



5th ANNUAL CONFERENCE

Interagency Interaction In Crisis Management And Disaster Response

AGENDA

Time	Activities
DAY ONE: 01/06/17 THURSDAY	
0800-0900	Registration
0900-0910	Welcome note KRASIMIR KARAKACHANOV Deputy Prime Minister for Public Order and Security and Minister of Defence of the Republic of Bulgaria Opening remarks: COL Vassil ROUSSINOV CMDR COE Director
0910-1025	Keynote speakers panel: Rear Admiral Peter A. GUMATAOTAO Deputy Chief of Staff, Strategic Plans and Policy in Supreme Allied Command Transformation (SACT). Mr. Jean-Dominique DULIÈRE - CRISIS MANAGEMENT AND RESILIENCE Head of Crisis Responses and Exercises Section in NATO HQ, Brussels. BG Konstantinos ALEXOPOULOS - ENERGY SECURITY IN SOUTH-EASTERN EUROPE Director of A6 Directorate (Civil Defence, CIMIC and Civil Emergency Planning) of Hellenic National Defence General Staff and the Chairman of the Coordinating Committee of the Multinational CIMIC Group. Energy security is under increasing, global threat. As technologies, sources of energy and power generation evolve, so do the levels and complexities of threat. It includes additional factors such as ensuring price stability, business continuity and timeliness, as well as security of network infrastructure. The latter is a prerequisite for the development of others and guaranteed by the use including the Armed Forces Assoc. Prof. Maria IVANOVA Member of the Scientific Advisory Board of the UN Secretary-General, a Board member of the UN University Institute for the Advanced Study of Sustainability (UNU-IAS) and of the Ecologic Institute in Berlin.
1025-1030	Administration remarks
1030-1100	Group photo & Coffee break



CRISIS MANAGEMENT AND DISASTER RESPONSE CENTRE OF EXCELLENCE

34A Totleben Blvd. 1606 Sofia, phone +359 2 92 24700

1100-1700	<p>First plenary session: DEFENCE SUPPORT IN DISASTER RELIEF OPERATIONS</p> <p>Chair: Colonel Milen MILKOV (milen.milkov@cmdrcoe.org)</p>
1100-1130	<p>RISK & VULNERABILITY ASSESSMENT APPROACHES FOR REGIONAL AND NATIONAL DISASTER RISK REDUCTION PLANNING</p> <p>Steve RECCA Humanitarian Assistance Program Advisor, Pacific Disaster Center; Dr. Joseph GREEN, Epidemiologist & Health Risk Specialist, Pacific Disaster Center</p> <p>The presentation (and related paper) will focus on the application of risk assessments, successfully employed in a disaster risk reduction environment, for decision support in a broad array of regional, national, and subnational natural and man-made security challenges.</p> <p>The presentation provides a risk assessment approach that has been validated at global, regional, national and sub-national levels in a combined <i>risk and vulnerability assessment</i> (RVA) used by governments and regional organizations in Asia, the Americas, and in Africa.</p> <p>The approach is based on disaster risk as conceptualized as a function of Multi-Hazard Exposure (MHE), Vulnerability (V) and Coping Capacity (C). Each risk component (Multi-Hazard Exposure, Vulnerability and Coping Capacity), as well as the sub-component themes and sample datasets that can be used to describe them, will be discussed during the presentation.</p> <p>The RVA is a dynamic model leveraging existing open source, regularly updated data to represent aspects of the partner nation government and civil society networks to enable consideration of a wide assortment of attributes that are relevant to assessment of resiliency and vulnerability. Finally, the presentation will describe how the RVA analysis can help determine the underlying drivers of resiliency and vulnerability, whether NATO members are engaged in planning for natural hazards or human-induced security events.</p>
1130-1200	<p>MILITARY SUPPORT TO THE HURRICANES</p> <p>Jefrey MILLER, Humanitarian Assistance Advisor/Military USAID , Office of U.S. Foreign Disaster Assistance (OFDA)</p> <p>Military Support to the Hurricane Matthew Response in Haiti 2016. The article/presentation will discuss how militaries (primarily the US but also the Netherlands) supported the international response to the devastation in Haiti caused by Hurricane Matthew. There will be a discussion of how the militaries functioned within the international system and an analysis of what worked well, what could be improved upon, and recommendations for future military support to disaster response.</p>
1200-1230	<p>ONGOING MULTI – STAKEHOLDER PROCESSES ON DEVELOPING HUMANITARIAN CIVIL COORDINATION STANDARDS</p> <p>Ingrid NORDSTRÖM-HO, Head, Policy and Planning Unit, Civil-Military Coordination Section (CMCS), Emergency Services Branch (ESB), United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA)</p> <p>First Plenary Session (Defence Support in Disaster Response Operations): Development of Standards on Humanitarian Civil-Military Coordination (UN-CMCoord), under the auspices of the multi-stakeholder UN-CMCoord Consultative Group.</p>
1230-1400	Lunch
1400-1425	<p>NATO MILITARY CONTRIBUTION TO DISASTER RESPONSE AND HUMANITARIAN ASSISTANCE OPERATIONS – E&T IMPORTANT PART OF CAPABILITIES BUILDING</p> <p>COL Milen MILKOV, Chief of CMDR COE E&T Branch</p> <p>With the upsurge in natural disasters, and armed conflicts continuing in different regions of the world, military assets can have an important role in supporting the international community HA and DR efforts.</p>



