

South East Europe Transnational Programme

Project Idea Form

Project idea's title

Priority

(choose priority and indicate the relative area of intervention)

Project Idea Promoter
(name of the institution)

Contact Person

Danube FLOODRISK

Stakeholder oriented flood risk assessment for the Danube floodplains

☐ Priority Axis 1

Aol _____

☒ Priority Axis 2

Aol 2.1 Improve integrated water management and transboundary flood risk prevention

☐ Priority Axis 3

Aol _____

☐ Priority Axis 4

Aol _____

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Is the applicant the project's potential Lead Partner?

☒ Yes

☐ No

If not, is the potential Lead Partner already being chosen?

☐ Yes

☐ No

Background (main problems or challenges to be addressed)

Between 1998 and 2007, South East Europe suffered over 100 major damaging floods, including the massive floods along the Danube River in 2002, 2005 and 2006. All Danube countries work intensively on improvements in the fields of flood risk management and spent high budgets. BUT the key problem still is, that the Danube, as an international river, with its transboundary risks and substantial upstream-downstream relations calls for basic urgent improvements in the risk management network. This network has to include

- a) all Danube countries (transboundary),
- b) different sectors like water management, spatial planning, agriculture etc. (interdisciplinary and horizontal cooperation) and
- c) different levels of organisations from national to local actors (vertical cooperation).

All countries still work with different flood risks mapping methods, various elevation systems, different criteria for risk assessment and many regions suffer from missing or insufficient risk information for planners, population and decision makers. **Unless there is a joint international project, this situation will not be changed**, since all national resources are urgently needed to fulfill the provisions of the ICPDR Action Program on Sustainable Flood Protection, which is line with the new EU Flood Directive. Cooperation for information and mitigation in the field of flood risk is the most cost-effective approach. All existing physical measures for flood risk mitigation are comparing ineffective, if not integrated into a transboundary cooperation strategy for flood risk management.

The International Commission for the Protection of the Danube River (ICPDR) has created the basis for this cooperation through the implementation of the Flood Action Program, which requires close transboundary cooperation of all Danube countries, including on issues related to land use and spatial planning.

This situation especially generates the necessity for an INTERREG project focused on the upgrading of basin wide approach in flood risks mapping, taking into account the experiences from successful cooperation projects in the Elbe River or the Oder River.

The idea for a FLOODRISK project was initiated under the presidency of Romania of the International Commission for the Protection of the Danube River (ICPDR), and supported by all Danube countries at the 10th ICPDR Ordinary Meeting, December 2007. The necessary actions for such a project are communicated with and supported by the Flood Protection Expert Group (FP EG) of the ICPDR. As an outcome of a workshop organised by the FP EG in September 2007 in Budapest, a common position on "Flood Risk Mapping in the Danube River Basin" was defined and later on agreed by the ICPDR as the starting point for future cooperation in the flood risk mapping in the Danube River Basin. The FLOODRISK Project is building on this joint policy statement.

The FLOODRISK Project will bring together scientists, governmental bodies, NGOs and stakeholders in developing a scalable system of flood risk maps for the Danube River floodplains. Transboundary methodology and models will be developed and implemented for flood risk assessment and mapping, leading up to the proposal of flood mitigation measures.

