



To the
Secretary General and President of the
International Cartographic Association ICA

Gunten, 02nd March 2023

Nomination of Dr Christophe Lienert, MSc as Co-Chair of the ICA Commission on Cartography in Early Warning & Crisis Management for the period of 2023–2027

Dear Thomas, dear Tim

It is my great pleasure as President of the Swiss Society of Cartography to propose to the next ICA General Assembly in Cape Town, according with articles 8, 10 and 24 of the ICA Statutes, the nomination of Dr Christophe Lienert, Zurich, as co-chair for the ICA Commission on Cartography in Early Warning & Crisis Management for the next quadrennial term, starting in 2023, together with co-chair Prof. Shen Jie (CN).

Dr Christophe Lienert, (Managing Director, Swiss Steering Committee on Intervention in Natural Hazards LAINAT) has been actively engaged as Vice-Chair in the Commission already as well as in the community for more than 15 years. Together with the proposed co-chair Prof. Shen Jie (China) he will guarantee not only for the continuation of the excellent work of this important ICA Commission, but also foster new activities, some of which you can find in the attached proposed Terms of Reference.

The presented nomination has the full support and endorsement of the President and the Executive Committee of the Swiss Society of Cartography. We are proud to make this proposal, and we are also certain, that Dr Christophe Lienert is an excellent candidate for this position.

Please find attached, besides a declaration of his willingness to serve in this position, the proposed Terms of Reference for the Commission, and a short CV of Christophe, which provides you with more details on the candidacy.

If you or the Executive Committee have any questions on this nomination, please do not hesitate to contact either Christophe or myself.

Yours sincerely

Mark Wigley
President SGK

Attachments:

Note of willingness to serve and motivation

Curriculum Vitae Dr Christophe Lienert

Terms of Reference for the Commission on Cartography in Early Warning & Crisis Management 2023-2027



Dr. Christophe Lienert, MSc

Family name: Lienert
First name: Christophe
Middle names: Charles Edouard
Birthday: 26. March, 1977
Place of birth: Wettingen/AG, Switzerland
Nationality: Swiss
Place of origin: Lucerne/LU and Einsiedeln/SZ
Marital status: married, two daughters
Private address: Hägelerstrasse 7, CH-5400 Baden
Office address: Federal Office for the Environment BAFU,
Secretariat LAINAT, 3003-Berne, Switzerland
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Position: Managing Director, Swiss Steering Committee
on Intervention in Natural Hazards LAINAT



Introduction to current work

My name is Christophe ("Chris") Lienert and I've been working in the cartography, GIScience and natural hazard domain for 15+ years in different positions. In my current position, I am working for the Swiss Steering Committee on Intervention in Natural Hazards in the role of Managing Director. The steering committee is a coordination body for natural hazard warnings on the level of Swiss Federal Offices and research institutions. The committee involves the Federal Office for the Environment (FOEN), the Federal Office of Meteorology and Climatology MeteoSwiss, the Federal Office for Civil Protection (FOCP), the Federal Office of Topography (swisstopo), the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), the Institute for Snow and Avalanche Research (SLF) and ETH Zurich with its Swiss Seismological Service (SED).

The work comprises the coordination among the mentioned partners to jointly further develop strategies of early warning and information products (floods, droughts, wildfires, mass movements, severe weather and earthquakes). Our main goal is to minimize damages to people and assets caused by natural hazards. We achieve this by providing and developing warning products that are suitable to diverse audiences and that are delivered in a timely, coherent and consistent way. Dealing with various aspects of the warning chain (from sensor to user), distribution channels, and communication aspects, operational cartographic natural hazard information and warning systems, platforms and interactive apps are integral part of our work.

Professional career and roles

2000 – 2005 MSc Geography, focus on Hydrology, University of Berne, Switzerland
2005 – 2006 Swiss Virtual Campus «Natural Hazards and Risks NAHRIS», ETH Zurich
2006 – 2010 PhD «Real-Time Cartography in Operational Hydrology», ETH Zurich
2010 – 2011 Hydrologist and GIS-specialist, AF-Consult
2011 – 2020 Head unit hydrometry, Member of Cantonal Crisis Committee, Canton Aargau
2020 – to date Managing Director Steering Committee Intervention in Natural Hazards, c/o FOEN

Memberships and other roles

2007 – to date Expert group natural hazards FAN, Member
2011 – to date ICA, Commission Early Warning & Crisis Management, Vice-Chair
2014 – to date Juror Swiss Cartography prize PrixCarto
2012 – to date Regional Crisis Committee City of Baden, local natural hazard advisor
2020 – to date scnat, Swiss Academy of Sciences, Hydrological Commission Chy, Member
2022 – to date WMO, World Meteorological Organization, Standing Committee DRR, Core Member

Publications (selection)

Lienert, C., Angly Bieri, F., Dallo, I., and Marti, M. (2022). Improving visualization and functionality of natural hazard warnings on multi-hazard platforms. In: Proceedings of EuroCarto 2022, Vienna, Austria.