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	<p>The primary goal of the training for military involvement to NATO disaster response and contribution to humanitarian assistance is to prepare the specific training audience for the effective contribution to holistic disaster response efforts. Training as one of the important activities of the pre-disaster phase, in strive to be ready for all of the potential hazards, ensures the right capabilities and materiel are on hand. Training requirements and opportunities - the training necessary to achieve and sustain the desired level of performance for NATO military contribution to disaster response and humanitarian assistance operations.</p>
1425-1450	<p>MILITARY MEDICAL TEAM IN DISASTER RELIEF OPERATION – LESSONS IDENTIFIED MD Rostislav KOSTADINOV PhD Medical University Plovdiv</p> <p>At 16:53, 12 January 2010, Haiti was hit by devastating earthquake. More than 3 million people were affected by the disaster. Majority of critical and medical infrastructure became non-operational. Many countries, Bulgaria included, responded to the Haiti government appeal for humanitarian aid. On 22 January surgical team from the Military Medical Detachment for Emergency Response was deployed in Haiti.</p> <p>The aim of this study is to discuss some of the challenges Bulgarian military surgical team faced during its deployment in Haiti capital. Obtained results present that military medical teams have to enhance their capabilities, as well training and logistician support, in order to be better prepared for fulfilling disaster medical support tasks.</p> <p>As conclusion some proposals for human resources, training and logistician support activities are presented.</p>
1450 -1515	<p>MOD BGR ARMED FORCES MODULE FORMATION IN SUPPORT OF DISASTER RELIEF OPERATIONS Nikolay KRASTEV, Chief Expert, Staff of defence, Operations and training directorate</p> <p>To carry out preventive activities, avoiding and overcoming the consequences and reducing losses from disasters at national level, forecasting, planning and coordination are implemented to the response for protection population and infrastructure in the event of critical situations. The specificity and volume of emergency and rehabilitation work to prevent and overcome the consequences of disasters, require from state institutions, to keep in readiness specialized forces united in a united national rescue system.</p> <p>Armed Forces, whose primary purpose is to ensure the sovereignty and territorial integrity of the country, possess operational capabilities, management bodies and resources, with which they can actively participate in helping the population in disasters if necessary.</p>
1515 -1530	<p>LAND FORCES UNITS FOR OVERCOMING DISASTERS CONSEQUENCE Kalin KARADIMOV, Expert, Operations Branch, Land Forces</p>
1530-1545	Coffee break
	<p>First plenary session: continues</p> <p>EARTHQUAKE STRUCTURAL DAMAGE ESTIMATION Mihaela KOUTEVA-GUENTCHEVA, Assoc. Prof., PhD, Civ.Eng, Dept. of Computer-Aided Engineering, Faculty of Structural Engineering, University of Architecture, Civil Engineering and Geodesy; Kr. Boshnakov, PhD, Civ. Eng., Chief Ass., UACEG, Sofia, Bulgaria</p> <p>This paper is aimed at presenting an attempt on correlation of observational damage states to ground motion parameters and selected analytical damage indices. Structural damage is estimated through damage indices in result of nonlinear time history analysis of test reinforced concrete structure, characterising the building stock of the Mediterranean region designed according the earthquake</p>



