding partnerships in disaster management emerge, such as growing inequality and mispricing of risk, in addition to the more 'traditional' factors, i.e. urbanisation, population growth, and climate change. Timothy Manning underlined the importance for an effective disaster management approach of leveraging the activities of multiple players, including the private sector, military, law enforcement, and NGO communities and voluntary organisations. Mr Manning underlined the need to create a conducive environment for the effective coordination of efforts of all these actors and bringing also the public into the planning efforts of governments. According to Ms Fink-Hooijer traditional partners have changed their business model and profile. The EU has responded to these changes and fostered its cooperation with regional organisations and humanitarian actors, as in the case of Ebola. Traditional donors also change profiles, resulting in an increasing awareness of the potential and necessity to look into better accountability and more localised response.

• Effective partnership is about building trust and confidence and investing in long-term relationships.

Policy makers have a key role to play in creating a conducive and predictable environment for multiple stakeholders, including the private sector. Jose Luis Carneiro stressed that building trust between the systems is crucial and called for collective efforts towards overcoming the obstacles between the public and the private sector, both in the understanding of disaster risk prevention and response, and in building knowledge and capacities of European citizens. Ms. Bala pointed out that engaging also with parliamentarians is indispensable for building a legal framework on a sound understanding of the dynamics of disaster management. Finally, Ms. Bala highlighted how regional organisations are becoming more prominent actors, building on a shared vision and understanding of the political environment and specific cultural backgrounds.

• Local actors play a key role as first responders.

Alicia Dela Rosa Bala underlined it is crucial to build up the capacities of local authorities and that local actors should be actively engaged in the dialogue. She referred also to engaging the youth in disaster management, for example by embedding innovation hubs in the school systems. Michael Adamson referred to local business as being equally concerned during emergencies and recalled that the fastest way for local business to recover from and emergency is to be involved in and support the crisis response. Mr. Carneiro pointed out that local responders are crucial also for better data availability.

• The private sector has a key role in disaster management and there is a lot of untapped potential to be explored in partnering with the industry.

Engaging with financial institutions and insurance groups is instrumental for fostering disaster risk financing. Michael Adamson explained that in some cases relations with the private sector are based on pre-arrangements and preliminary assessment, considering that many emergencies are to a certain extent foreseeable. Examples are agreements with telecommunication companies for sending health messages during the Ebola crisis, agreements with retailers for procurement of emergency supplies during disasters etc. Mr. Adamson pointed out the central role of government in encouraging the engagement of the private sector in emergency management. Timothy Manning called for tapping further into the potential of public-private partnerships, including though non-contractual avenues. An examples is the partnering with large retailers in the USA for a more coordinated emergency response.

 Partnership with the scientific and research community is indispensable for an effective operational disaster management and for fostering technological innovation.

Michael Adamson stressed the importance to engage all dimensions of the science community — academia as well as research and development scientists - and to find financial incentives for novel technologies, including those with limited but important application. Florika Fink-Hooijer reminded the audience that the scientific interface and scientific cooperation with the EU Joint Research Centre is instrumental for the effective

functioning of the EU Emergence Response Coordination Centre (ERCC) namely for assessment and forecasting. She called for an effective dialogue between stakeholders to tap into the potential of science and exploit all existing funding opportunities; Ms. Fink-Hooijer called for common and science-based methodologies that can be used by a wide range of partners across the globe both in policy making and in the field. She referred to the setup of an EU disaster risk management knowledge centre as an example of collective efforts towards sharing of knowledge. Creating networks will help seizing opportunities across sectors, such as academia, industry, national and local communities.





"We need to create an environment that is conducive to coordinating the universe of people involved in disaster response."

Timothy Manning, Deputy Administrator for Protection and National Preparedness, Federal Emergency Management



"We need more shoulders to stand on."

Florika Fink-Hooijer, Director for Strategy, Policy and International Co-operation, DG ECHO, European Commission



PANEL 4 LINKING INTERNATIONAL DISASTER MANAGEMENT ACTORS

The New International Crisis Management Landscape

This panel focused on the cooperation between the European Commission's Emergency Response Coordination Centre (ERCC) and international crisis response actors and discussed challenges and opportunities for improving global coordination and delivering a timely and efficient assistance in the field. Panellists exchanged views on preparedness strategies applied across different organisations, exchange of best practices, facilitation of operational cooperation at the headquarters and in the field, and building of international alliances on global policy issues. The Nepal Earthquake emergency was amongst the highlights of the



discussion. An interactive intervention of WHO the debate was ensured through live video connection from Kathmandu, Nepal, with Dr. Ian Norton, WHO Project Leader on Foreign Medical Teams.

 Improving coordination in disaster management requires a good mutual understanding between the different actors and 'speaking the same language'

Amongst the existing challenges, Juha Auvinen pointed out the differences in the terminology used across the disaster management community, referring to the example of civil protection modules in the EU and the equivalent emergency response units of the Red Cross. He stressed that more structured operational coordination is needed, including developing standard operating procedures between the key disaster management players and incorporating these procedures in the practical work of the different crisis centres. Ian Norton highlighted the importance of developing a common language and comparable standards in the health sector in emergencies, stressing that foreign medical teams should adhere to minimum quality standards. As regards the role of aviation in disaster management operations, Kenneth Thomas highlighted challenges for both the aviation and humanitarian community related to keeping passenger flights operating during crisis situations, referring in particular to the example of the Ebola outbreak and the landing permissions for relief flights in key airports, such as in the Nepal emergency. Efficient

cooperation between the aviation and humanitarian experts requires prioritising from a humanitarian perspective the relief flights in disaster zones and on the other hand, effectively communicating from an aviation perspective the information needed to ensure permission for relief flights. Adrian van der Knaap underscored the importance of building institutional capacity among National Disaster Management Organisations. More experienced civil protection authorities can share their knowledge, expertise, and information on tools and working processes.

• Strengthening the link between the local, regional and global levels is a key to improving coordination in an increasingly complex disaster risk environment.

