

INTERNATIONAL WORKSHOP ON NATURAL DISASTERS AND EMERGENCY MANAGEMENT (IWNDEM 2015)

University of National and World Economy
Sofia, Bulgaria
November 4 - 6th 2015



Organized by:



***University of National and World Economy
Bulgaria***



***Shenyang University of Chemical
Technology
China***

Supported by:



***Iwate Prefectural University
Japan***

- ▶ The IWNDEM-2015 provided an open forum for the dissemination of the current research progress, innovative approaches and original research results on all aspects of Natural Disasters and Emergency Management. Topics included:

- Advanced ICT and natural disasters
- Big Data and natural disasters
- Climate change and disaster risk
- Climate information management
- Climate information processing
- Cloud Computing in emergency management
- Communications and natural disasters
- Crowdsourcing and emergency management
- Disaster information processing
- Disaster prevention and mitigation
- Disaster relief, resilience and research
- Disaster risk management capability assessment
- Emergency preparedness
- Hazard, vulnerability and risk mapping
- ICT challenges in emergency management
- Integrated risk governance
- IoT and natural disasters
- Mobile computing and emergency management
- Natural disaster monitoring
- Natural disaster risk assessment
- Natural disaster risk management
- Natural disaster risk reduction
- Natural disasters and security
- Natural hazard and vulnerability analysis
- Security and privacy issues in disaster management
- Social media and natural disasters
- Socio-economic impacts of natural disasters

10:00 – 12:00 – Workshop Official Opening

- **Opening Remarks by Prof. Dr. Dimiter Velev, Workshop organizing chair**

- **Keynote speech:**

Maturing towards disaster resilience

Prof. dr. techn., dr. rer. nat. **Jose J. Gonzalez**

Centre for Integrated Emergency Management (CIEM)

Dept for ICT, Faculty of Engineering and Science, University of Agder, Norway

- **NATO Crisis Management and Disaster Response Centre of Excellence
Introduction**

COL **Vassil Roussinov** –COE Director /COL **Orlin Nikolov**- Capabilities Branch Chief
Crisis Management and Disaster Response Centre of Excellence (CMDR COE), Sofia

- **Legal framework of disaster protection in the Republic of Bulgaria**

Senior commissar **Alexandar Dzhartov**

Director of Department "Critical infrastructure, prevention and control"

DG Fire Safety and Civil Protection, Ministry of Interior, Bulgaria

- **Role of computer assisted exercises (CAX) for crises management training**

Nikolay Tomov - Chairman

Bulgarian Modeling and Simulation Association - BULSIM

- **Discussion**

13:30 – 15:00 – First Session

- **A Verification Platform of Failure Resistance Evaluation for Wide-area Distributed Systems**

Yutaka Kikuchi, Yoshiaki Kitaguchi, Tohru Kondo, Kohei Ichikawa, Kazuma Nishiuchi, Ikuo Nakagawa, Hiroki Kashiwazaki

Kochi University of Technology, Japan

- **A Study on Medical Support System in Multiple Hospitals for a Large Tsunami Disaster**

Ph.D. Professor *Jun Sasaki*

Faculty of Software and Information Science, Iwate Prefectural University, Japan

- **A Resilient Network for Large Scale Disaster from Experience of the Great East Japan Earthquake**

Yoshitaka Shibata, Noriki Uchida and Norio Shiratori

Presentation by *Prof. Dr. Yuko Murayama, Iwate Prefectural University, Japan*

15:15 – 17:15 – Second Session

- **Investigate and assess M&S Decision Making Support and Data Analysis platform for Crisis Management, Disaster Response (CMDR) and Climate Change**
COL Orlin Nikolov- Capabilities Branch Chief
Crisis Management and Disaster Response Centre of Excellence (CMDR COE), Sofia
- **Typology and trends in the occurrence of natural disasters in Bulgaria**
Prof. Dr. Mariyana Nikolova - Acting Scientific Secretary
Department of Geography, NIGGG - Bulgarian Academy of Sciences
- **Information Technology Application in Disaster Risk Reduction**
Prof. Dr. Dimiter Velev¹, Assoc. prof. Plamena Zlateva²
¹*Department of Information Technology and Communications, UNWE*
²*ISER-Bulgarian Academy of Sciences*
- **European capacity for innovation in crisis management: Preliminary results from 33 country studies**
Todor Tagarev¹, Vesselin Petkov², Maike Vollmer³, Isabelle Frech³, Valeri Ratchev¹
¹*Centre for Security and Defence Management, Institute of ICT, BAS, Bulgaria*
²*Procon Ltd., Sofia, Bulgaria,*
³*Fraunhofer Institute for Technological Trend Analysis INT, Dept. of Meta-Analyses and Planning Support, Euskirchen, Germany*
- **Mapping of morphometric indicators in small drainage basin and assessment of risk flooding**
Galina Bezinska, Krasimir Stoyanov, Miroslav Ivanov
South-West University "Neofit Rilski", Blagoevgrad, Bulgaria
- **Discussion and Closing Workshop Remarks**