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	resistant requirements in the 50-60s years of the XX century. The performed analyses of the earthquake resistant behaviour of structures is based on the strong motion data, available through the publically assessed databases.
1545-1610	Measuring Interagency Collaboration CAPT (BGR-N) Prof. D.Sc. Yantsislav YANAKIEV, Director of Defense Advanced Research Institute (DARI), G.S.Rakovski National Defense College, Principal National Representative to NATO S&T Organization, Human Factors & Medicine Panel
1610-1630	Role and mission of the Bulgarian Red Cross in Disaster Management in Framework of intergovernmental cooperation Lyubomir KARAKANOVSKI, Senior Expert Bulgarian Red Cross
1630-1650	Disaster Response and Single Rescue Georgi Gatev, chief of Fire & Rescue Department Mol
1650-1710	Disaster relieve in the context of the EU's Common Security and Defense Policy Ass.Proff. Doncho Doychev, in Emergency Management Department in G.S.Rakovski National Defense College The capacities developed in the context of the EU's common security and defence policy will be very important in supporting civil protection and humanitarian assistance notably in large-scale natural disasters. Today specific proposals for the use of civilian and military means under CSDP as part of the EU's disaster response must be developed in EEAS, European Commission and EU member states future plans, policies and strategies. In this way the military and civilian leaders and senior level experts involved in disaster relieve activities, will enhance understanding of management culture, and will assess better the needs when disaster happened.
1710-1730	Wrap Up of the day
1930-2200	Hosted Dinner restaurant Panorama on behalf of the Minister of Defence of the Republic of Bulgaria
DAY TWO: 02/06/17 FRIDAY	
0830-1030	Second plenary session: IMPLICATIONS OF CLIMATE CHANGE TO MILITARY ACTIVITIES AND M&S SUPPORT FOR CRISIS AND DISASTER MANAGEMENT Chair: Colonel Orlin NIKOLOV (orlin.nikolov @cmdrcoe.org)
0830-0900	MSG 147 M&S SUPPORT FOR CDM AND CCI COL Orlin NIKOLOV, CMDR COE Chief of Capabilities Branch The responsibility for crisis management and disaster response is different for every nation and may involve several ministries and agencies. It is also a core task of the Alliance. Today the Alliance is able to take decisions in crisis and emergency situations, and to act under significant threat and time pressure. NATO develops capabilities to be ready, on a case-by-case basis and by consensus, to contribute to effective crisis management and disaster prevention. This enables the Alliance to actively engage in crisis management and disaster response, including through non-Article 5 crisis response operations. The Alliance is therefore encouraging the joint training of military and civilian personnel to help build trust and confidence. The 2015 Gap Analysis Report serves as the foundation for the development of the 2015 Action Plan (AP) on M&S in support of military training. Science, Technology, Modelling & Simulation Branch NATO HQ SACT and CMDR COE staff realized, that there is a gap in NATO computer supported capabilities dealing with big events with negative impact over human society like crisis and disasters as well evaluation of Climate Change.



