



**Project information:**

**Project title:**

Preliminary Flood Risk Assessment and Hazard Mapping Data Production

**Project identification:**

KEOP-2.5.0/B/10-2010-0001

**Beneficiary:** General Directorate of Water Management

**Implementation period:** April 20, 2011 – August 30, 2014

**More information:** <http://akk.beruhazas.eu/>

**Funded jointly by the European Union and the Government of Hungary**

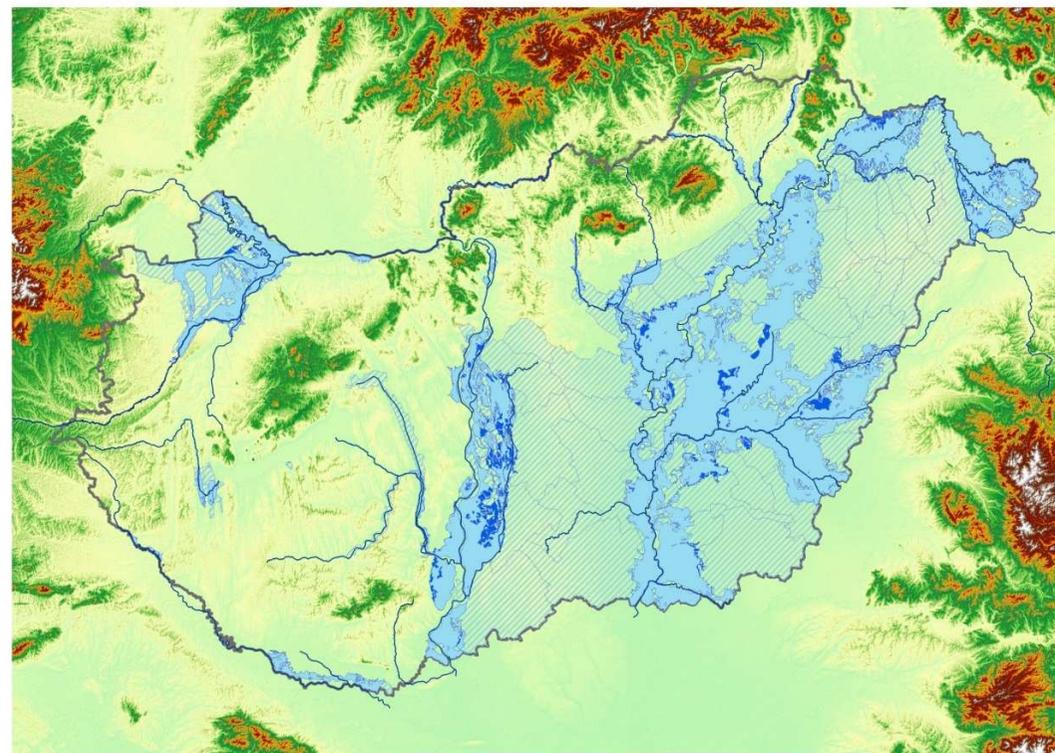
**Grant:** HUF 2,880,905,000



## Preliminary Flood Risk Assessment and Hazard Mapping Data Production

KEOP-2.5.0/B-10-2010-0001

Flood Risk Mapping and Strategic Risk Plan Preparation  
Project Construction Phase 2



## Transposition of the EU Floods Directive

Hungary operates an internationally recognized high-level structure of flood protection system. This system has been gradually developed over the past centuries due to the geographical position of the country and the virtually permanent risk of inundation. The basic structure of the current system relies on the major flood protection lines, which were designed to provide for the equal safety principle to all protected areas. Nevertheless, the dramatic changes in the social and economic environment over the past 20 years and the experiences with the extraordinary floods have shown that the equal safety principle needs to be revised, and the inundation risk-bearing and risk-sharing among the affected parties should be reconsidered. The protection system should be developed according to the risk assessment based planning, which allows for the inundation of less valuable areas in order to spare more sensitive areas by a more efficient use of resources.



The flood risk mapping and strategic risk assessment based planning KEOP operational program project construction was launched in 2008. The objective is to fulfill the requirements of Directive 2007/60/EC of the European Union on the assessment and management of flood risks, and prepare a national flood protection strategy to meet the current social and economic needs. Phase 1 of the project was closed in 2010 by defining the methodology to be applied and necessary datasets to ensure a unified approach to flood and inland waters risk assessment that would allow to set an objective list of priorities prior to the development phase. The plans prepared according to the unified methodology are harmonized and mutually complementary. During construction Phase 2 the preliminary flood risk assessment was prepared in line with the EU requirements, and the datasets defined in Phase 1 were also produced. Eventually, by the end of 2015 and Phase III the national flood risk maps and the strategic risk plans will be in place as well.



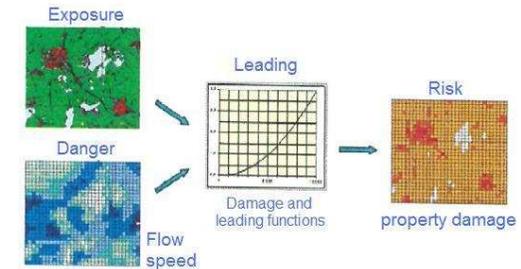
## Project implementation

The project aims at contributing to the flood risk assessment and management in Hungary in line with the EU Floods Directive to mitigate the harmful consequences of floods to human health, environment, cultural heritage and economic activities.

### Main project objectives

To determine and map the level of inundation hazard according to flood protection best practices, and pre-determine the inundation risk of the hazard areas based on land-use and value of capital asset at risk as well as vulnerability to inundation.

The preliminary risk assessment has been prepared in line with the provisions of the Floods Directive and it required thorough knowledge of the areas impacted by inundation hazard, number of communities impacted and types of risks. An important step was to set the overall nationally applicable principles of hazard mapping and risk management, and set the boundaries of the planning units in accordance with the practice of other authorities involved and the Water Framework Directive. These were the project milestones whose accomplishment resulted in the national hazard map and national risk map.



At the same time the project was also the preparatory step that delivered all the necessary data to be used during the implementation of the national flood risk management and planning program in Phase 3.

A detailed data collection process preceded the actual hazard mapping phase. The data collection process comprised a series of preset tasks aiming at meeting the project requirements in terms of gathering consistent and nationally relevant data needed for mapping the hazard related to floods, small water courses and inland waters as well. In addition, this process also contributed to the storing of the relevant data in a centrally managed repository.

All this requires strong IT support as digital data files are to be produced. The Flood Risk Information System developed in Phase 1 set the foundation for the later stages. The system is based on the consolidated database of the Water Data Repository.