



PROJECT FACTSHEET

TRANS-ALP

Transboundary Storm Risk and Impact Assessment in Alpine regions

PROGRAMME:

Union Civil Protection Mechanism Prevention and Preparedness Projects in Civil Protection and Marine Pollution

<https://ec.europa.eu/echo>

START DATE:

January 1st 2021

END DATE:

December 31st 2022

BUDGET:

590 347 €

EC CONTRIBUTION:

501 795 € 85%

PROJECT PARTNERS:

- **Eurac Research** - Accademia Europea di Bolzano (Italy, Lead Partner)
www.eurac.edu
- **EPC** - European Project Consulting srl (Italy)
www.epcsrl.eu
- **ARPAV** - Agenzia Regionale per la Prevenzione e Protezione Ambientale del Veneto (Italy)
www.arpa.veneto.it
- **ZAMG** - Zentralanstalt für Meteorologie und Geodynamik (Austria)
www.zamg.ac.at
- **BFW** - Bundesforschungszentrum für Wald (Austria)
<https://bfw.ac.at>

THE CHALLENGE

The increasing intensity and occurrence of extreme weather events in the Mediterranean region are likely connected to climate change and threaten vulnerable environmental and socio-economic systems.

The current risk assessment and prevention tools are still insufficient, therefore, there is an urgent need to provide local, national and European decision makers and stakeholders with improved and harmonised tools and methodologies for climate change adaptation for cross-border event.

There is a current lack of harmonised, transboundary risk assessments oriented to impact forecasting and prevention for such type of events in the Alpine regions.

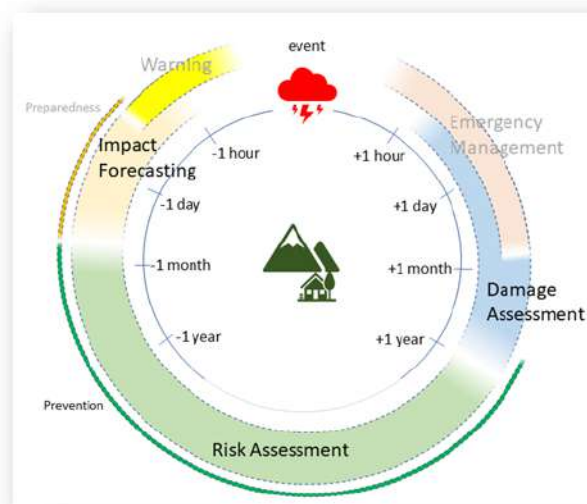
The project will be implemented by a consortia of environmental, meteo-hydrological and earth observations institutes from Austria and Italy.

The project will be supported by a group of Interested Stakeholders from areas of Civil Protection, Land Management, Research and other key sectors, from Italy, Austria and Slovenia.

PROJECT OVERALL METHODOLOGY

The overall goal of the TRANS-ALP project is to develop an integrated methodology for multi-hazard risk assessment and impact forecasting for mountainous regions at cross-border scale, in order to further advance the decision-making processes and support transnational cooperation along the disaster management cycle in the EU.

Severe Storms will be addressed as representative examples of complex hazards with cascaded/compounded components (such as floods and landslides) for which a lack of risk assessment and operational protocols has been observed in Alpine regions. Test sites in Italy and Austria will be considered for the exemplification and testing of innovative risk mapping and communication of emerging meteorological threats in the Alps.



PROJECT GOALS

- To critically review and analyse the current multi-hazard risk assessment and their impact using forecasting approaches for mountainous regions at cross-border areas between Italy and Austria.
- To provide an integrated conceptual methodology along the disaster management cycle in order to better link risk assessment with impact forecasting, and further advance the decision-making processes in the EU in the context of disaster risk prevention.
- To increase the awareness towards high-intensity multi-hazard extreme weather events.
- To provide practical tools and methodologies for cross-border impact forecasting and risk assessment, with a potential for significant advises on joint risk reduction implementing measures.

PROJECT OUTPUTS

- Hazard forecasting and limit of predictability:** project findings will be summarized in a whitepaper aimed at helping civil protection authorities and decision makers in correctly using forecast data for the definition and implementation of mitigation and preparedness measures.
- Scalable and transferable multi-hazard exposure and vulnerability modelling framework:** a set of practical guidelines for the systematic cross-border description and characterization of the main exposed assets and infrastructure, and their susceptibility to the different hazards, will be developed and discussed with relevant stakeholders.
- Damage observation and mapping of the consequences:** different experiences and best practices will be reviewed and assessed; common, standardised operational protocols will be suggested to frame the proposed technical solutions into a transferable scheme.
- Multi-hazard risk mapping and visual communication:** a set of guidelines and indications for the efficient development of dynamic risk maps and their components (e.g. hazard, exposure, vulnerability) will be produced. A lightweight, prototype web-GIS platform will be set-up.