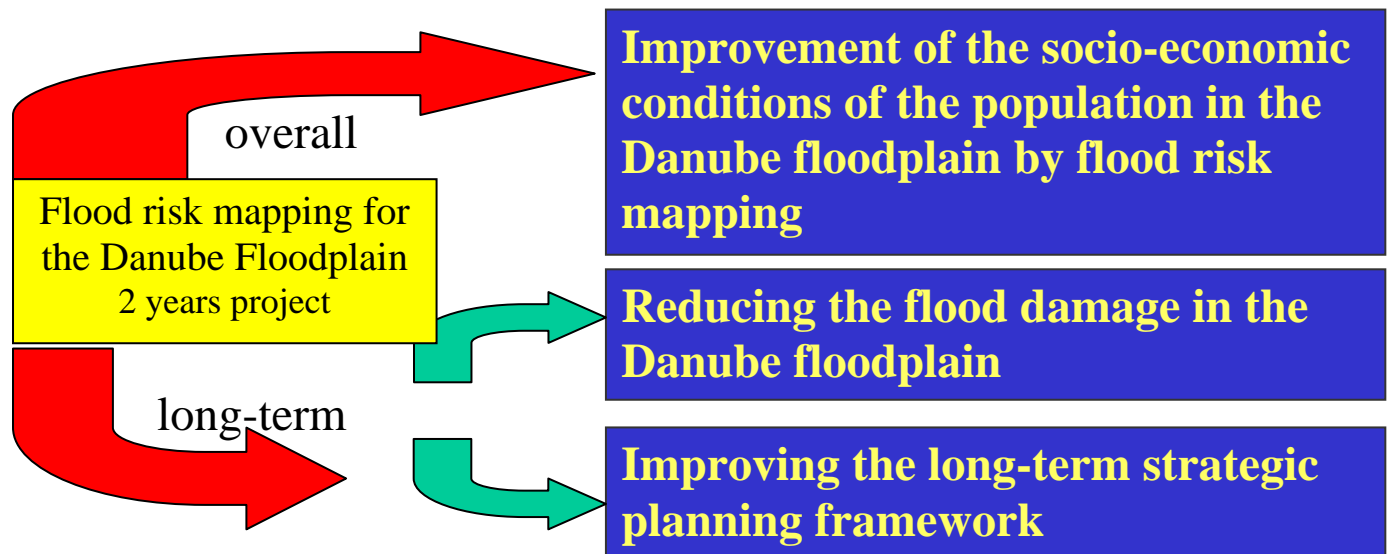
Objectives (main and specific objectives to be achieved)

The goal of the DANUBE FLOOD RISK project is to provide efficient flood risk maps for the transboundary Danube river floodplains to present important risk information for spatial planning and economic requests. This is necessary to provide the basis for sustainable development along the Danube River. To organise the processes not theoretically but practically oriented, stakeholder and end user involvement is an important task.

The project's objectives are:

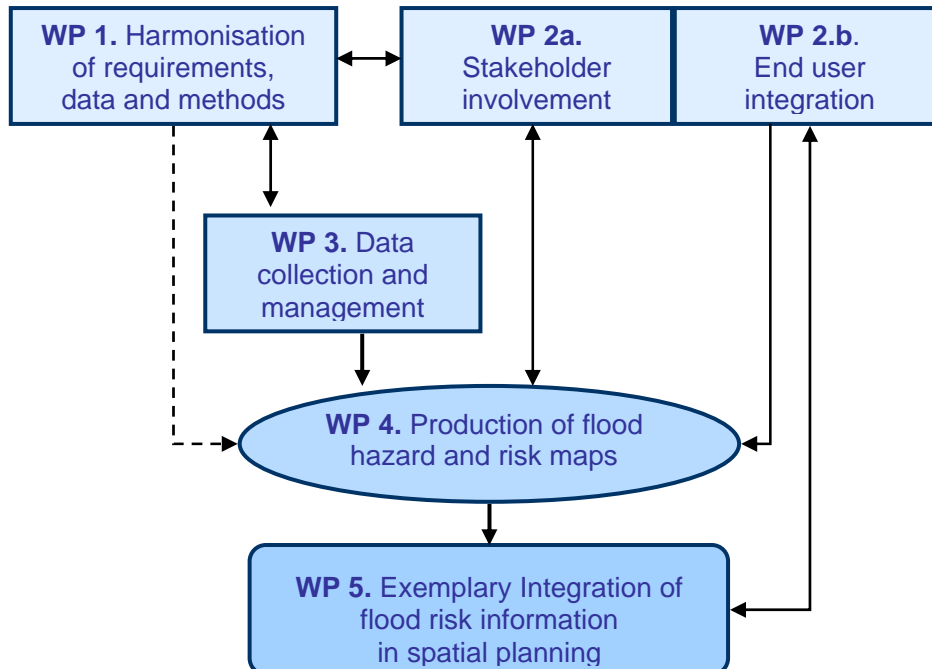
- The development of a joint mapping method for flood risk and harmonisation of data sources.
- The integration of relevant stakeholders and users on different levels into the definition and realisation processes.
- The involvement of different economic aspects of land use in the river basin like spatial planning, recreation and agriculture as well as energy supplier or health service.
- The production of flood risks maps and integration of linkages of flood risk mapping as basis for planning, e.g. within the EU Floods Directive. (the product are maps deci le-am pus primele)
- The development and distribution of exemplary procedures within the Danube countries and beyond.
- The reflection of the EU Directives, e.g. WFD, Floods directive, providing feedback based on the experiences of the project cooperation by using the platform of the ICPDR Flood Protection Expert Group

