

## The Challenge



The Adriatic Ionian area is prone to quite all types of natural and man-made hazards, which severity and frequency has steadily risen in the last decades due to climate change, urbanization, population growth and environmental degradation, causing significant human losses, damages to environment and infrastructures and social alert.

In the last few decades, all ADRION countries have equipped themselves with a National Civil Protection System in order to decrease exposure of the population to the impact of hazards and increase the overall ability of communities to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner.

Each National Civil Protection System deals with the prediction, prevention and management of the emergencies via: (i) the construction of specific knowledge; (ii) ability to issue early warnings and to reach people through different information channels, then (iii) capacity to coordinate human and technological resources to cope with calamities.

Decreasing ADRION community risk to future disasters depends on the cooperation level among National Civil Protection Systems towards delivering relief assistance. Currently this level is highly affected by differences in their national administrative structures, procedures, organizations, early warning systems and processes for forecasting, managing and preventing natural and manmade hazards.

Thus, integration of existing procedures and early warning systems represents a necessity and an opportunity to decrease ADRION territories risk to natural and man-made hazards.



## The TransCPEarlyWarning Approach



The TransCPEarlyWarning project approaches the above challenges by equipping ADRION Civil Protection with transnational Early Warning System, enabling Civil Protection command and operational units towards a more efficient, interoperable and homogeneous handling of risks, according to validated real risk scenarios and efficient alerts.

#### This approach is built on three pillars:



**Governance** - it relates to the improvements of existing Civil Protection Early Warning Regulatory System and legislation in ADRION countries, in the light of enhancing their level of uniformity, homogeneity and similarity and how to improve their overall efficiency, to make available to National and Regional Authorities a transnational uniform Early Warning legislative base according to EU principles of cooperation and subsidiarity.

Innovation - it relates to the development of an ADRION Civil Protection Early Warning System (CPEWS), comprising a semantically enriched web enabled platform, enabling the management and monitoring of Early Warning processes among involved stakeholders in the different countries, integrating information from different sources, allowing experimentation with open source Machine Learning algorithms and open data, and safeguarding security by design principles

**EU integration** - it relates to the exchange of information with Emergency Response Coordination Centre of the EU Civil Protection Mechanism at national level, when state of national emergency is declared.

## **Specific Objectives**

- Promote the harmonization of current Civil Protection Early Warning legislations among ADRION countries
- Reinforce the coordination and cooperation of Civil Protection chains of command in Early Warning among ADRION countries
- Promote the EU Civil Protection standards among IPA Civil Protection Institutions

## Main Outputs

- Innovative Transnational Network for Civil Protection Early Warning
   An innovative Transnational Network for Civil Protection Early Warning will be established
   in ADRION, modelling stakeholder roles and processes
- Innovative Early Warning Platform supporting Civil Protection Networking in ADRION
   Innovative Web Enabled Semantically Enriched Platform Tool for facilitating Civil Protection
   Networking in the ADRION area related to Early Warning Mechanisms
- Civil Protection Early Warning System Strategic Outline Action Plan
   A strategy jointly defined by all the partners will be implemented with a common vision
   and common solutions. A joint action plan will be delivered indicating how the strategy
   will be implemented

### **Target Groups**

ADRION ADRIATIC-IONIAN
European Regional Development Fund - Instrument for Pre-Accession II Fund
TRANSCPEARLYWARNING

- Local Public Authorities
- Regional Public Authorities
- · National Public Authorities
- · Higher Education and Research
- Interest Groups including NGOs
- General Public

### Civil Protection Early Warning Framework Evaluation in ADRION Countries

#### **Civil Protection Legislation and Regulations**

Country	Legal approach	
Albania	Highly centralized (1 law)	
Bosnia Herzegovina	Neutral (5 laws)	
Croatia	Fragmented (11 laws)	
Greece	Highly centralized (1 law)	
Italy	Fragmented (7 laws)	
Montenegro	Fragmented (11 Laws)	
Slovenia	Fragmented (9 laws)	