Lienert C., Angly Bieri F., Neversil B., Meier D. (2021). The public Swiss natural hazard portal for warnings and recommended behaviour. In: Proceedings of ICC 2021, Florence, Italy.

Lienert C., Meier S., Moser S. (2020). Coping and cooperation: flood-response in a federal political system – examples from Switzerland. In: Proceedings of Interpraevent 2020, Bergen, Norway, pp. 31-33

Angehrn P., Steiner S., Lienert C. (2019). The Swiss joint information platform for natural hazards. In: Proceedings of ICC 2019, Tokyo, Japan.

Lienert C., Meier S. (2014). Environmental Data Visualization EnVIS – Linking real-time sensor data with spatial data Infrastructures for Web-based visualization. In: Bandarova T., Konecny M., Zlatanova S. (Eds.). Thematic Cartography for the Society. Berlin: Springer, pp 293-304

Lienert C., Jenny B., Schnabel O., Hurni L. (2012). Current trends in vector-based Internet mapping - a technical review. In: Peterson, M. (Ed.). Online Maps with APIs and WebServices. Berlin: Springer, pp. 23-36

Lienert C., Weingartner R., Hurni L. (2009). Real-Time Visualization in Operational Hydrology through Web-based Cartography. *Cartography and Geographic Information Science* 36(1):45-58



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Lenkungsausschuss Intervention Naturgefahren LAINAT
Comité de direction Intervention dangers naturels
Comitato direttivo Intervento pericoli naturali
Steering Committee on Intervention in Natural Hazards

Secretariat

CH-3003 Bern
BAFU; LIC

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Mr. Mark Wigley
President of the Swiss Society of Cartography
c/o ESRI Schweiz
Josefstrasse 218
8005 Zürich, Switzerland

Aktenzeichen: BAFU-611.23-59874/9/2
Ittigen, 7th March 2023

Acknowledgement of willingness to serve

Dear Mr. Wigley

In conformance with the by-laws of the ICA, I formally acknowledge my willingness to serve as cochair of the ICA Commission Cartography in Early Warning and Crisis Management if elected by the General Assembly in August 2023.

Kind regards

Secretariat LAINAT
c/o Federal Office for the Environment FOEN

Christophe Lienert

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TERMS OF REFERENCE
of the
ICA Commission on Cartography in Early Warning and Crisis Management
for the term 2023-2027

1. Initiate development of concepts, models and standards for the cartographic visualization of early warning, disaster management, monitoring and resilience.
2. Integrate spatiotemporal information and related data in humanities and social sciences with thematic data for disaster detection, early warning, monitoring, damage assessment, response and training/education.
3. Develop big data analysis, social computing, information distribution technologies (e.g., APIs) crowd-sourcing and artificial intelligence technologies for early warning and crisis management.
4. Generate hazard zone, vulnerability and exposure maps for different type of hazards, such as forest fire, cyclone, floods, droughts, volcano eruptions, earthquakes, landslides, infectious disease etc., and for the identification and assessment of potential risk and disaster zones.
5. Foster quality mapping and cartographic modeling, including state-of-the-art visualization and dissemination technologies, geospatial process and publishing tools, for early warning and crisis management through suitable publications.
6. Provide methodological and technical inputs and advice for efficient technical systems for risk reduction and increase of resilience: monitoring, multi-hazard early warning systems, impact assessment, and risk-based decision-making
7. Promote the development of disaster management plans for pre-, during and post- disaster situations and enhance support for early warning systems, emergency events mitigation and risk-based decision making.
8. Develop technical training and know-how transfer about emergency geospatial information service for institutional partners and developing countries.
9. Conduct international workshops or symposia about selected aspects of cartography and GIScience in early warning and crisis management.
10. Compile and publish reports and proceedings about the work of the commission.

8th March 2023

Prof. Dr. Shen Jie, Nanjing P.R. China & Dr. Christophe Lienert, Berne Switzerland