Jesper Lund made the point that in a landscape of disaster management actors that is becoming increasingly complex and diverse, the challenge is to deliver the appropriate level of coordination in the right forum. The key is linking the needs on the ground with global coordination. Leon Prop and Adrian van der Knaap called for continuing the investment in first building local capacities, given the driving role of local actors during emergencies. Leon Prop pointed out that after first building up local capacities we should look into the capacities of neighbouring countries, before reaching out to the global level. He referred to the response to typhoon Haiyan in the Philippines and the Nepal earthquake as examples with active involvement and assistance from neighbouring countries and regions. What is required are transparent information flows, effective reporting, and accountability of all actors involved across all levels, including government, donors, intergovernmental agencies etc. Juha Auvinen made the point that the Voluntary Pool established under the EUCP Mechanism has a strong potential of bridging the coordination needs between regional capacities with global coordination. The Pool can accommodate the active involvement of the European regions in the commitment of assets for a joint European response.

• Needs-based assessments are the backbone of efficient disaster response.

Jesper Lund emphasized that a timely and accurate needs assessment is vital for ensuring efficient delivery of assistance during a crisis. Leon Prop stressed that bringing the voice of affected people to the table is vital for effective disaster response and suggested independent research on the perspective of affected people in disasters. Juha Auvinen referred to the ongoing development of a Voluntary Pool of assets under the EU Civil Protection Mechanism, which will allow keeping assets on standby for immediate deployment. The Pool is expected to enhance coordination and planning of the European response and to improve efficiency. With regard to health emergencies, Ian Norton stressed the need to of a rapid assessment of urban and also rural environments with regard to health infrastructures to significantly improve the planning for the deployment of Foreign Medical Teams. Further work is needed according to Jesper Lund on modelling and development of automatic systems to provide quality information during disasters. He confirmed the importance of rapid information specifically for the medical and search and rescue teams, stating the currently existing advanced needs assessment protocols give very precise but often not timely enough information to make a real impact in the

life-saving phase.

 Regionalisation of assistance can help increasing the speed and efficiency of disaster response.

Speakers agreed on the importance of further focusing on regional cooperation. Juha Auvinen emphasized the close operational cooperation between the EU Emergency Response Coordination Centre and the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre). He stressed the importance of further developing this cooperation. With regard to health emergencies, Ian Norton highlighted the need to advance the work at local and regional level to enhance the involvement of the Health authorities in the emergency management and to strengthen the understanding of emergency practice amongst health players.

• International efforts towards better coordination for emergency response should go hand-in-hand with a long-term vision for building resilience on community level.

Speakers referred to the importance of directing our common efforts to giving people the tools to help themselves, by building understanding of risks and first aid skills and by encouraging family preparedness plans.





PANEL 5 PARTNERING WITH THE PRIVATE SECTOR

How emergency managers engage best with the private sector

Speakers underlined the importance of partnerships between the civil protection and humanitarian communities and the private sector for meeting the current and future disaster management challenges in Europe and internationally, but also pointed to the specificities and uniqueness of each of these stakeholder groups. On the basis of good practices and experiences outlined by the panellists and the floor the panel identified key driving forces, components, motivations and incentives for effective partnerships, looking also at the potential and challenges for closer collaboration, including as regards win-win relationship and fostering staff motivation and exchange of skills and promotion and diffusion of new



technological innovation and governance practices.

The role of profit in long term sustainability of win-win initiatives as well as new forms of private sector engagement and implications thereof were highlighted. The panel also discussed what role could the EU play in creating an enabling environment encouraging to harness the potential for collaboration

with the private sector, balancing between ad hoc and more structured approaches and identifying a few priorities for actions in this regards notably through the creation of a high level platform for dialogue.

Partnerships between the public and the private sector should be perceived as a means rather than an end in itself

Andrea Debbane stressed that NGOs are end users for the private sector rather than customers. Partnership with the disaster management community is an opportunity for business not only to be more efficient, but is also an exchange and learning process in view of making best use of all resources. She explained some lessons learned from the activities of Airbus Corporate Foundation, notably related to air transport for humanitarian aid operations or using empty leg flights to facilitate prepositioning of relief items, as well as related to helicopters for search and rescue, urgent medicine delivery, satellites imagery, training and education activities and the specificities of the foundation model in the Europe.

Speakers agreed that public-private partnerships could enable a more efficient and better organised response. Ed Martinez pointed out that private companies can offer a wide range of skills and resources needed by the public sector and NGOs in cases of disaster preparedness and response, beyond supply chain assets including also human resources and expertise. According to Didier Le Bret, the private sector is essential for the

humanitarian sector also because it is often best placed to support the transition from the emergency intervention towards the reconstruction phase.

 In a context of disasters increasing in numbers and scale, there is a need of a stronger engagement with the private sector in emergency management

Didier Le Bret stressed that the increasing number, duration and scale of crises emphasize the need of stronger engagement of private actors. Speakers agreed that there is a lot of untapped potential of partnering with the private sector and that one of the primary added value that the business could bring relates to technological innovation and flexibility in the decision-making process. Jérôme Glorie pointed out that emergency management can benefit from the engagement of the private sector for its efficiency in delivering results and innovation in methodology and working processes, budgetary discipline and a global vision. He referred to the laboratory B-Life deployed in response to the Ebola outbreak in West Africa as an example of an effective added value of a public-private partnership in disaster management.

 Strengthening public-private cooperation in emergency management requires shifting the paradigm into long-term partnerships, built on trust between the disaster management community and private companies

Jérôme Glorie stressed that a successful public-private partnership requires a win-win approach, and in order to address obstacles, partners need to be aware of each other's' priorities and objectives. He referred to the example of public-private partnership of the Belgian civil protection authorities and BASF for the development of a Turbojet response asset which was present at the outdoor exhibition of the Forum. Didier Le Bret pointed out amongst the main challenges for partnerships with the private sector the issues of legitimacy and ethics. Due to the profit nature of business, there is often a lack of trust from traditional actors as regards the intentions of the private sector for engaging in humanitarian matters. Didier Le Bret referred to foundations as a successful model to bring forward synergies from the two sectors and to address part of the existing mind-set challenges.

Alan Kuresevic agreed that trust is a key factor for further developing public-private partnership and stressed that reasons for the private sector to engage in disaster management go well beyond strict profit motives. They include corporate social responsibility, operational environments to test technological innovation, staff motivation in benefiting society etc.