## Civil Protection System Organization – Administrative Structure



IPA		ERDF				
Albania	Bosnia and Herzegovina	Montenegro	Croatia	Greece	Italy	Slovenia
centralized level						
national	national	national	national	national	national	national
decentralized level						
regional	entities		regional <sup>1</sup>	regional	regional	local
	cantonal	local				
local (municipal and commune level)	local (municipal and city level)	(municipal level)	local (municipal level)	local (municipal level)	local (municipal and provincial level)	(municipal level)

<sup>&</sup>lt;sup>1</sup> Within Croatia, counties have populations amounting to 200.000 persons and often local and regional responsibilities overlap.



# Civil Protection System Organization – Governance System Approach



Countries		Civil Protection Governance system approach (top-down, bottom-up or both)	Civil Protection Governance system organization (centralized, rather centralized, rather decentralized, decentralized)	
	Albania	top-down	centralized	
IPA	Bosnia and Herzegovina	both	decentralized	
	Montenegro	top-down	rather decentralized	
ERDF -	Croatia	both	centralized	
	Greece	both	rather centralized	
	Italy	both	rather decentralized	
	Slovenia	top-down	centralized	



## Early Warning Framework for Forest Fires – Organization



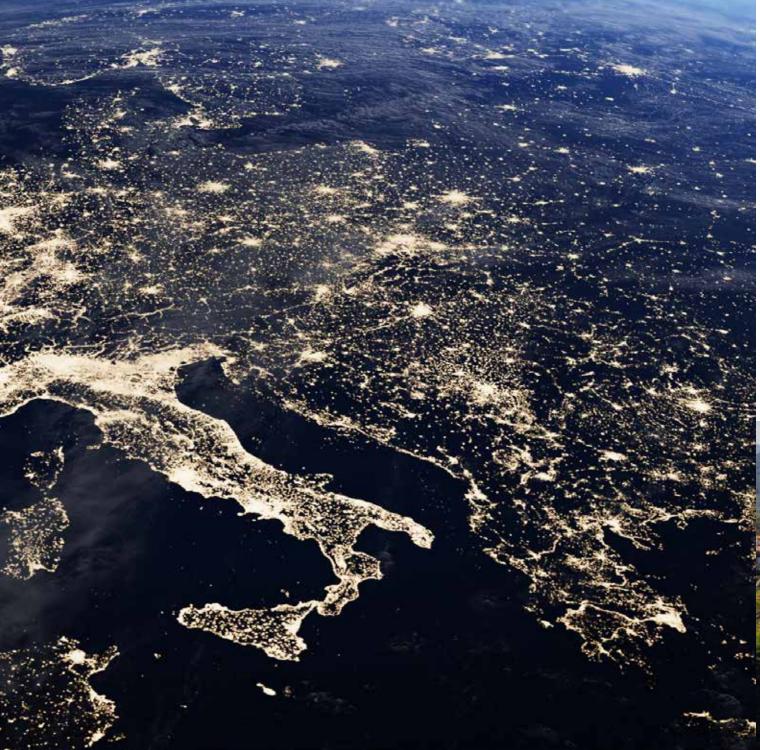
Country		Operational Approach	Governance Approach	
IPA	Albania	Generic	bottom- up	
	Bosnia and Herzegovina	Specific	both	
	Montenegro	Generic	top-down	
ERDF	Croatia	Specific	both	
	Greece	Specific	both	
	Italy	Specific	both	
	Slovenia	Specific	both	



## Early Warning Framework for Floods – Organization



	Country	Operational Approach	Governance Approach
IPA	Albania	Generic	bottom- up
	Bosnia and Herzegovina	Specific	both
	Montenegro	Specific	top-down
ERDF	Croatia	Specific	bottom-up
	Greece	Specific	both
	Italy	Generic	both
	Slovenia	Specific	both



