

HARMONIZATION OF SEISMIC HAZARD MAPS FOR THE WESTERN BALKAN COUNTRIES

NATO SFP Project Number 983054 (BSHAP)

Project Overview

Project Leading Country: Montenegro

Project Directors:

Prof. Dr. Branislav Glavatic, Montenegro, PPD
Prof. Dr. Sinan Akkar, Ankara, Turkey, NPD

Participating Institutions:

Montenegro: Montenegro Seismological Observatory
Geological Institute of Montenegro

Albania: Seismological Institute, Geographic Studies Center
Academy of Sciences of Albania

Serbia: Seismological Survey of Serbia, Belgrade
Faculty of Mining and Geology, Department for geology
Faculty for Civil Engineering, University of Belgrade

Macedonia: Institute of Earthquake Engineering and Engineering Seismology
Seismological Observatory, University "Ss. Cyril and Methodius"

Bosnia and Herzegovina: Center for Seismology, Sarajevo
Hydro Meteorological Institute of Republic of Srpska
Sector for Seismology

Croatia: Faculty of Science, Geophysical Department

Turkey: Middle East Technical University

Project will last for: 3 years (2007 - 2010)

Project Launch

The official launch of the Project was on 2nd of October 2007, at the Podgorica, Montenegro, with the presence of dignitaries from NATO Science for Peace and Security Programme, Environmental Panel members, Project Co-Directors, distinguished guests from abroad and domestic dignitaries.



Project Objectives

- Establishing of a complex, consistent GIS application database of earthquake catalogue, seismotectonics and seismic hazard data for the region of interest
- Surmounting of the existing artificial differences of seismic hazard in the cross border regions through unified, harmonized and methodologically improved seismic hazard assessment
- Providing a consistent background for tailoring the seismic provisions of the participating countries harmonized with EU standards (Eurocode 8)
- Improvement of existing seismic monitoring through the deployment of strong and weak-motion stations at the participating countries; real data exchange
- Establishing of active scientific collaboration between the participating countries and training of future-promising young scientists in earthquake hazard related topics
- Publishing of the major Project findings and obtained hazard maps to disseminate results to the scientific and engineering community.
- Training of young researchers

Reasons for the Project:

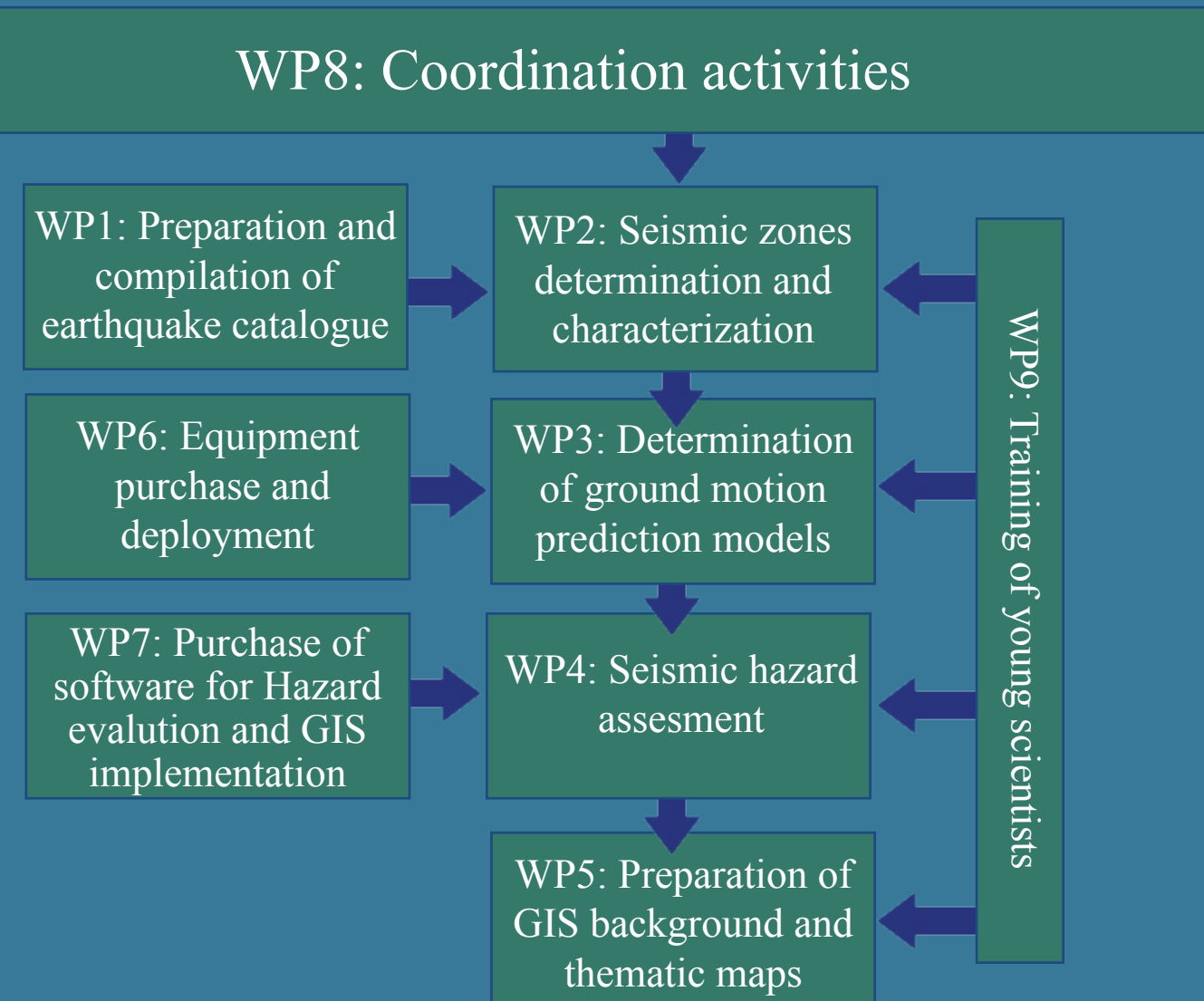
The crucial reasons for starting the Project are:

- Updating of existing seismic hazard maps is necessary, from the stand point of view to introduce the state of the art in the methodological approach.
- Local seismic design code regulations, seismic risk estimation, risk management and seismic safety improvements should be based on reliable hazard maps.
- The fact that current seismic provisions have been updated in early 1980-is underlines an evident need to upgrade these technical norms.
- The foreseen logical step is harmonization with EU standards, what impose the seismic hazard harmonization as the first step towards.
- Necessity to overcome the problem of artificial differences in the level of seismic hazard in cross-border areas by performing unique seismic hazard analysis, over the whole area of the region etc.

Project Web Address: www.wbseismicmaps.org.

Flow chart of Project activities

Project consists of 9 working packages:



Objectives already achieved

- Improvement of international cooperation with similar EU institutions
- Introducing many governmental and scientific institutions with the benefits of the NATO SPS Programme
- Advocacy for the importance of mitigation of seismic risk in the region and region and education of society
- Fostering of other NATO Sfp Projects in the Region
- Stimulating of cooperation between partner institutions: parametric seismic data exchange, including earthquake catalogue compilation, introduction of new agreements and practice on real time seismic data exchange, determination of joint criteria for seismological instruments improvement and harmonization in the region, etc.

End users:

- Civil protection agencies
- Agencies for urban planning
- Ministries responsible for seismic safety improvement and seismic risk management
- Authorities for seismic design code legislation
- National seismic networks
- Seismological, geological and geophysical institutions in the Region
- Insurance companies

End products:

- Unified seismogenic model for the region
- Improved seismic monitoring networks through the deployment of new seismic instrumentation
- Seismic hazard maps, harmonized with the EU standards as a base for seismic safety improvement, seismic risk management and seismic design codes
- Improved scientific collaboration between the participating countries and institutions
- Integrated database organized in a GIS application for the whole region: regional earthquake catalogue, seismotectonical data, focal mechanism data, morphological and geological data, etc.
- Trained young scientists in earthquake-hazard related topics
- Published and disseminated the major Project results



This project is supported by:

The NATO Science for Peace and Security Programme