Andrea Debbane referred to the example of Airbus Foundation to stress that effective partnership needs an added value from each partner and bring complementary expertise together, for instance humanitarian aid expertise guiding the business on decisions as regards efficient use of transport solutions or assets prepositioning during emergencies.

PANEL 6: SCIENCE-BASED DISASTER MANAGEMENT

Advancing disaster management through scientific support

This panel focused on the importance of robust scientific and evidence-based methods for understanding risks and informing risk management planning and the difficulties in bridging the "science-policy gap", as well as in bringing together a wide group of stakeholders.



Key messages:

 There is a need for a sustainable, structured and coordinated approach to the sciencepolicy interface.

Delilah al Khudhairy, Graham Willmott and Andy Kirkman spoke about the need for a sustainable, structured and coordinated approach to the science-policy cooperation. Faced with increasing vulnerabilities and potentially greater disaster impacts, including on growth, it is important to find better ways to make knowledge accessible and draw on the wealth of existing information about the disaster cycle. Delilah al Khudhairy explained how the proposed knowledge centre for disaster risk management, operated by the Commission, could provide such a sustainable and coordinated mechanism. It would have three main strands of work: EU-science partnerships, working with users, and setting up a science-industry platform building on the DRIVER project results. Graham Willmott described how the Community of Users brings together security research stakeholders from different fields. Its primary aim is to make information more accessible. Andy Kirkman laid out how the Natural Hazards Partnership provides a route for decision-makers to access research and data about natural hazards and risks. It has worked successfully already for a while and, crucially, has proven economic benefits.

• Different communities involved in disaster management such as scientist, policy-makers,

industry and end-users need to work together.

In order to improve disaster management, it is important to know underlying vulnerabilities and risks and enable people in the field to do their job better. But a number of speakers emphasised that sharing knowledge was not always straightforward and that it was important to understand the different stakeholders involved. Scira Menoni spoke about the FP7 research project 'Knowledge 4 DRR' which looked into knowledge transfer and how this was a social rather than a purely technical process. Different types of knowledge - e.g. scientific, administrative, and 'common knowledge' also played a role in making knowledge transfer difficult. It was important to overcome boundaries between both different type of knowledge and different communities. Graham Willmott emphasised that one of the main tasks of the Community of Users was to bring together as wide a stakeholder group as possible. Andy Kirkman added that the NHP included 17 organisations who discuss common themes, curate data e.g. for science notes on hazards, and identify gaps. He also spoke about the difficulties in such partnerships, e.g. the different remits and funding levels of organisations. There was a need to work with those differences and find overlapping interests. Delilah al Khudhairy referred to the work on risk assessments, which often brings together different policy communities, and how the work on national risk assessments could contribute to work on cross-border risks and pan-European scenarios.

The evidence base for scientific and technological innovation needs to be considerably improved.

According to Graham Willmott, the initial impetus for the community of users came from not knowing whether security research results were relevant and visible for the right people. In order to improve the information flow, it was necessary to understand the needs of the security industry and also know about research from related fields. Operational needs could then also be fed back into the research design cycle; industry, on the other hand, could benefit from better understanding their potential customers. Delilah al Khudhairy stressed that research results should be analysed in view of their usability, while identifying gaps in knowledge. Merle Missoweit described how DRIVER, which included five core projects and had a budget of over €46m, was a response to the growing complexity of crisis management and related innovation needs. Innovations should be modular and address multiple hazards. The evidence-base for technologies had to be improved – most users wanted tried and tested products – and DRIVER provides a system for testing new technologies. DRIVER is based on a gap analysis carried out under a previous FP7 project, ACRIMAS, showing how research results feed further work. Andy Kirkman pointed out that the amount of available information was a risk in itself, as it needed to be vetted and curated to maintain consistency and quality. Scira Menoni stated that knowledge has to be "fit for purpose" in a given policy or operational context.

• Importance of involving users

Graham Willmott set out how the Community of Users aimed to help the security industry know and understand both research results and innovation needs. However, it is close to

impossible to involve all potential users and field experts. Scira Menoni emphasised that it was important to know knowledge needs first before starting activities in this area. For example, her research had shown that regional authorities – often first responders and product users – were much more sophisticated in their understanding of disaster risk management than anticipated. Andy Kirkman mentioned the important role of users in scenario-planning, which can be an opportunity to let them ask questions ahead of time. A comment from a civil protection expert in the audience focused on the need to make information accessible to users and responders who operate in the field. Andy Kirkman agreed that it was the users who take a risk and have to make quick decisions, and that some new technologies were outstripping our capacity to use them. Scira Menoni presented the positive example of the STOP manual in Italy, which was very simple and accessible but based on advanced science.





"We have a wealth of knowledge about disaster risk management and we need to capitalise on this knowledge."

Delilah Al Khudhairy, Head of Unit Global Security and Crisis Management, Joint Research Centre, European Commission

"We must curate the knowledge, information and data that is sent to decision makers."

Andy Kirkman, Deputy Director for Government Services, Met Office, United Kingdom



Special address by Carlos Moedas, European Commissioner for Research, Science and Innovation

In his special address, prior to the plenary session and three panel discussions dedicated to innovation, Commissioner Moedas outlined the importance of collaboration and unified action by the disaster management and the science and research communities. Collaboration between the two communities will enable better setting of research and innovation priorities and will ultimately ensure that European research and innovation will be of use to those on the ground.



Key messages:

Peace and security in Europe are the result of unified action and collaboration.

Open dialogue and partnerships allow knowledge to be shared and innovation to take root. The European Civil Protection Forum provides the perfect chance for meaningful ties to be made and collaboration to be stimulated amongst experts.

Open collaboration is vital in today's interconnected world.

Nowadays, instability in one region or a disaster in one town can have negative spill-over effects in other regions and towns. The work of disaster management community fuels our resilience and helps us to prevent the unthinkable.

The demand for resources will continue to grow.

Violence, conflict and natural disasters will continue to displace entire populations. There

is ever-increasing demand for safe drinking water, food, healthcare and energy.

 Practical, workable ways of coordinating research for risk reduction and disaster prevention must be established at the EU and international levels.

