



REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT
AND SPATIAL PLANNING

SPATIAL PLANNING, CONSTRUCTION AND HOUSING DIRECTORATE



Co-financed by the European Regional Development Fund

Inspire Policy Making with Territorial Evidence

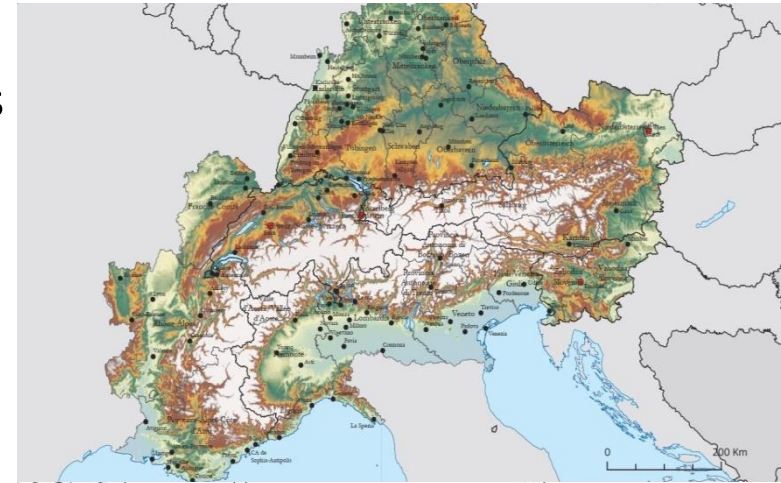
Online Workshop:
Territorial impacts of natural hazards -
Transnational view – Alpine area
Blanka Bartol, MESP SI

ESPON WEEK Green and Just Recovery for all
European Territories, 16-17 June 2021



Alpine Area

- Sustainable and effective protection from NH a precondition for settling and economic activities
- Long lasting cooperation among alpine countries and regions: Austria, France, Germany, Italy, Lichenstein, Monaco, Slovenia, Switzerland
- Common challenges: climate and demographic change, biodiversity loss, energy transition,...
- Alpine Convention since 1995 (International agreement for protection and sustainable development of the Alps; signatory states + EU)
→ **Natural Hazards Platform**
- EU Strategy for the Alpine Region, endorsed by EU Council in 2015 → **Action group 8: Risk governance**
- Alpine Space programme as a support for activities at transnational level





Alpine Convention

The main aim: protection and sustainable development of the Alps
Joint work in alpine relevant topics (working groups and platforms)



190 700 km²



> 14 mio inhabitants,
> 100 mio tourists



Increase of
average air T
for nearly 2 °C



> 5700
municipali-
ties



13 000 plant
species and
30 000 animal
species

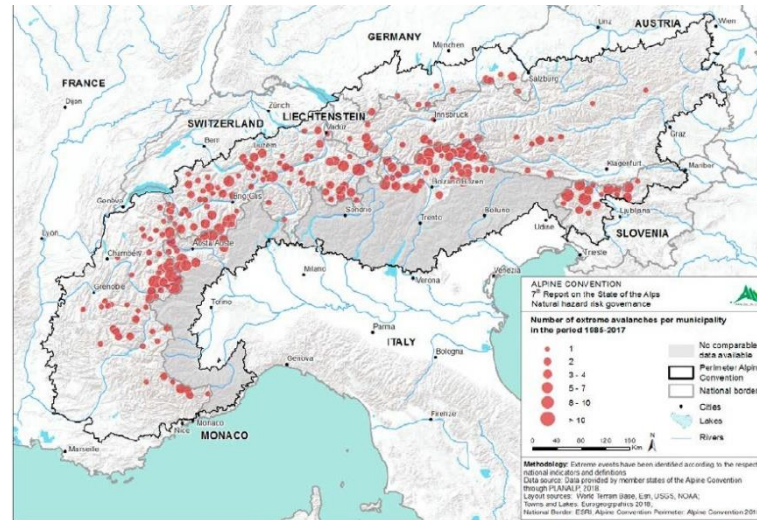
Natural Hazards Platform – PLANALP

7. State of the Alps Report – NH Risk Governance



NATURAL HAZARD RISK GOVERNANCE
Report on the state of the Alps

ALPINE CONVENTION
Alpine Signals – Special Edition 7



The report includes the maps of alpine natural hazards

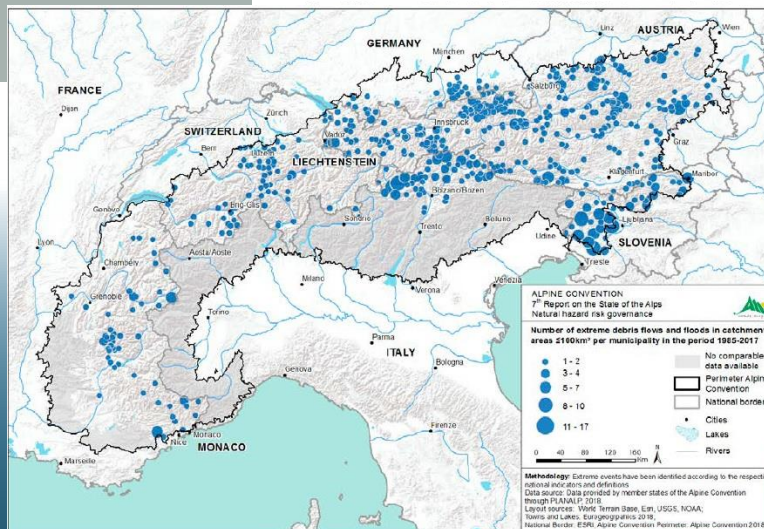


Figure 8: Extreme events in the Alps in the period 1985-2017: extreme debris flow and floods in catchment areas $\leq 100\text{ km}^2$ (Data source: PLANALP Author: Environmental Agency Austria, 2018)