## Project Partnership



#### **Molise Region, Italy**

Molise Region is a public body and its administrative organization is divided into several departments, which pursue specific activities and objectives. This system enables an efficient governance providing development of economy, infrastructures and employment, protection of historical and cultural heritage, support for local investments and research. The staff of ETC service, with more than 20 employees, works on European Territorial Cooperation programmes and European funding programmes. It's also responsible for EU international relations. It has an ad hoc structure with a long experience in the management and implementation of international and European projects. The working group has knowledge, skills and competences to design project proposals concerning multiple programmes and to successfully manage funded projects.

Molise Region is the Lead Partner of the project.





## Industrial Systems Institute – ATHENA, Research and Innovation Centre in Information, Communication and Knowledge Technologies, Greece

The Industrial Systems Institute is a Greek public research institute of the ATHENA Research and Innovation Centre operating under the supervision of the Greek General Secretariat of Research and Innovation. Its main expertise lies in the application of Information and Communication Technologies (ICT) in different sectors presenting the necessary skills in successfully undertaking its role in the modelling, design and development of the Civil Protection Early Warning System platform. ISI has more specifically a strong profile in modelling, ICT development, semantics and big data that present main competencies required. Furthermore, ISI has significant expertise in risk management both in the context of natural and man-made risks.

#### Municipality of Ajdovščina, Slovenia

Out of 211 municipalities in Slovenia, the Municipality of Ajdovščina is the 18th largest by its surface and 20th largest by its population. It is located in the south-western part of Slovenia, in the Upper Vipava Valley. Due to its strategic location it is an important player in the Slovenian economy as it not only connects the Italian Po Valley with the rest of Slovenia, but also other Adrion regions. The Municipality was established in 1994 and is headquartered in the town of Ajdovščina. As a public local authority, it implements European and national provisions and adopts additional local regulations. The Municipal Administration employs 40 people and completes few tens of projects per year.





#### **Varazdin County, Croatia**

Varazdin County is a regional self-government. It performs state administration duties transferred to it, and affairs of (regional) significance. Varazdin County has 22 municipalities and 6 cities (population: cca. 171.000 persons). Varazdin County manages activities related to education, health, regional/urban planning, transport, economic development, civil protection and networking of (civil defense) institutions. With reference to civil protection, Varazdin County has the following competencies: 1) Policymaking: It has the authority to develop policies & measures for civil protection. 2) International cooperation: It has twinned with various towns in Europe to gain best practices, and coordinate civil defense in cross-border systems. 3) Citizen awareness: Its staff with its civil defense partners promote volunteering, safety measures, and organize demonstrations to show citizens that it is crucial to take measures/actions that protect their community from disaster. 4) Emergency response coordination: In its long-range plans, it aims to create a Regional Centre for Civil Protection & Rescue.

#### Regional Council of Durres, Albania

Regional Council of Durres established in year 2000 is a regional public body. Region of Durres is one of 12 Regions in Albania. Its area is 766 km <sup>2</sup>. It has a population of 402,943 people and a coastline of 61.6 kilometers. The district includes Municipalities of Durres, Kruja and Shijak. Within this area you can find high mountains, landscapes and seacoast. The main function of the Regional Council of Durres is the building and implementation of Regional policies and their harmonization with the state policies on a regional level. One of the main pillars of the Regional Strategy of the Region is the protection of environment, through tackling environmental vulnerability, fragmentation, and safeguarding ecosystem services in the area. The Regional Council of Durres has played an important role in managing and preventing natural and manmade hazards, such as forest fires, sea and river floods, storms etc.





## Civil Protection and Fire fighting Administration of Herzegovina Neretva Canton, Bosnia Herzegovina

Civil Protection and Fire Fighting Administration of Herzegovina - Neretva Canton was established to carry out administrative, professional and other tasks in the field of protection and rescue within the cantonal jurisdiction. It consists of three departments, which make up the basic organizational units, as follows: • The Civil Defense Department • Department of fire protection and fire fighting • Department for Administrative and Legal, general and material-financial affairs. Civil Protection and Fire Fighting Administration is established to perform tasks and duties in the field of civil protection and fire service.