The Sendai Framework for Disaster Risk Reduction 2015-2030 was recently agreed. It emphasised the role of research and the need for new, holistic solutions. The EU is taking steps to intensify its international research and innovation collaboration for disaster risk reduction.

 European innovation is already providing vital data to governments, scientists and international relief services.

Horizon 2020 allows for multinational, interdisciplinary research and innovation – involving a wide range of stakeholders – to keep citizens safe. In addition, Demonstration projects can examine new ways of dealing with disaster risk reduction.

• Social innovation can be as equally important as scientific and technological innovation.

Research, alone cannot have an impact without effective communication, coordinated action and the meaningful engagement of citizens and the civil society. Efforts in research and innovation are insignificant without empowering those who provide relief and the conditions for communities to recover.

 Insight and input of disaster management professionals is required to make research and innovation useful to those operating on the ground.

Research and innovation priorities should be informed by the experience of experts in disaster risk management. Unified action will be the difference between mere survival and real recovery in the face of the many challenges to come.

PLENARY SESSION INNOVATION IN DISASTER MANAGEMENT

Civil Protection Directors-General from Member States

Civil Protection Directors-General from Participating States to the EU Civil Protection Mechanism and from Turkey provided their national perspectives and examples on innovation: What does innovation mean for civil protection and disaster management authorities, the challenges of getting end-users linked into the research and development activities, the importance of closely working with the private sector on innovative solutions. The speakers shared practical ideas for further work at European level, such as a common radio frequency for disaster management communication, the pooling of resources for renting satellite bandwidth for crisis communication, the communication and outreach to the end-users on innovative technologies and innovation results, the importance of social media in crisis communication.



Key messages:

• Develop at European level a one-stop shop and platform for communicating on innovative technologies and research results.

All speakers stressed the importance of enhancing the links between end-users and research, academia and the private sector whenever new technologies are being developed. These links need to be developed at all levels and should involve the various first-responders communities (i.e. emergency managers, police, armed forces, etc) in a cross-disciplinary process and with a view to enhancing interoperability among sectors and among countries. A European repository/platform of research projects was considered useful in this regard. In addition, communication on research and innovation results should be done in a way that is understandable and user-friendly for non-scientists (first-responders and decision-makers). Such a repository/platform would help projects and local initiatives to disseminate their results. Some initiatives in this sense already exist in

some countries including Sweden and Germany. Claus Sorensen (DG ECHO) mentioned that a one-stop shop will be developed with the support of the Joint Research Centre. This future platform is currently referred to as the Disaster Risk Management Knowledge Centre. It has links with the Community of Users developed in the security research area.

• Engage with the private sector to steer innovation to make it usable and provide guarantees that results will be used by the disaster management authorities.

The importance of sitting at the same table with the private sector and agreeing on a common agenda when it comes to developing innovative solutions for disaster management was underlined by Helena Lindberg. Several examples of new tools developed with the private sector were presented in the areas of social media applications (Germany), satellite communication systems for on-site coordination (Luxembourg), CBRN equipment (Croatia), medical evacuations (Germany), Camp management (Turkey), and emergency shelter (Sweden). Michel Feider stressed that there is a need for a public facilitator (government/European Commission) to put in place new technologies developed by the industry and share the associated risks. One of the instruments to facilitate this is the pre-commercial procurement (PCP), which increases the probabilities that once a product is developed it will be taken up by the public sector (an example is the PCP on smarter protective equipment systems.

Social media use is key in crisis communication, situation assessment and early warning.

Speakers discussed the important role of social media in disaster management and the impact of this new tool. Jadran Perinic pointed out that information management is the backbone in emergency response, including managing social media information. Fuat Oktay stressed that it is also important to train citizens in using social media during an emergency. Social media can be used for avoiding misinformation during a disaster. Laurent Prevost explained how the French civil protection department is currently using social media for early warning (big events become visible immediately on social media), for situation assessment (based on photos or comments), and also for giving correct information to the public. This work is currently carried out by a small team in COGIC (the national civil protection operations centre in France), which is also using digital volunteers for processing data when needed (e.g. for localising French nationals in Nepal after the recent earthquake). Franz-Josef Hammerl provided the example of a warning application used in Germany. Relevant authorities can send out warnings and advice on appropriate behaviour following specific events.

• The European Commission should become a facilitator for the uptake of certain technologies (common radio frequency, satellite capacity for crisis communication)

Speakers pointed out issues on in the uptake of new technologies where a common approach at European level would have significant benefits for all countries. One practical example is the renting of satellite capacity for emergency communication during disasters, proposed by Michel Feider. This capacity renting needs to be arranged in advance, as it becomes otherwise too expensive once the event has occurred. The capacity is not

necessarily needed by all states at the same time. Another suggestion, brought up by Helena Lindberg, related to an agreement at European level on a dedicated radio frequency for emergency communication during disasters, allowing communication of data (e.g. for video streaming, photos).



"The Joint Research Centre is a hidden gem and should do more outreach on its work."

Helena Lindberg, Director-General, Civil Contingencies Agency, Sweden

"Social media is no longer seen as threat to crisis management, but as an excellent opportunity."

Laurent Prevost, Prefect, Director-General for Civil Security and Crisis Management, France

"The long procedures for EU research project selection should be reduced, as it makes it difficult to innovate at the necessary speed in the disaster risk management field."

Fuat Oktay, Director General, Prime Ministry Disaster & Emergency Management Authority, (AFAD), Turkey



PANEL 7: INNOVATION IN THE FIELD

Using new technologies including unmanned aerial systems for assessment and mapping

This panel discussed the use of different types of unmanned aerial systems (UAS) in disaster management, with focus on the benefits and challenges. Panellists ranged from UAS operators, researchers, and the European Commission. The discussion was focused on the panellists' experience and lessons learned with UAS to date and their views on necessary conditions for the effective use of this new technology, including the regulatory framework.

Key messages:

 Regulators need to provide guidance and certainty for the development of new technologies, such as UAS.

Private companies are reluctant to invest in new technologies, such as UAS, if their deployment is threatened by regulatory uncertainty. A clear and simple regulatory framework provides confidence to private operators to invest in new technologies. Regulations can inhibit innovations. Therefore the framework must stay flexible.