FLOODRISK Objectives



Main foreseen activities

The foreseen activities are structures with following work packages:



Within the work packages these activities are planned:

Work package 1: Harmonisation of requirements, data and methods

- Scoping study on available data etc. and on organization of data management
- Work out demands on data, databases, models: catalogue, checklist for the mapping actions

- Quality checks, discussion of samples, accompanying coordination of applications
- Series of workshops, expert group to develop the basic methods and demands
- Capacity building activities: training, seminars with organisations and consultants
- Long term concept for use and update of the products (including linkage with ICPDR).

Work package 2: Stakeholder and end user involvement

- Stakeholder analysis; set up two levels of stakeholder involvement: (a) transnational and (b) regional
- Accompanying working groups: (a) transnational and (b) regional / per nation
- Reflection of the mapping actions.
- Work out advice for the harmonisation group WP1 and for the mapping actions WP4.

Work package 3: Data collection and management

- LIDAR (light detection and ranging) survey to build up a transnational digital elevation model (DTM) where missing (e.g. data from Romania and from Austria can be used and will be integrated).
- Survey of cross sections where missing along the Danube River.
- Survey on vulnerability; assessment of risk.
- Validation of data (following methods in WP 1) and quality management (DTM, Hydrology, Hydraulics).

Work package 4: Production of flood hazard and risk maps

- Modelling (incl. hydraulic modelling) to develop flood hazard maps (regional by each partner);
- Development of layers of flood risk receptors (population, economic activity/CORINE land use protected areas) and pollution sources.
- Production of joint flood risk maps 1:100.000 (printed Atlas) and 1:25.000 (on DVD and for INTERNET).

Work package 5: Exemplary Integration of flood risk information in spatial planning

- Exemplary implementation of the risk information into regional and / or local spatial planning; pilot cases have to be determined; for all or most countries at least one pilot area with involvement of a municipality.
- Discussion and specification of local planning demands on the risk maps; feed back to the harmonisation and mapping in the transnational context.

Work package PM/FM and dissemination

The administrative work and all publicity actions will form the framework for the project.

Expected outputs and results

- Harmonized data and methods (geographic data, hydraulic models, etc.) and one transnationally adjusted digital terrain model.
- Joint catalogues and checklists for all risk mapping actions in the Danube countries including the consultation of experts, stakeholders and decision makers.
- Flood risk and hazard mapping for the Danube river basin.
- Assessment of flood vulnerability estimation.
- Methods and principles for the different steps of stakeholder oriented flood risk management planning (including the comprehensive identification of risk receptors estimation of vulnerability, innovative and cost-efficient approaches to risk assessment based on stakeholder consultation, and the integration of diverse aspects like economic risk, climate change, nature development, spatial planning and urban development, etc.)
- Exemplary engagement of relevant stakeholders in the different stages of flood risk management planning who represent the different aspects of land use in the catchment like spatial planning and agriculture as well as risk receptors like infrastructure providers and the raising of awareness through the cooperation.
- Exemplary implementation of stakeholder oriented risk assessment in different Danube countries on local and regional planning levels.
- Reflection of the EU Flood Directive and the guidelines of the EU Working group on floods (WG F) as well as the EU exchange circles on flood risk mapping (ExCiMap) and land use planning (ExCLUP) and concrete feedback to this group based on the cooperation between different partners from different countries. Development of early examples of implementation of the directive in varying regions to provide pilot projects for examination by other EU states.