#### Old Royal Capital Cetinje, Montenegro

Old Royal Capital Cetinje is a Local Authority and it operates on the basis of a local self-government. From 2011 a sector for EU funded projects was established in order to better absorb the grants given by the EU. During this period the Old Royal Capital Cetinje has gained significant experience in preparation and implementation of EU funded projects. In June 2011, the Business center Cetinje has been overtaken by Municipality of Cetinje getting status of local administration expert body responsible directly to the city mayor. During the period, a lot of activities were performed, especially in the area of SME support.





#### Jožef Stefan Institute, Slovenia

The Jožef Stefan Institute is a research organization for pure and applied research in the natural sciences, process and information technology. The JSI complements the role of the universities in the sense of bridging the gap between science, application and education. The activities are predominantly carried out by 28 research departments. A significant part of the work at the JSI reflects its concern for the environment. This includes environmental impact assessment and land-use (spatial) planning, environmental policy development, environmental risk evaluation, environmental mass balance and GIS modelling, etc. Since 1974 more than 500 environmental impact evaluations and projects related to spatial planning both inland and coastal area have been made.

#### Rethymno, Greece

The Municipality of Rethymno is a medium-sized municipality located on the northern coast of the island of Crete, in Greece. The Region of Crete has 623.000 inhabitants total population, of which, 55.525 reside in the Municipality of Rethymno which is the third-largest municipality of the island. Rethymno was established as public authority in 2011 by the unification of 4 pre-existing municipalities and accommodates more than 500.000 visitors annually as a worldwide famous touristic destination.

The administrative structure of the municipality consists of various departments with the relevant number of qualified personnel. Rethymno is experienced in preparation and implementation of different international projects both as project partner and as lead partner. The Department of Programming and European Projects consists of competent staff for the successful implementation of multidisciplinary projects which require regional and international cooperation skills. The Department of Civil Protection in the municipality of Rethymno has priorities to prevent and protect from natural and technological disasters which cause or may cause a state of emergency in peacetime. Its responsibilities arise from the existing Civil Protection Law 4662/2020.





#### Agricultural University of Tirana, Albania

The Agricultural University of Tirana (AUT) is an institution of higher education in Albania, offering studies in agronomy, veterinary medicine, agrarian economics, forest engineering, rural environment, and other similar fields. AUT is the largest center of education and scientific research in the field of agriculture and food in Albania. The AUT campus is located on a wooded hill on the northwestern outskirts of Tirana, about 7 km from the city center. AUT was established in 1951. At AUT research is considered an essential component of academic life. The research was carried out thanks to national projects with participation in the programs "Agriculture and Food, biotechnology and Biological Diversity", in projects by the National Environment Agency, in bilateral projects with the Greek and Italian governments, in DAD projects, in NATO projects, in IMG Tempus projects, World Bank projects, research and development projects awarded by the Albanian government with a special budget in 2004. AUT is the initiator of science-production links. These connections have been concretized through agreements related to Albanian business.

#### **Split and Dalmatia County, Croatia**

Split-Dalmatia County is experienced in preparation and implementation of different national and international projects, as project partner or lead partner. Institution has competent staff successful in implementing multidisciplinary projects that require regional and international cooperation skills. All realized projects were marked as successful by the relevant bodies and European Commission, thus, The County of Split Dalmatia has highly positive results within the field of international and regional projects implementation and has an extensive network of national, regional and local partner institutions. Field of competence: regional development planning, energy management, renewable energy, industry restructuring, research and development projects in the field of new technologies, agriculture, transport. Split-Dalmatia County (SDC) is the central-southern Dalmatian county in Croatia.





#### **Disclaimer**

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