CONTINGENCY PLANNING

Comparative analysis of challenges, strengths and weaknesses between contingency planning and natural hazard management



Mandate 2019-2020



ALPENKONVENTION CONVENTION ALPINE ALPSKA KONVENCIJA CONVENZIONE DELLE ALPI



1. INTRODUCTION

The Natural Hazards Working Group of the Alpine Convention (PLANALP) elaborated a comparative analysis of challenges, strengths and weaknesses between contingency planning and natural hazard management. This fact sheet summarises the key messages, for detailed information please read the <u>full</u> report.

Successful management of natural hazard events needs a good preparation and a well-established collaboration in the response phase. Contingency planners prepare plans at national and regional level that consider local knowledge, existing material resources and documentations of past events. In the response phase, natural hazard management experts, with their professional knowledge and understanding of the hazard process, profit from an appropriate contingency plan.

In the years 2019 - 2020, a focus of the PLANALP group has been on the contribution of prevention to contingency planning, with special consideration of synergies and challenges in the Alpine region. The general aim is to bring theory (planning) and practice (management) closer together and to harmonise them. A central question was to what extent the natural hazard managers can support the contingency planners in their challenges. The successful collaboration between emergency planners and natural hazard managers plays an essential role for managing disaster events.

2. BACKGROUND

In the preparatory phase, five categories that had emerged as particularly important and in some cases in need of improvement at the interface of contingency planning and natural hazard management were defined:

- Data Availability
- Risk Communication
- Structural Quality
- Material Resources
- Human Resources

The premise was to best translate expert knowledge into usable maps and information, and not to create common standards for maps. In the preparation, social aspects and the demographic structure (age, gender, special needs) of a municipality were considered.

To work through those objectives, PLANALP commissioned a project consortium consisting out of the Austrian Central Institute for Meteorology and Geodynamics (ZAMG), the Austrian Research Centre for Forests (BFW) and the Leoben University (Montanuniversität). The consortium together with the Working Group defined relevant natural hazards (avalanches/ice avalanches, forest fires, floods, soil

slope failures) to keep a focus in the study. A mixed methods approach was applied: the first part consisted of a quantitative survey to find out the status quo about challenges, strengths and weaknesses specific to natural hazards as well as the expert groups natural hazard management and contingency planning. In the subsequent second part qualitative workshops with focus group interviews were conducted in a total of five Alpine countries.

Based on the valuable contributions, the study was able to formulate recommendations for action for the Alpine region for the successful management of natural hazard events.

3. RECOMMENDATIONS

The key messages of the analysis are:

- 1. Invest in digitalisation and the creation of a central natural hazard database
- 2. Standardise the documentation of damage events, digitally available (e.g. Web-GIS solution) with the possibility of traceability and the derivation of lessons learned protocols
- Develop specific weather forecasts for small alpine catchment areas including changing weather patterns due to climate change
- 4. Establish more measuring points for different natural hazards (e.g. soil slope failure, forest fire)
- 5. Improve the hazard warning maps
- 6. Transform natural hazard maps into cross-disciplinary risk maps
- 7. Improve the cooperation and coordination with spatial planners as well as local decision-makers
- 8. Intensify the cross-border exchanges between the Alpine countries
- 9. Organise regular meetings and mandatory cooperation to improve the information and data exchange between contingency planning and natural hazard management
- **10.** Organise training/courses for knowledge transfer between local and supra-regional experts, different generations, relevant stakeholders and volunteers
- 11. Set up and integrate layperson-observation-networks to improve the risk communication



This <u>fact sheet</u> is a summary of the <u>key messages and recommendations</u> of the report "Contingency Planning in the Area of Natural Hazards". For detailed information please find the <u>full report</u> here: <u>https://www.alpconv.org/fileadmin/user_upload/Organisation/TWB/PLANALP/PLANALP_Continge</u> ncy_Planning_report.pdf

The <u>Alpine Convention</u> is a pioneer of its kind as the first international treaty dedicated to the protection and sustainable development of an entire mountain range – the Alps. The Convention was signed by the eight Alpine countries (Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia and Switzerland) and the European Union, and came into effect in 1995.

The foundations of the Alpine Convention are the Framework Convention and the implementing Protocols and Declarations, which establish guiding principles and a framework for transnational cooperation in key areas of Alpine environments, societies, and economies. Based on these foundations, the Convention works to build partnerships and establish cross-sectoral approaches to address the most pressing challenges in the Alps.

Work is carried out in different formats by the Alpine Convention's various bodies: the biennial Alpine Conference, the work of the Contracting Parties, the Permanent Committee, the Compliance Committee, numerous Thematic Working Bodies, and the Permanent Secretariat. Several Observer organisations also contribute to the implementation of the Convention.

The Alpine Convention is leading the way for sustainable life in the Alps, working to safeguard their unique natural and cultural heritages – now and for the future.

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