Innovative character of the project idea

a) For the Danube River Basin

The joint transboundary implementation of flood risk assessment and mapping actions is innovative, since the ICPDR framework provides the basis for cooperation, but the implementation is under the responsibility of the Member States. Thus it is not only innovative but also essential for future improvements towards a risk adapted economic growth in the Danube floodplains that all Danube countries here (for the first time) cooperate in concrete data management and harmonisation activities.

b) For South East Europe

This project provides an exemplary approach for all South-East Europe, since the situation in other transboundary river basins (like the Bulgaria-Greek-Border rivers) face the same problems of lack of harmonised data management and risk assessment approaches. Thus the project offers an innovative approach in SEES.

c) For flood risk management in Europe

The integration of the relevant stakeholders to represent the different kinds of land use as well as flood reception on the different levels of flood risk management planning is innovative in the risk management approaches in Europe. The development of standards for flood risk mapping in the countries of the whole river basin is innovative, since no other European River includes so many different member states like the Danube and like this project.

The practice and user oriented development of harmonised methods for flood risk assessment and mapping contributes in an early stage of the EU Directives on flood risk management to reflect the directives and to test the approaches fixed in the directive.

Partnership

Partners involved at this stage

ERDF Partners	<ol style="list-style-type: none"> 1. RO/LP - Ministry of Environment and Sustainable Development (MMDD) 2. Ro - Apele Romane National Administration 3. Ro CESEP- Centre for Environmentally Sustainable Economic Policy 4. Ro National Institute for Research and Development of the Danube Delta 5. Giurgiu/Galati Council 6. BG - Ministry of environment and water 7. BG - University of architecture, civil eng. and geod. 8. SK - Slovak water management enterprise (SWME) 9. SK - Slovak Hydrometeorological Institute (SHMU) 10. SK - Water Research Institute (VUVH) 11. HU - VITUKI research (non-profit organisation) 12. HU - VKKI (Central bureau for water and environment) 13. AT - National Agency for Environmental Protection 14. AT – Vienna City Council 15. HU - Danube Environmental Forum (DEF) (Hungary) 16. Int. - World Wildlife Fund (WWF) (observer?)
IPA Partners (partly to be confirmed or merged)	<ol style="list-style-type: none"> 17. HR - Ministry of Agriculture, Forestry and Water Management 18. HR - Croatian Waters 19. HR - Institute for Meteorology and Hydrology 20. RS - Water Directorate in Ministry of Agriculture, Forestry and Water 21. RS - Institute for the development of water resources "JAROSLAV ČERNI" 22. RS - Public Water Management Company (PWMC) "Vode Vojvodine" 23. RS - Public Water Management Company (PWMC) „Srbijavode“

	24. RS - Republic hydrometeorological service of Serbia	
Observer Partners	1. ICPDR 2. BS- Ministry of Foreign Trade and Economic Relations 3. CZ- Ministry of the Environment 4. CZ- Morava River Basin Authority 5. D - Federal Ministry for the Environment, Nature Conservation and Nuclear Safety 6. D - Bavarian State Ministry for the Environment, Health & Consumer Protection 7. MO - Scientific Researcher Institute of Ecology and Geography 8. SL - Ministry of the Environment and Spatial Planning 9. UK - Ministry for Environmental Protection (MEP) 10. IT - APAT	
Partners requested	ERDF Partners	--
	IPA Partners	--
	ENPI Partners	--

Estimated Total Budget

6 - 7 Mill. €

Does your project idea foresee the application for the 10% rule*

<input type="checkbox"/> Yes. Please, explain in detail what will it be used for and the relevance for the project	<input checked="" type="checkbox"/> No
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Estimated duration
(in months)

24 months

☒ I would like my project's idea to be published on the Southeast Europe Transnational Programme's website and presented during the SEE kick off event.

* ENPI Funds won't be available for the 1st Call. Partners from Ukraine and Republic of Moldova can be involved by applying for the 10% rule.

* The 20% rule is not applicable for the 1st Call.