 The regulatory framework for UAS should take account of the special case of disaster management.

Whilst putting a regulatory framework in place was considered to have the potential to result in a more rapid development of the industry, the special role of disaster management was emphasised. In disaster management the use of UAS should be governed by a specific regulatory framework extended to national and international actors. The European Commission is currently working on its approach regarding commercial UAS. As part of this work, three pillars are considered: (1) the regulatory framework, (2) enabling technologies, and (3) educating the society at large.

 With an increasing number of UAS operators involved in disaster management (in particular in response to disasters) there is a need for an industry-wide code of conduct and rules of procedure.

The proliferation in the number of UASs operators requires attention, as there is potential for 'things to go wrong' with too many operators vying for space in this booming sector. A code of conduct has already been suggested by some actors active in the UAS space (e.g. Patrick Meyer). The public benefit must be kept in mind – the UASs should only be used in disaster management when there is a clear reason to do so. At the moment it is not possible to control in a systematic way how many UAS are deployed and by whom. Discussions are planned for later this year with various stakeholders on how to devise a system for detecting UASs that are being deployed.

• For UAS to be used to their full potential in disaster settings it is necessary to integrate them with the existing disaster management / humanitarian aid systems in place.

Evidence from successful past deployments suggests that UAS are of most useful when they are 'part of a package' offered by civil protection / humanitarian aid actors. UASs operators need to connect with the existing actors during the response in an emergency.

Interoperability may be required for the UAS technology to thrive in the future.

At the moment there are many different systems / manufacturers / researchers working on UAS. For the technology to continue developing there needs to be a level of interoperability. Part of the research community is going in that direction, whilst private operators continue to see value in developing proprietary technology.

 There is a need to educate the public about the potential benefits of using UASs for disaster management purposes.

The public is in general poorly informed about the potential use of UASs for a 'good' purpose, such as disaster management. There is a need to invest in the education of the public to change the current perception (e.g. military use).



"Every disaster needs assessment."

Peter Spruyt, Scientific/ Technical Project Officer on Global security and crisis management, Joint Research Centre

"We need regulations. There may be exceptions to these regulations but we cannot close our eyes to what is happening."

Javier Gilabert, Associate Professor, Universidad Politécnica de Cartagena, Spain

PANEL 8 INNOVATIVE PARTNERSHIPS IN TRAINING

Forward-looking cooperation between professional, academic and research communities

There is a growing recognition of the complexity of disaster risk management, and of the importance and need of a robust and interdisciplinary approach to training for disaster risk managers and operators. In Europe, disaster management training is fragmented, without a common curricula or learning objectives. There is no mutual recognition or equivalence of courses and diplomas. There is also a lack of common terminology. Disaster management training would benefit from more multi-disciplinary partnerships between the academic and scientific community, governmental departments, non-governmental organisations, and private operators.

Speakers discussed possibilities to build more sustainable and effective partnerships and standards in the training sector. Discussions revolved around legislative, political, financial, technical and other barriers, and highlighted positive examples of partnerships.

The European Commission introduced the new Disaster Management Training Network designed to facilitate closer cooperation in training by bringing interested actors together.

Key messages:

Disaster management cooperation would benefit from a stronger networking in training

Volunteer's organisations continuously invest in training staff to build capacity and improve its operability. In the private sector, training drives competitiveness enabling the business to be on the cutting edge of the markets. There is a strong potential in joining forces between the different stakeholders in order to define training quality standards and converge to commonly agreed good practices.

• The EU Training Network is expected to unleash a lot of untapped potential for collaboration in disaster management training

As the number of training networks already exist, for instance within universities, there is an emerging need of better coordination between the different actors and for an enhanced alignment between curricula, learning objectives, and diverging approaches within these systems. There is often no common understanding of definitions. The training offer is not sufficiently geared towards the actual needs. Research is not effectively linked to the practice and professional trends. The European training network will aim at creating a platform where universities and their networks could meet and discuss training related topics with professional disaster management organisations, and cooperate with volunteers and private companies. The first and most important activity of the EU Training Network will be to map the existing training offer, to organize it according to different criteria (vocational vs academic training, scientific vs human science training, etc.), and to analyse commonalities and differences.

Future developments: the important international dimension of networking

The challenges for training standards, training offer and training needs at European level are often comparable at the global level. Examples of evolving good initiatives in this field include the USA National Academy of Science, and the Chinese Academy of Governance. While the first is counting on own resources, joining the



forces of governmental entities, scientific networks and private organisations, the Chinese outfit works on capacity building and institutional strengthening at central governmental level, selecting the best practises available in Europe. None of the existing processes is mature enough to set standards. Cooperation among national, federal, or regional actors will be only possible, once the different networks start communicating with each other.



PANEL 9 CRISIS COMMUNICATION

New communication technology and social media in disaster prevention, preparedness and response

Speakers discussed the use social media in disasters management, the main challenges and opportunities that it offers, and the added value of new technologies.





Key messages

• Artificial intelligence is progressively used to support human work.

The challenge lies in the enormous amount of data that needs to be gathered and processed in order to train the artificial intelligence before it learns to recognize relevant data with sufficient accuracy.

• Innovative communication means are successfully used for humanitarian work.

Patrick Meier, co-founder of the Digital Humanitarian Network (DHN) and author of the forthcoming book "Digital Humanitarians" explained that the overflow of information generated during disasters can be as paralyzing to humanitarian response as the lack of information. Making sense of enormous amounts of data is proving to be a significant challenge for traditional humanitarian organizations. The purpose of "Digital Humanitarians" is to provide through a network an interface between formal professional humanitarian organizations and informal yet skilled volunteer & technical networks.

James Powell provided examples of tools used by UNICEF to support humanitarian workers, including U-report, a tools based on SMS and Twitter used to inform on disaster preparedness, e.g. in Uganda. U-report is also used as a tool for informing young people about HIV/AIDS in Zambia and to fight Ebola in Liberia. Another UNICEF innovative communication tool successfully used in Uganda is an SMS-based and web-based data collection and analysis platform. mTrac is used nationwide by health facility workers in health facilities and has successfully tracked the health facility stock of essential medicines.

 Traditional communication need to be continued in order to reach people who do not use social media.