0900-0930	OPTIMAL RESILIENCE PLANNING FOR INTERCONNECTED CRITICAL INFRASTRUCTURES – DEVELOPMENTS OF THE EU-CIRCLE PROJECT Mr. Ralf HEDEL, The Fraunhofer Institute for Transportation and Infrastructure Systems IVI – Dresden
0930-1000	IMPRESS PROJECT Ms. Nina DOBRINKOVA, Assoc.Prof., Bulgarian Academy of Science, Danidou Yianna, Dimopoulos Christos, Efstathiou Nectarios, Finnie Thomas, Galatas Ioannis, Gkotsis Iliad, Heckel Marcel, Kostaridis Antonis, Moutzouris Marios, Olunczek Andrej, Panunzi Simona, Psaroudakis Chrysostomos, Seynaeve Geert, Thiraios Michael, Tsekeridou Sofia, Vergeti Danae <p>ICT tools are everywhere in the nowadays world. They play a vital role in many spheres of the everyday life and support the decision makers to improve their care towards the general population. IMPRESS project has such goals in its ideas when it comes to disaster management and resource allocation in cases of mass emergencies where many injured people are affected. The IMPRESS project system which had three years to be developed, tested and validated with real users involvement DEMO's is going to be presented in our article. The information about the system structure and outcomes is structured in three main sections. The first gives the introduction about the system and its components, the second represent the components and the third state the overall conclusions and future work for the IMPRESS project system</p>
1000-1030	COALITION OF THE WILLING GAME Johan De HEER, PhD, Thales Research & Technology Netherlands <p>Modern operational environments require awareness on and insight in the comprehensive approach at all levels viz. technical, operational, tactical, strategically, and political. Moreover, professional 21st century leadership skills and competencies are a sine qua non in these crisis and disaster management scenarios. Here we focus on two game based learning solutions for training purposes that aim the development of those skills. The first game – Fog of war – is a single-player digital game, in which players are confronted with series of dilemma's that unfold a storyline based on their judgment and decision making skills. The second game – Coalition of the willing – is a multi-player board game based on a simplified dynamic model of the comprehensive or 3D approach, in which players need to bring their collaboration skills to the table. Both game based learning solutions are available for training purposes</p>
1030-1100	Coffee break
1100-1120	ADVANTAGES OF GIS-INTEGRATED MARITIME DATA IN THE BLACK SEA REGION FOR MULTIPURPOSE USE Lyubka PASHOVA, Anna KORTCHEVA, Vasko GALABOV, Marieta DIMITROVA <p>The role and significance of geospatial data are of vital importance for marine/maritime environment management in the Black Sea region at all government levels. An appropriate data organization, systematization and interoperability of marine data sets within GIS environment allow their efficient managing and usage for different operational needs, e.g. Early Warning & Crisis Management (EW & CM). This paper addresses the issues related to: WMO, ISO, OGC standards and recommended practices and procedures for the representation of data and associated metadata; the effective integration and visualization of available marine multi-source data provided by research organizations in Bulgaria; online access to marine data using recognized standards; developing marine services, which have to meet requirements of the Marine Spatial Data Infrastructure (SDI) as a part of National SDI according to the INSPIRE Directive 2007/2/EC/-especially the themes Atmospheric Conditions, Environmental Monitoring Facilities, Meteorological Geographical Features, Natural Risk Zone, and Sea Regions.</p>



