



International Cartographic Association
Association Cartographique Internationale

Commission Report to the ICA Executive Committee

Commission: CARTOGRAPHY IN EARLY WARNING AND CRISES MANAGEMENT (CEW&
Date of report: 30/06/2023
Period of report: 07/2019 - 06/2023
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EC liaison: Philippe De MAEYER

General Remarks:

The report should focus on major events and generally not exceed 1.5 pages incl. photos and links. Activities to be reported may fall into the following categories, but should either be (co)initiated by your commission or reflect significant commission participation:

Commission/Working Group highlights (e.g. conferences, publications, products & services, awards, etc. and outcomes for the EC to take note)

Conferences(30):

- 1.July 14,2019,Tokyo:A technical visit to KUKUSAI KOGYO Co., LTD and GSI Science Museum
- 2.December 10-13, 2019,Hainan, China:Seminar on Intelligent Emergency Mapping and Disaster Risk Reduction Mapping Service.
- 3.June 20-25,2022,Nessebar, Bulgaria:Commission On Cartography on Early Warning and Crisis Management Meeting (along with 8th International Conference on Cartography & GIS and Seminar on Disaster Risk Reduction – Solutions and Innovations).
- 4.May 23-27,2022,Bali, Indonesia :Commission On Cartography on Early Warning and Crisis Management meeting along with 7th Session of the Global Platform of Disaster Risk Reduction GPDRR, organized by UNDRR.
5. September 18, 2022,Vienna:Organizing the pre-workshop Disaster Mitigation & Risk Reduction for Cartography in the Big Data Era at the 2nd Conference EuroCarto 2022.

Publications(83):

- 1.Liu Jiping, Konečný Milan, Du Qingyun, et al. The latest progress of data fusion for integrated disaster reduction intelligence service[J]. International Journal of Image and Data Fusion, 2021, 12(4): 265-267.
 2. Mao, W., Hong, S., Chai, T., Shen, J., & Shen, J*. (2023). Cultural Landscape Reproduction of Typical Religious Architecture in Qingjiangpu Based on Scene Theory. Applied Sciences, 13(1), 82.
- Products(2):
- 1.Chair Jiping Liu used cartographic theory and technology to provide global real-time big data service for the New Coronary Pneumonia Epidemic, analyzed satellite night light data and generated epidemic big data analysis reports,2020-2021.
 - 2.Vice chair Shen jie successfully applied a 2021 National Key Research and Development Program of China -Study on Cognition and Construction method of urban Disaster Management and Emergency Response scenarios based on the integration of CIM and big data, 2021.10.1—2024.9.30.

Awards(5):

1. Second Class Prize of The State Scientific and Technological Progress Award : Key technology and Application of State E-government collaborative Spatial Decision services (J-25201-2-01), Jiping LIU
2. Special Class Prize of The Scientific and Technological Progress Award of Surveying and Mapping : Development and application of Internet geospatial information detection and security supervision platform (2018-01-00-01), Jiping LIU
3. Outstanding winner of Jiangsu university foreign students teaching competition, Dec. 2022, Jie SHEN
4. Honorary awards in Cybercartography Competition 2022, Design and Implementation of Interactive Narrative Map of Nanjing Ming Dynasty City Wall Based on Mixed Reality, June 14,2022, Jie SHEN.
5. Jury member for the Swiss Cartography Prize 2023 “Prix Carto”, Christophe LIENERT.

Notable cross-disciplinary events (e.g. with other ICA Commissions/WGs, regional and international communities)

1. June 20-25, 2022, Nessebar, Bulgaria: The meeting was organized by ICA, BCA and UACEG, and the ICA mainly discussed the role of cartographers in the UN SDG challenges and the Sendai Framework.

2. December 13, 2021, Florence : ICC2021 pre-conference seminar, held in a remote and physically hybrid format, focused on the challenges of disaster risk reduction mapping in the context of big data.

3. September 18, 2022, Wien : The ICA Early Warning and Crisis Management Mapping Committee organized a pre-conference workshop for the European Cartographic Association on Mitigation and Risk Reduction in the Era of Mapping Big Data.

4. May 24, 2023, Deqing, China : International Cartographic Association Early Warning and Disaster Management Cartography Special Committee (ICA CEW&CM) investigated and planned to establish our committee branch in China.

5. As the member of the ICA Working Group on the Cartographic Body of Knowledge <https://bok.cartography.no/>, Shen Jie.

6. Committee member of ISO/TC 268/SC 1/WG 6 on Global Directory recommended by Chinese Standardization Administration, Shen Jie.

Notable public events (e.g. invited public speech, Mapathon, TED talks, hackathon, etc.)

