# Commission on Cartography in Early Warning and Crises Management

CEWRCM

# WHAT WE DO:

- Provide leadership in the development of concepts, ontologisation and standardization for early warning, hazard, risk and vulnerability mapping.
- Promote the cartographic use of remotely sensed and other geospatial data for early warning and crisis management through scientific conferences, seminars and workshops.
- Investigate psychological condition of end user given by their personal character and situation and psychological condition of rescued persons (with support of ubiquitous and adaptive mapping).
- Foster quality mapping and cartographic modeling, including state-of-the-art visualization technologies, geospatial processing and publishing tools, for early warning and crisis management through topic related publication activities.
- Participate and contribute to global initiatives in early warning and crisis management through the maintenance of a website, newsletters and social network channels.
- Promote the development of dynamic and real-time cartographic visualization concepts and techniques for enhanced operational early warning activities through active collaboration with governmental authorities.
- Establish and cultivate professional networks for exchange of information among stakeholders in the domains of crisis management and early warning.
- Develop mechanisms of command and control systems integration as well as improve real-time data-centric intelligence based on field sensors for purposes of Crisis Management.
- Develop mapping methodologies and technologies for EW&CM in children perspectives. Promote the process of teaching, understanding and using maps for EW&CM in children aspects.

## HISTORY and ACTIVITIES:

ICA was the first organisation of JBGIS who started to deal with the topic of Early Warning and Crisis Management. The 13th ICA General Assembly, held in 2005 in conjunction with the ICC in La Coruna, agreed to establish a Working Group on EW and CM, which have been approved to upgrade on commission on ICC held in Moscow, 2007.

Commission maintained this structure of activities:

- Regular annual or bi-annual meetings (Novosibirsk, Albena),
- Activities initiated by commission and realized in cooperation with other organizations (mainly ISPRS, FIG, GEO, ISDE, Gi4DM, etc.),
- Participating in the World sound and influential organizations activities (Geospatial World Forum, high level EU projects, etc.),
- Try to cover by activities various parts of the World,
- Organize special EW and CM conferences and workshops (China, Malaysia, Colombia, EU).

#### **HOW WE PROCEED...**

Chair:



WHO WE ARE...

**Christophe LIENERT** Switzerland lienertc@ethz.ch





Milan KONECNY Czech Republic konecny@geogr.muni.cz



Future Vice-chair: LIU Jiping China liujp@casm.ac.cn



Map in adaptive cartography

symbolics

resolution

contents

cartographic method

display size transfer rate interactivity

Commision meeting 2014, Riviera, Bulgaria

## WHAT WE WANT TO DO:

- Contribute in the mapping aspects of the development of concepts, ontologization and standardization (developing new e.g. for automatic metadata extraction from existing data) for disaster risk reduction (DRR), crises/disaster management (DRM), and early warning (EW) through the hazard, risk and vulnerability mapping.
- Emphasize aspects of cartographic communication in the context of early warning and disaster management such as the use of remotely sensed and other geospatial data, including concepts of Volunteer Geographic Information (VGI) and Public Participation Geographic Information Systems (PPGIS), psychological conditions of users, cartographic modelling of state-of-theart visualization technologies, geospatial processing and publishing tools, dynamic and realtime cartographic visualization for enhanced operational early warning activities through active collaboration with governmental authorities.
- Participate and contribute to global initiatives in early warning and crisis management through the maintenance of a website, newsletters and social network channels and establish and cultivate professional networks for exchange of information among stakeholders in the domains of crisis management and early warning.
- Prepare concept of a contemporary book on Cartography for DRR.
- Develop cooperation with world leading initiatives and organizations in DRR efforts, such as UN-ISDE, ICSU-IRDR and regional organizations, further GEO, GEOS, COPERNICUS, ISDE, IEAS, CODATA and sister organizations in JB GIS.
- Keep world network of commission conferences and promote cooperation with above mentioned organizations and initiatives in international, regional and local levels.

### WHERE WE MET (2011-2015):

Commission original activities:

Albena (Bulgaria), Baden (Switzerland), Dresden (Germany), Kuala Lumpur (Malaysia), Lisbon - Coimbra (Portugal), Novosibirsk (Russia), Riviera (Bulgaria), Varna (Bulgaria), Wuhan (China).

Activities in which CEW&CM cooperated with other organizations:

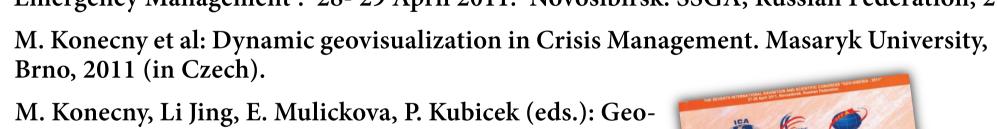
Amsterdam (The Netherlands), Beijing (China), Bogota (Colombia), Budapest (Hungary), Geneve (Switzerland), Hamburg (Germany), Istanbul (Turkey), Kaifeng (China), Orlando (USA), Sofia (Bulgaria), Split (Croatia).

### **PUBLICATIONS:**

<sup>H</sup> INTERNATIONAL CONFERENCE

Konecny M., Zlatanova S., T. L. Bandrova (eds.): Geographic Information and Cartography for Risk and Crisis Management. Lecture Notes in Geoinformatics and Cartography. Heidelberg: Springer, 2010. S. S. Dysljuk, A.G. Novitskaya (eds.): International Workshop on "Early Warning and Crises/Disaster and

Emergency Management". 28-29 April 2011. Novosibirsk: SSGA, Russian Federation, 2011.



information Support for Flood Management in China and the Czech Republic. Brno: Masaryk University, 2011. T. Bandrova, M. Konecny (Eds.) 4rd International Conference on Cartography and GIS, CD Proceedings, Albena:

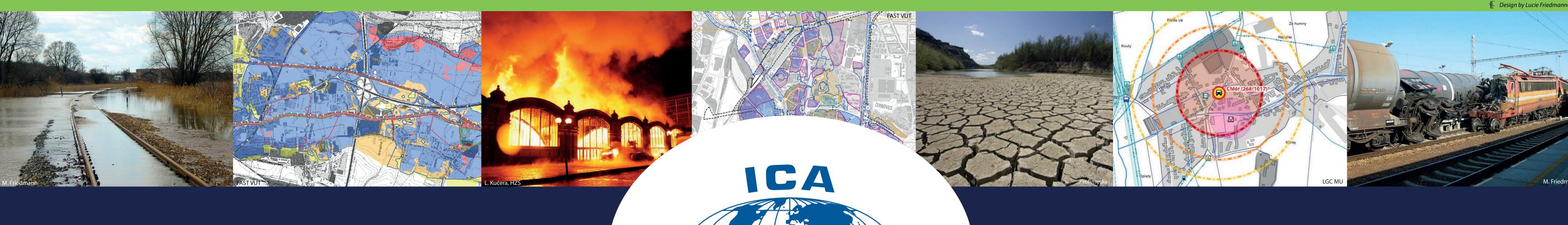
desy, Bulgaria, 2012. The Value of Geoinformation for Disaster and Risk Management (VALID). Copenhagen:

T. Bandrova, M. Konecny (Eds.) 5th International Conference on Cartography and GIS, CD Proceedings, Riviera: University of architecture, Civil engeneering and Geodesy, Bul-

JB GIS, 2013.

garia, 2014.





ACI

http://icaci.org

International Cartographic Association

http://icaci.org

**Association Cartographique Internationale**