BORIS

Cross BOrder RISk assessment for increased prevention and preparedness in Europe

Newsletter #2, April 2022

Welcome to the second BORIS newsletter! In this newsletter, we want to inform you about the project progress over the past months as well as future activities.

About the project

Funded by the Directorate-General for Civil Protection and European Humanitarian Aid Operations (DG ECHO), BORIS will develop a shared methodology for cross-border seismic and flood risk management.

The project area, the Eastern Alps, including the Italian – Slovenian-Austrian borders, as well as the region of South-Eastern Europe – is in fact characterized by strong seismicity and hydrometeorological risks. To establish coordinated transboundary approaches able to assess and communicate those risks, BORIS will firstly do an overview of the existing methodologies for flood and seismic risk assessment in the countries involved (Italy, Slovenia, Austria, Turkey and Montenegro).

Based on such analysis, a shared methodology for single and multi-risk assessment will be developed to assess the expected impacts for single natural hazards and to do a comparison with multi-risk impacts in those transboundary regions. The strategy will be tested in some pilot sites. The project also aims to develop a platform for single and multi-risk assessment which will facilitate the visualization, storage, updating of data, models, documentation and the representation of damage and impact data following a common metrics approach.



Project partners











University of Ljubljana

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Timeline so far

01.01.2021 - official project launch 25.01.2021 – project kick-off meeting 25.06.2021 – BORIS leaflet published 31.08.2021 - submission of D2.1 Comparison of National Risk Assessment 16.09.2021 - synergy meeting with colleagues from the Trans-Alp project 17.11.2021 – presentation of BORIS at DRMKC 5th Annual Seminar 23.12.2021 – first BORIS newsletter published 31.12.2021 - deliverables D2.2 "Data availability and needs" and 3.1 "Architecture of the platform" submitted 09.02.2022 - WP 4 results discussion 24.02.2022 – WP 5 kick-off 31.03.2022 - deliverables D4.1 "Guidelines for cross-border risk

assessment: Shared framework for single and multi-risk assessment at cross-border sites" and D4.2 "State of the art of tools for seismic risk, flood risk and multi-risk assessment" submitted

Achievements in 2021

2021 marked the launch of the project. Still restricted by the global pandemic, we worked remotely on tasks, submitted multiple deliverables, fostered knowledge exchange with other projects and presented BORIS at events.

To learn more details about this first year, please check out our first newsletter which was published in December 2021.

<u>Read the first newsletter ></u>

Furthermore, we recommend looking at our official communication channels - the BORIS website and the BORIS LinkedIn page - which also include an overview of all our deliverables and project updates.

- <u>Check out our website here ></u>
- Follow us on LinkedIn >

Work and goals in 2022

The goal for this year is to continue working on the platform for assessing and visualizing individual risks and multi-risks and test the methodology in two crossborder regions.

To opimize the output, workshops and trainings with local stakeholders and end users are planned, starting in June.

Learn more about the tasks and next steps in the individual projects on the next pages.

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WP updates

Work package 2

Work package 3

Work package 4

Work package 5

Work package 6

WP2

With the end of M12, December 2021, WP2 was finalized. The two deliverables, the results of WP2, are elaborated in D2.1 Comparison of National Risk Assessments and D2.2 Data availability and needs for large scale and cross-border risk assessment, obstacles and solutions.

Find the reports here:

- D2.1: Comparison of NRA
- <u>D2.2: Data availability and needs for large</u> <u>scale and cross-border risk assessment</u>, <u>obstacles and solutions</u>

WP3

The deliverable D3.1 on the architecture of the platform was submitted in December 2021 and the development of the web platform is ongoing with the continuous integration of additional elements and data resulting from the other work packages. The survey on enduser requirements outlined that there is a strong interest in the visualization of exposed people, buildings, infrastructure to better prepare for upcoming events. Also, the importance of keeping the data and risk information easy to understand and up to date was pointed out. Few end-users have had previous experience with multi-risk / multi-hazard mapping and cross-border visualization, and besides the focus is often given to hazard assessment rather than to assess risk. Read the deliverable here >



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WP4

The results of WP4 are summarized in D4.1 dealing with shared framework for single and multi-risk assessment at cross-border sites and D4.2 on state of the art of tools for such evaluation.

Overview of main results:

For seismic risk, the ESHM2020 model can be employed for hazards while a heuristic approach combining existing vulnerability models in confining countries is proposed. For flood risk, a simplified approach to assess flood harmonized hazard curves is proposed, while existing models from literature are used for describing flood vulnerability. For multi-risk, multilayer single risk assessment is adopted. Harmonized consequence functions allow the evaluation of impacts, e.g. in terms of direct economic losses; risk curves are selected as tools for multi-risk comparison and ranking. The final risk results will be represented at municipal level, e.g. employing risk maps.



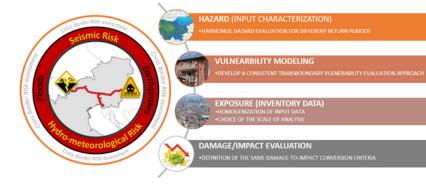


FLOOD HAZARD

Methodology for flood risk harmonization

MAP

CROSS-BORDER HARMONIZATION FOR SEISMIC RISK





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WP5

A Kickoff meeting for WP5 Pilot application in cross-border sites was held on 24 February, 2022. One chosen pilot region is at the Italian-Slovenian border around Gorizia and Nova Gorica that is known as earthquakeprone area. The second region along the Austrian-Slovenian border includes municipalities around Bad Radkersburg and Gornja Radgona and is characterized by the Mur(a) river, historic flood events and flood management. The next steps are to test and apply the multi-risk framework (developed in WP4), create data for the web-platform, rank different risks affecting the same area and to evaluate the methodologies used in singleand multi-risk assessment.



Screenshot of WP5 kick-off in February



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WP6

In the scope of this work package, 3 workshops and 2 trainings will be organized. The first workshop and training will be held on 22 and 23 June in Vienna, Austria, and the second will be held in Slovenia in September. The final workshop involving also invited attendees from countries not participating in BORIS will be organized in Italy.

All slides collected from the workshops and training notes in electronic format will be downloadable from the project website in English language.

The trainings will be organized for local experts in the language of the country where they are held.

Whenever training events or workshops will take place, the capacity to spread the message of the project to the outside and the quality of the developed outputs will be measured by the feedback from the surveys to be filled by the participants and involved agents.



Our next newsletter will be available in August 2022

Funded by the European Union

BORIS is a project funded by Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO).

Learn more about BORIS



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in linkedin.com/showcase/borisprojecteu