1. November 13-14, 2019: Beijing, China; 6th UPINLBS (The Sixth International Conference on Ubiquitous Positioning, Indoor Navigation and Location-Based Services. Integrated Disaster Reduction Intelligent Service System, Jiping Liu.
2. December 10-13, 2019: Haikou, China; The seminar on Intelligent Emergency Mapping and Disaster Reduction Mapping Service, Research and Development Trend of Integrated Comprehensive Disaster Reduction Intelligent Services, Jiping Liu.
3. December 1, 2020: Beijing, China; 4th International Workshop for Disaster Risk Reduction Knowledge Service (2020), Multi-source Information Integration Service for Comprehensive Disaster Risk Reduction, Jiping Liu.
4. August 20, 2020: Nanjing, China; "Geographical Big Data training" Summer School for Postgraduates, The Potentials of GI Science and Cartography in Realization of U.N. Efforts: Sustainable Development Goals and Sendai Framework, Spatial cognition and Map design for disaster and risk management in the era of big data. Milan Konecny and Jie Shen.
5. September 16-17, 2020: Zhejiang, China; FIG Int. Workshop on Professional Standards and Practice. Sendai Framework and Geospatial Efforts: Potentials of DBAR and U.N. GGIM, International cooperative research on disaster management and ecological civilization mapping in the context of One Belt And One Road. Milan Konecny and Jie Shen.
6. May 25, 2021: Novosibirsk, Russia; INTER-GEO-Geosiberia-Big Data in ES Conference. United Nations Key Initiatives - Agenda 2030 and Sendai Framework: Improvements of Geoinformatics Support. Milan Konecny and Jie Shen.
7. September 7, 2021: Beijing, China; the International Forum on Big Data for Sustainable Development Goals. HOW TO INTEGRATE GLOBAL DATA EFFORTS TO REALIZE SDGs IN DIFFERENT STATES? Milan Konecny.
8. October 20–22, 2021: Amsterdam; GEOSPATIAL WORLD FORUM. Disaster Risk Management towards Healthier Soils in Crisis Situations. Milan Konecny.
9. December 2022; Kishinev, Moldova; United Nations Agenda 2030 and Sendai Framework, United Nations Agenda 2030 Spatial Data Supportive Initiatives and Strategies, National Mapping Organization, Online, Milan KONECNY.
10. November 29 to December 2 2021: Johannesburg, South Africa; International cooperative research on disaster management and eco-logical civilisation mapping in the context of One Belt and One Road, The Belt and Road International Geospatial Information Training (BRGT) on Geospatial Information Science for a Nature Positive Society, Johannesburg. Jie Shen.
11. May 23.-28. 2022: Bali, Indonesia; The 7th session of the global platform for disaster risk reduction, member of the Swiss Delegation; organized by UNDRR; member of the session organizing team at UNDRR, coupled with the 3rd Multi-Hazard Early Warning Systems Conference, convened by WMO and UNDRR, Christophe Lienert.
12. April 17-21 2023: Taiwan, China; Natural Disasters Occurrence, Reduction, and Restoration in Mountain Regions, INTERPRAEVENT International Symposium 2022, Taichung, Christophe Lienert.
13. October 17-19 2022: Geneva, The 2nd session of the Commission for Weather, Climate, Water and Related Environmental Services and Application (SERCOM-2) of the World Meteorological Organization WMO, Member of the Swiss Delegation, Christophe Lienert.
14. April 4 2023: Berne, Warning platforms, hazards maps, warning governance and further developments of warnings for governmental delegation of Greenland, Christophe Lienert.

Educational highlights (e.g. degree programs, MOOCs, lifelong learning courses)

1. June 19-25, 2023, China: Online education in Organizing "Cartography and Geographic Information System" academic science popularization series activities in China.
2. August 14-23, 2020, Nanjing: Summer school sponsored by various organizations including the China Association for IGespatial Information Society, International Cartographic Association, and Jiangsu Graduate Education Steering Committee.
3. October 10-16, 2019, Beijing, China: Lectures about Early Warning, Crises Management and Disaster Risk Reduction gave by Prof. Milan Konecny from University of Masaryk, Czech Republic.
4. May 10 2023, online, Webinar University College London on "The Future of Forecasts and Warnings", Christophe Lienert.

Any other sharable experiences

1. Decmber 8 2022; ISO 37174, Smart community infrastructures- Disaster risk reduction- Guidelines for implementing seismometer systems, Jie SHEN
2. June 2023;ISO 37179, Smart community infrastructures - Disaster risk reduction- Basic framework for the implementation of disaster risk reduction, Jie SHEN.
3. April 15 2022; Chinese standards:Indoor map data model and expression, GB/T 41445-2022,Published, attendee, Jie SHEN.
4. May 24 2023; Organized the action plan about setting a branch of our commission in Deqing,May 24 2023.

Upcoming events and planned actions

1. August 13-18, 2023, Cape Town South Africa, organizing the sessions of Early Warning and Crisis Management.
2. August 12,2023, organizing Pre-conference workshop of ICA Commission Early Warning and Crisis Management; nominee for chair of ICA Commission Early Warning and Crisis Management.
3. September, 2023, Beijing, organizing the session Agenda 2030 and Sendai Framework Symbiosis and Data Support for the 3rd International Forum on Big Data for Sustainable Development Goals, application of the session completed.
4. Establishing the China- Central and Eastern Europe on Deep-Time Digital Geomorphology and Visualization Center in Nanjing Normal University.