Bart Bruelemans stressed that the use of social media proved to be very useful in a two-

way communication between responders and the wide public. He pointed out that people on the spot are always faster than first responders and they can inform about an incident very quickly and accurately. Experience shows there is a significant part of the people who do not use social media. They receive information through traditional channels, such as phone calls. Traditional ways of communication still have an important role in crisis communication and should not be underestimated. This was also confirmed in the EU civil protection exercise Prometheus 2014, carried out in Greece.

We need to be flexible enough in planning to adapt to the fast changing technology in this area.

Speakers discussed the challenges for security and confidentiality of data used in social media. Panellists agreed this is a sensitive issue, and approaches varied across different countries. Katja Evertz pointed out that the data protection law in Germany is one of the strictest in the world. This leads to additional challenges for identifying which data is public. Also, social media tools and user groups are changing over time. It is therefore important to adopt a comprehensive approach for the use of information from social media and rely on a wide range of sources. Kelly Saini stressed the importance of training of relevant authorities and first responders in the use of social media and exercising the procedures. Speakers agreed that the approach to social media is also influenced by different cultural backgrounds and mind-sets. Another challenge identified relates to the need of informing people after an imminent threat is gone. It is important to build trust in the information and reliable post disasters procedures.

UNICEF has recently opened the Global Innovation Centre in New York tasked to assess UN innovation projects in the area of crisis communication and social media and to ensure their best use in practice.

All speakers agreed on the need of a common platform to link and share relevant data to disaster management which could be used not only during emergency response but serve to generate knowledge in the long-term.





AWARD CEREMONY

TRAINING CERTIFICATES UNDER THE EU-CHINA DISASTER RISK MANAGEMENT PROJECT

During the closing ceremony of the European Civil Protection Forum, the Director General of DG ECHO, Claus Sorensen, together with the Head of the civil protection of France, Mr le Prefet Laurent Prevost, representing the European consortium composed of institutions from seven European Member States implementing the EU-China Disaster Risk Management Project in China and in Europe and Mr GONG Weibin Director General of the National Institute of Emergency Management (NIEM) in Chinese Academy of Governance (CAG), delivered training certificates to three successful Chinese colleagues from the Emergency Management Office of Quingdao city, a 6 Mio inhabitants city in Shandong Province, East of China. They represent a group of 125 students that have successfully completed the training activities under the EU-China Disaster Risk Management Project.



This project aims at supporting China in developing it disaster risk management system. It is co-financed by the European Commission through EU development funds and by the Chinese authorities. An EU China Institute on Disaster Management has been created and is operating in Beijing. Training activities are conducted in Beijing, in Europe and in a number of selected Chinese provinces.

SIDE EVENTS

EUROPEAN COMMISSION - COMMITTEE OF THE REGIONS JOINT EVENT "EUROPEAN REGIONS AT THE FOREFRONT OF DISASTER MANAGEMENT"

Summary

The European Commission DG for Humanitarian Aid and Civil Protection (DG ECHO) and the Committee of the Regions' (CoR) Commission for Natural Resources (NAT) organised on 5th May 2015 a joint debate with regional and local authorities on a stronger cooperation in disaster management. The Joint Event "European Regions at the Forefront of Disaster Management" discussed the role of local and regional authorities in disaster management, links with the Union Civil Protection Mechanism, and the existing EU financial instruments to support disaster management capacity and resilience at local and regional level.

For the first time, local and regional authorities discussed in this format with national civil protection experts and EU policy makers, sharing their views and increasing their awareness on the existing resources at EU level for disaster management. Participants identified a great potential for future cooperation in disaster prevention, preparedness and response.

Discussions were organised in two panels. The event was hosted by Christos Stylianides, European Commissioner for Humanitarian Aid & Crisis Management together with José Luis Carneiro, Leader of Baião Town Council in Portugal and Chair of the NAT Commission at the Committee of the Regions. Claus Sorensen, Director-General for Humanitarian aid and civil protection at the European Commission, chaired the discussion in the first panel on the EU Civil Protection Mechanism and presented the conclusions of the joint debate. Anthony Gerald Buchanan, 1st Vice Chair of the Commission for Natural Resources, Committee of the Regions, chaired the second panel on the wide range of EU instruments available to regions for resilience building.

Discussion underlined areas in which the EU can further support local and regional levels in building resilience including through enhancing citizens' preparedness and awareness of disaster risks and in developing local capacities and resilient infrastructure by making best use of existing EU financial and operational instruments on cohesion and civil protection policy.





Speakers:

Opening addresses:

Christos Stylianides, Commissioner responsible for Humanitarian Aid & Crisis Management

José Luis Carneiro, Chair of the Commission for Natural Resources, Committee of the Regions

Claus Sørensen, Director-General for Humanitarian Aid and Civil Protection (ECHO), European Commission

Panel discussion 1: "The EU Civil Protection Mechanism: what added value for EU Regions?":

Chair: Claus Sorensen, Director-General for Humanitarian Aid and Civil Protection (ECHO), European Commission

Mark Weinmeister, State Secretary for European Affairs, Land of Hesse, Member of the Committee of the Regions

Cristina D'Angelo, Director of Civil Protection, Rome Municipality, Italy

Adam Banaszak, Committee of the Regions Rapporteur on the EU Civil Protection Mechanism, Member of the Kujawsko-Pomorskie Regional Assembly

Martijn Warmerdam, Director, Reeleaf, Netherlands and MIRG-EU project

Panel discussion 2: "Using EU instruments to build resilience at local and regional level"

Chair: Anthony Gerald Buchanan, 1st Vice Chair of the Commission for Natural Resources, Committee of the Regions

Florika Fink-Hooijer, Director for Strategy, Policy and International Co-operation, DG ECHO, European Commission

Charlina Vitcheva, Director Smart and Sustainable Growth and Southern Europe, DG Regional and Urban Policy, European Commission

Harvey Siggs, Committee of the Regions, Rapporteur for the Post 2015 Hyogo Framework for Action: Managing risks to achieve resilience; Councillor, Somerset County Council

Antonio Monni, Head of the Monitoring and Surveillance Centre, Emilia Romagna Region, Italy

Highlights from Panel 1

 Regional and local authorities carry the first responsibility for disaster management and have a large stake in the activities of the EU Civil Protection Mechanism (EUCPM)

When a disaster strikes, local and regional authorities are best equipped with knowledge and key assets for efficient first response. Speakers pointed out that although in certain countries disaster management may fall to a larger extent with the local and regional level, the work with the central national level and even the European and international level has an important role.