1120-1145	<p>Estimating and Mapping Potential Disaster Indirect Economic Losses (Data, Decision and Coordination) Georgi Penchev, Senior Assistant Professor, University of National and Regional Security, Sofia</p> <p>The aim of the paper is to analyse possibilities to support decision-making process by estimating and mapping indirect disaster losses within the disaster relief phase. Indirect losses are not related to the damaged infrastructure or enterprises and are generally defined as interruptions in economic activities. Limited physical damage can produce a cascading effect for region economy. Therefore it is important to evaluate these effects not only to know the possible amount of losses, but also to find where to start the relief by recovering the most critical for the region network infrastructure.</p> <p>In order to define data requirements for decision-making the research on economics approaches for evaluation of disaster indirect losses is provided. Spatial dependencies and networks are visualised and discussed. The coordination needed for data gathering and dissemination is also studied.</p>
1145-1210	<p>EDMSIM / MILSIM Demonstration Harry THOMPSON, Vice President for Simulation Services in Bartragh Services</p> <p>Emergency and Disaster Management SIMulation (EDMSIM) is a stochastic, entity level resolution model constructive simulation designed for training military and government organizations to respond to manmade or natural disasters.</p> <p>MILSIM is an entity-based, real-time constructive battlefield command simulation. MILSIM allows commanders to simulate engagements realistically from the individual to Joint/Combined level without loss of resolution. A simple user interface and Automated Force functionality allow limited numbers of staff to control large units. After Action Review functionality provides participants graphical and video lessons learned.</p>
1210-1230	<p>INCIDENT & CRISIS MANAGEMENT SYSTEM - COBRA Timothy MAHONEY</p> <p>The ICMS, is based on the COBRA software platform, which will be adapted to the specific needs of the Belgian users. This first phase of the rollout is to include all cities and municipalities, provinces and relevant federal authorities. Through 2016, ICMS will arise as a national security network that will allow users to draw up contingency plans and work together during an emergency through various media and platforms, including the sharing of maps, combined logs, tracking the deployment of the emergency services and resources and more. In later phases, this network will be expanded to also connect utilities, ports, high-risk companies, hospitals and other organizations.</p>
1230-1245	<p>TERRAIN DATA GENERATION IN SUPPORT OF CRISIS AND DISASTER MANAGEMENT Nikolay TOMOV, Synergy Horizons</p>
1245-1400	Lunch
1400-1530	<p>Third plenary session: BUILDING SOCIETY'S RESILIENCY AND MITIGATING VULNERABILITY Chair: Colonel Jaroslaw KUBISZ (jaroslaw.kubisz@cmdrcoe.org)</p>
1400-1430	<p>Why Resilience matters? Ms. Gloria STOYANOVA</p> <p>Why Resilience matters? The article presents the recent work within NATO on the topic of resilience, ensured through robust civil preparedness and effective civil-military planning. It stresses the importance of a high-level political engagement and investment in order to fulfill the Warsaw Commitment to Enhance Resilience.</p>



1430-1500	<p>IMPROVING OPERATIONAL RESILIENCY AND SENSEMAKING DURING CRISIS Karim M. A. HARDY, Ph.D., CSP, CSHM, CMIOSH, MIIRSM, EurOSHM, Chair – Bachelor of Science in Safety Management College of Aeronautics, Worldwide Campus, Embry-Riddle Aeronautical University, USA; Captain Dominique COSTARGENT, Second-in-Command of the French Naval Aviation; François DARSEES, PhD, Full Professor, Head of the ACSO Department (Action and Cognition in Operational Situations) at the French Armed Forces Biomedical Research Institute</p> <p>Understanding the mechanisms of analysis and decision-making processes during extreme events allows to improve an organizational state and to maintain an ideal level of resilience through situational (re)formulations and awareness. Studying altogether the concepts of sensemaking, situational awareness and resilience highlights their affinities to understand their mutual influences in the construction of organizational performance in times of crisis. This article is structured around three objectives. Initially, it focuses, on the one hand, to define what a crisis, complexity and the notion of control are, and then, on the other hand, to describe the concepts of resilience as well as of sensemaking in a complex sociotechnical system during an extreme event. Secondly, it intends to show how the concepts of operational resiliency and sensemaking are interconnected through the concept of situational awareness and how this concept is critical to an efficient crisis management process. Finally, in terms of system dynamics, this article attempts to underline the various factors and variables that influence levels of operational resiliency, sensemaking and situational awareness critical maintaining an optimum level of performance in crisis management.</p>
1500-1530	<p>WHY DISASTERS HAVE BECOME MILITARIZED IN MODERN TIMES? RETHINKING THE MILITARY'S ROLE IN EMERGENCIES. COL Stjepan DOMJANČIĆ, PhD, Ministry of Defence, Republic of Croatia</p> <p>Participation of Military in support of civil institutions and citizens in situations of major natural, technical-technological and other accidents and catastrophes is important due to the respectable capacities of the Military, which can be used in these activities (the rationality principle), and due to the strengthening the link between the Armed Forces and society (Military showing its general social usefulness). However, in those situations Military cannot become "the first responder", i.e., control and coordination functions must be carried out through civil institutions and specialized services.</p>
1530-1545	Coffee break
1545-1610	<p>INTEGRATING SPATIAL ANALYSIS, DISASTER MODELLING AND SIMULATION FOR RISK MANAGEMENT AND COMMUNITY RESILIENCE IN URBANISED COASTAL AREAS. Lt.C (ITA) Walter DAVID NATO M&S Centre of Excellence Analysis and LL Section Chief, CD&E Branch,</p> <p>Urbanisation is a global trend rapidly changing the human landscape and it has been identified by NATO and Nations as a cause of potential instability with increased requirement for the military to operate in crowded urban networks and littoral environments as response to disasters, social unrest or armed conflicts. In this context, spatial and network analysis on Geographic Information Systems (GIS) inclusive of military forces and political, military, economic, social, information and infrastructure information like the Archaria model have been used by NATO for 2016 urbanization wargame; such tool, integrated by statistics, historical data, and disaster simulation tools like <i>ST_Crisom</i>, provides insight to research challenges and strategic implications of potential instability situations in urban environment by supporting disaster risk management and community resilience requirements in vulnerable environment like large urbanised coastal areas</p>