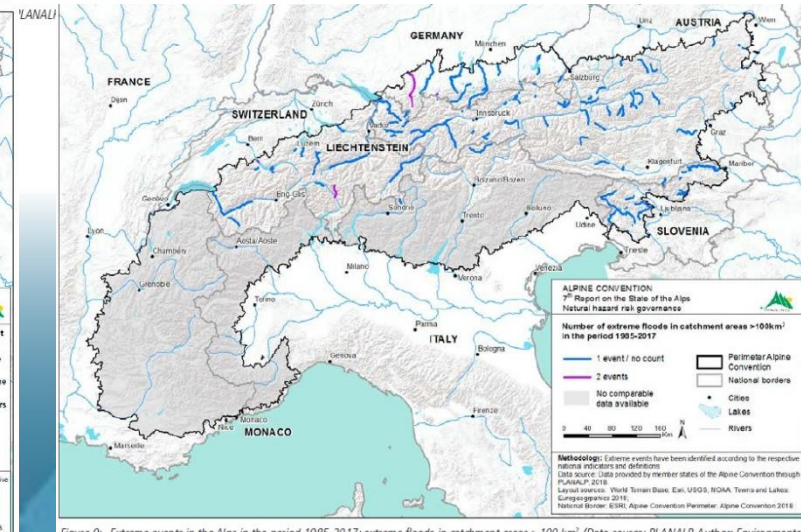


Figure 9: Extreme events in the Alps in the period 1985-2017: extreme floods in catchment areas $> 100\text{ km}^2$ (Data source: PLANALP Author: Environmental Agency Austria, 2018)



Alpine Climate 2050 platform

x



- ECOSYSTEMS & BIODIVERSITY
- ENERGY
- MOUNTAIN AGRICULTURE
- MOUNTAIN FORESTS
- NATURAL HAZARDS
- SOIL
- SPATIAL PLANNING
- TOURISM
- TRANSPORT
- WATER

- ALPENKONVENTION
CONVENTION ALPINE
ALPSKA KONVENCIJA
CONVENZIONE DELLE ALPI
- HOME
- ABOUT
- CLIMATE ACTION PLAN 2.0
- PATHWAYS
- CHALLENGES & TARGETS
- COMMUNITY
- NEWS & EVENTS



ESPON-TITAN - Adobe Acrobat Reader DC

Alpine Climate targets for ten sectors (including natural hazards) adopted in 2019 → on line platform → developed implementation pathways for each sector

NATURAL HAZARDS

RISK. MANAGEMENT PLAN. CROSS-BORDER. MONITORING. PERMAFROST. GEOMORPHOLOGICAL PROCESSES. INDIVIDUAL.

The development of an Alpine-wide risk management plan is at the heart of implementation activities proposed by the ACB. Experiences with natural hazard risk management can only be exchanged effectively and interfaces can only work on the basis of a harmonized data framework and on common tools for early-warning systems.

This Alpine-wide risk management plan on cross-border risks shall include the definition of harmonized methods for risk mapping and monitoring, harmonisation of approaches to deal with residual risks and a common toolbox on measures. The other pathways deal with further actions on Alpine-wide permafrost & erosion monitoring as well as the improvement of precautionary measures at private level.

Pathway 1	Pathway 2	Pathway 3
Alpine-wide risk management plan, focusing on cross-border risks		
This pathway develops a starting point for an Alpine-wide risk management plan a synthesis of existing approaches on natural hazard management related to cross-border risks and a mapping of hazard "hot spots" for critical infrastructures and settlements which are specifically risk-prone. On this basis, a common framework for risk-management of cross-border risks will be developed.		
MORE		



Climate Action Plan 2.0

Natural hazards implementation pathways include:

- Alpine wide risk management plan focusing on cross border risks
- Mapping hazard hot-spots for critical infrastructure and settlements
- Common framework for cross-border risk management (methods, standards, recommendations, tools)
- Alpine wide monitoring of permafrost and geomorphological processes



ESPON TITAN

- Economic impacts of natural hazards – important to raise awareness on indirect economic impacts of natural disasters (added value of the project); indirect impacts are diverse and specific, for example after the storm wind hit some alpine forests the attack by beetles may happen → indirect impacts;
- Territorial diversity in Europe → diversity of natural hazards that hit them (for specific territories some NH are more relevant than others) → it is difficult to make an aggregated map of economic impacts for EU !
- Vulnerability analysis → important to have reliable data at proper level; important to be embedded in spatial planning, problem of finances;
- Spatial planning – often highlighted as an appropriate framework for prevention but still far from optimal „use“ as such;
- Not everything can be done through analysis and assessment → importance of education and governance

Learn about natural hazards!



Thank you!

blanka.bartol@gov.si