Cristina D'Angelo stressed that municipalities are closely engaged with the citizens and have an important role to play in building a structured and coordinated voluntary service and empowering resilient citizens. European regions play an important role under the Mechanism

in bringing assistance to those in need. Mark Weinmeister referred to the example of the Slovenia sleet emergency when the Land of Hessen provided much needed support, facilitated through the EUCPM. Another example of the regions' cooperation under the EUCPM is the EU Maritime Incident Response Group. Martijn Warmerdam explained how EU funding brings together cross-border regions in Europe to build together a better response to incidents on passenger ships and cargo vessels.

Local and regional authorities have also a particularly important role in developing risk assessments. Under the EUCPM national or equivalent risk assessments are now legally required from the Member States by the end of 2015.

Regions and local authorities provide also crucial knowledge and expertise for the assessment and planning of disaster risk management capability at different levels of governance. Adam Banaszak welcomed the important place allocated in the new legislation on the EUCPM to regional and local authorities in this respect and for better risk management planning. He stressed the importance of active involvement across all levels of governance to deliver in 2015 effective, specific and applicable plans for times of crisis.

In the context of new challenges in disaster management, the EU Civil Protection
 Mechanism provides a platform for a stronger and coordinated response in Europe and globally

Because societies are becoming more interconnected, risk profiles are changing and becoming more complex. Prevention and preparedness planning based on sound risk assessments are instrumental in such context to allow for efficient response to disasters and risk management. The EUCPM supports and complements Member States efforts for strengthening prevention, preparedness and response systems to disasters at all levels, including local and regional. Adam Banaszak emphasized the valuable role of the EU Emergency Response Coordination Centre for facilitating coordinated response and for maximising resources in disaster management.

The EU can fund up to 85% of the transport cost of assistance provided under the EUCP Mechanism. Martijn Warmerdam pointed out the importance for the regions of the transport support provided under the EUCPM for operational assistance. He stressed the potential for the MIRG project of joining the voluntary pool of assets under the Mechanism in order to bring regional capacities for future assistance operations to regions and countries in need. Joining forces under the voluntary pool of the EUCPM is important in order to mitigate the impact of incidents as well as to enhance the knowledge and capacity of the experts deployed in the field as EUCPM teams.

 Engaging in disaster management has a strong economic underpinning. It protects and stimulates growth

Claus Sorensen pointed out the importance of effective engagement in disaster management for creating a stronger economic and investment climate in regions and municipalities across Europe. He stressed that preparedness plans and risk assessments are necessary for accessing

EU structural funds for disaster risk management. Local, regional and national authorities and the EU have strong interest in working closer together and exchanging best practice for making best use of the available funding.

Referring to the EUCPM, Martijn Warmerdam stressed that pooling resources together is enhancing response efficiency, but has also a strong economic benefit for regions and countries that do not have sufficient resources to develop independently specific capacities and expertise. Florika Fink-Hooijer stressed that disasters affect the growth potential also of economically strong countries and impede competitiveness of regions and countries and, in turn, of the EU. Harvey Siggs emphasized the importance of engaging the private sector including the insurance business as partner in disaster management and sharing data as well as sharing the risk and responsibility.





Highlights from panel 2

• Risk assessments are a key element for EU policies and funding

Florika Fink-Hooijer emphasised the crucial importance of effective risk assessments as a prerequisite for tapping into the available EU funding opportunities. Risk assessments also linked EU civil protection legislation to EU regional policy as regional funding for disaster prevention activities was now conditional on having a risk assessment in place. The EU Floods Directive and Environmental Impact Assessment Directive also required risk assessments, to name but a few other policy areas.

 A wide range of funding opportunities is available from the EU budget to help municipalities, regions and countries in Europe to foster their disaster resilience, including response capacities.

Florika Fink-Hooijer stressed the existing cooperation between the EUCPM with the science and research community, including the EU Joint Research Centre, and encouraged all levels of governance in Europe to explore the potential of engaging with science and tap into the existing funding for research for prevention, preparedness and response.

Charlina Vitcheva explained that EU cohesion policy includes a thematic objective on risk management and prevention measures. A budget of 7 billion euros is available in the programming period 2014-2020 for investment activities in these areas. Access to funds was

conditional on having a risk assessment in place, a provision known as 'conditionality'. In addition to the Cohesion Fund, the EU Solidarity Fund provides post-disaster assistance to national and regional authorities hit by severe natural disasters. To benefit, a country must demonstrate implementing relevant prevention actions from EU legislation, e.g. the Flood Risk Management Directive. Antonio Monni shared his experience from the Emilia Romagna Region in using EU funds for disaster recovery and pointed out that the resources received under the EU Solidarity Fund have played a decisive role in recovery as well as in building the region's resilience.

In reply to one of the questions from the audience it was emphasized that the development of civil protection modules can be supported with EU funding. Overall, regional and national authorities should further explore the potential of EU instruments to strengthen their disaster management capacities.





Conclusions

In his concluding remarks, Claus Sorensen reiterated the importance of regional and local authorities' involvement in the activities of the EU Civil Protection Mechanism and stressed the existing financial and operational opportunities that regions and communities can benefit from including exchange of experts, trainings, sharing civil protection capacities under the voluntary pool and risk assessments. Areas with potential for cooperation between the EU and the local and regional levels were identified such as building resilience of key infrastructure and improving citizens' preparedness and awareness of disaster risk.