1610-1635	<p>MILITARY MEDICAL TRAINING – TOOL FOR DISASTER MEDICAL RESILIENCE</p> <p>MD Rostislav KOSTADINOV PhD Medical University Plovdiv</p> <p>Contemporary world is facing unprecedented increase in both frequency and severity of natural and man-made calamities. The most valuable society assets that are affected by the disasters are the human life and health. Therefore, the society disaster resilience directly depends on disaster medical response adequacy and efficiency. The contemporary trends in medical society are not favorable for building disaster medical capacities.</p> <p>The aim of this study is to analyze the military medical training capabilities to enhance the healthcare system readiness for disaster medical support. Obtained results highlight several medical shortages – knowledge, skills, human and material, for disaster medical support provision. Military medics are trained primary to operate in hostile and dangerous environment similar to the disastrous one. A lot of the military medicine standard operating procedures could be easily utilized into disaster medical support. As conclusion the plausibility of military medical training for amelioration of disaster medical resilience is noted.</p>
1635-1700	<p>Syrian Conflict: The American and the European Perspective</p> <p>Ph.D. Iskren Ivanov, St. Kliment Ohridski University of Sofia, Assistant Professor</p> <p>The Syrian Conflict is one of the greatest challenges for the international system today. The main purpose of this article is to find out what is the best scenario for the regulation of this conflict. The main thesis of the presentation is that United States and Europe have to join their actions in Syria, despite their differences and contradictions. In order to prove this thesis the following research will emphasize on several key aspects. The first aspect is the Syrian conflict itself. The article will analyze it by using the so called “conflict analysis cycle”. The first aspect is the American perspective for the Syrian conflict. The article will study US foreign policy and military strategy in the region and their impact on the situation in Syria. The third aspect is the European perspective. The presentation will examine what is EU’s foreign policy in the region and its interests in Syria. This research will also try to make a case study in order to shape several scenarios for the resolution of the Syrian conflict. The methodology, used in the research is based on qualitative methods including the historical approach.</p>
1700-1715	<p>DA'ESH'S TERRORISM AS A MODE OF WARFARE</p> <p>Zhuliyana ZHELEZOV, Student at the University of Southern Denmark</p> <p>The main purpose of my paper was to answer the question of what should we know about the perpetrator in the case of Daesh and does Daesh wage hybrid warfare? If yes, how the different strategies and tactics, fit within the overall hybrid warfare waged by Daesh.</p>
1715-1730	<p>Wrap-up and Closing ceremony</p>