HIGH LEVEL ROUND TABLE "TOWARDS A CLOSER ASSOCIATION TO THE EU CIVIL PROTECTION MECHANISM"

Summary

On 6 May 2015, the European Commission organised a High-Level Round Table discussion with civil protection representatives of 44 countries from the EU, the EU Neighbourhood and the candidate and potential candidate countries. Based on an issues paper, participants were invited to reflect on future cooperation in the field of civil protection and the links with the ongoing review of the European Neighbourhood Policy. The discussion showed a clear convergence of views on the following conclusions:

- **Disaster risks are increasing**, both world-wide and within our region. The human and economic impact of disasters in the last decade is staggering.
- Both the EU and its Neighbours value the existing civil protection cooperation based on regional programmes on prevention, preparedness and response to disasters (PPRD), which have proven to be mutually beneficial.
- The EU Member States and the EU Neighbours are united in their wish to further develop and increase this cooperation. All participants agreed that a longer term vision and more permanent cooperation arrangements, based on agreed objectives and interests, are now necessary.
- As there are differences in the risk profiles and preparedness of the Neighbourhood countries, the precise needs and priorities vary. This underscores the need for a tailormade and differentiated approach, focusing on different partners' priorities.
- Further cooperation should aim to bring the Neighbours closer to the EU Civil Protection
 Mechanism by developing partnerships with those that are ready to work towards agreed goals, thus allowing for a differentiated approach.
- Civil protection is seen as a key focus area for the future European Neighbourhood Policy, both by Member States and Neighbourhood countries. Future funding from the European Neighbourhood Instrument will be key in supporting Neighbours in their progress towards the agreed objectives and in facilitating civil protection cooperation.
- This should also allow for sub-regional pools of cooperation, based upon shared interests
 and common risks, addressing common challenges of EU and neighbouring countries. This
 includes for instance early warning systems for floods, forest fires and tsunamis; common
 response mechanism for forest fires, floods and earthquakes; training and exercises.

Introduction

On 6 May 2015, A High-Level Round Table discussion on closer association with the EU Civil Protection Mechanism gathered representatives of 44 EU Member States, EU Neighbourhood countries and enlargement countries. Participants included national Directors-General for civil protection, Ambassadors, high-level experts from national Civil Protection departments, and representatives of the national embassies in Brussels. The Commission was represented by the Director-General for Humanitarian aid and Civil Protection (DG ECHO), the Director-General for

Neighbourhood Policy and Enlargement Negotiations (DG NEAR), as well as the Managing Director of the Crisis Response & Operational coordination of the European External Action Service.

In his introduction, Director-General Sørensen (DG ECHO) considered the increase in disaster risks and the need to step up cooperation and coordination at all levels. The EU has recently developed its legislative framework for civil protection, placing additional emphasis on prevention, preparedness and planning. Cooperation with the EU Neighbourhood needs to be further developed, based on similar ambitions and objectives.

Director-General Danielsson (DG NEAR) explained the ongoing review process of the ENP, highlighting the EU's willingness to be a key partner for all the countries in the Neighbourhood region, in disaster management and more broadly. He mentioned that the Commission views civil protection as a focus area for the future ENP. He encouraged Neighbourhood countries to voice their views in the ongoing stakeholder consultation.

Director Serrano (EEAS) reflected on the broader security context, reaffirming the continued importance of the EU Neighbourhood for Europe's Security Strategy and emphasising the link between disaster management and societal security and resilience.

In their contributions participants reflected on the past cooperation with the EU Civil Protection Mechanism, and on their interest to engage in a closer and longer-term partnership with the Mechanism on the basis of agreed principles and objectives. Participants identified challenges and opportunities for deepening the cooperation, and emphasised the need for the future ENP to include civil protection as a focus area.

The following key messages arose from the discussions.

• The increase in disaster risks calls for more international coordination

Director-General Claus Sørensen referred to Sendai conference statistics, which show an increasing trend in the world's vulnerability to disaster risks. The human and economic impact of disasters in the last decade is staggering, with a total estimated economic cost of USD1.4 trillion and a total number of 1.7 billion people affected and 700 000 lives lost. Europe and its Neighbourhood are not spared.

The underlying drivers of this increasing vulnerability — a mix of climate change, industrialisation and urbanisation — are not going away. On the contrary, the evidence suggests that the kind of disasters we witnessed in recent years will be more frequent and intense in the future.

Disasters can easily overwhelm the local or national capacity to respond. This is the reality for all countries, big or small. Moreover, in today's interdependent world, disaster risks in one country are likely to have a direct impact on other countries. Coordination, joint efforts and a common response will always be more effective than any country acting on its own. A holistic approach to disaster management, considering all phases of the disaster cycle, and all risks and hazards is crucial for a safer world.

• The EU and the EU Neighbourhood are united in their wish to strengthen civil protection cooperation between the EU and Neighbourhood countries

Civil Protection cooperation with EU Neighbourhood countries developed in the past on the basis of successive regional programmes, and has proven mutually beneficial.

All participants agreed that a longer term vision and more permanent cooperation arrangements, based on agreed objectives and interests, are now necessary. The EU and its Member States share a common interest in stepping up cooperation in the field of civil protection.

There is considerable interest among EU Neighbours to become partners of the European Union Civil Protection Mechanism (UCPM)

Several Neighbourhood countries expressed their interest to enter into an associated partnership with the UCPM, as proposed in the issues paper. This would allow them to join in specific UCPM activities on the basis of an agreed set of principles and objectives. This should lead to a better cooperation in the response to disasters and a more structured exchange of knowledge and good practices on prevention and preparedness.

Disaster management needs to be a key area of the European Neighbourhood Policy (ENP)

The ENP was created to build new partnerships with the EU's direct neighbours, based on fundamental values, stability and prosperity. After 12 years from its first drafting, the Commission identified the need for a fundamental review of its Neighbouring Policy. It identified four key drivers for this review: the need for more differentiation, ownership, focus and flexibility. The ongoing stakeholders' consultation on the ENP review is an opportunity to consider how the EU can more effectively and pragmatically support the development of an area of shared stability and prosperity with EU partners.

Many participants considered civil protection to be a key focus area for the future ENP. In a context of increasing disaster risks, civil protection is a key component of societal security and resilience.

Future funding from the European Neighbourhood Instrument is key in supporting Neighbours in their progress towards the agreed objectives and in facilitating civil protection cooperation. This should also allow for flexible types of cooperation such as sub-regional pools of cooperation, based upon shared interests and common risks, addressing common challenges of EU and neighbouring countries. This could include for instance early warning systems for floods, forest fires and tsunamis; common response mechanism for forest fires, floods and earthquakes; training and exercises.

