Interreg
Italy - Croatia
E-CITIJENS

EUROPEAN UNION

E-CITIJENS

Civil Protection Emergency
DSS based on CITIzen Journalism
to **ENhance Safety**
of Adriatic Basin

THE EDSS PLATFORM, A SOCIAL-MEDIA, BASED TOOL FOR A BETTER EMERGENCY MANAGEMENT

#EDSS

INCREASING SAFETY THROUGH SOCIAL MEDIA BASED TOOLS

Deliverable «Publications and booklets», WP 2 Communication Activities.
Activity 2.2 Media Relations, printed promotion documents and publications.
Partner in charge of WP: Adriatic Ionian Euroregion (PP7).
Partner in charge of publication: Molise Region (LP), Adriatic Ionian Euroregion.

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Partnership

Lead Partner:	Molise Region (IT)
Partners:	P1 Split and Dalmatia County (HR)
	P2 Veneto Region (IT)
	P3 University of Split (HR)
	P4 EEIG EuRelations (IT)
	P5 University of Bologna (IT)
	P6 Pescara Municipality (IT)
	P7 Adriatic Ionian Euroregion (HR)
	P8 Zadar County Rural Development Agency (HR)
	P10 City of Dubrovnik (HR)

Project communication channels:
www.italy-croatia.eu/web/e-citijens
Facebook - Twitter - LinkedIn - YouTube

PROJECT DESCRIPTION

Overall objective

The objective of the E-CITIJENS project is to increase the safety of the Croatian and Italian Adriatic basin from natural and man-made disasters by enhancing Civil Protection's capacity at reducing disaster risk through an innovative emergency management system capable of harnessing the potential of social media networks

Specific objectives:

- equip the Civil Protection with an advanced and efficient Emergency Decision Support System (EDSS), based on a semantically enriched web platform integrating institutional data sources, local sensors and real-time updates voluntarily provided by citizens via the social media (citizen journalism)
- raising citizens' awareness of their role of «active sensors», while stimulating them towards a responsible use of social media during emergencies
- harmonise the Civil Protection Regulatory System in Italy and Croatia by identifying similarities and differences, critical issues to be dealt with, and by developing common technology-based operational models

E-CITIJENS main activities:

- A scientific analysis of current risk scenarios, emergency management legislation and social media applications to model a «social media based» Civil Protection emergency management system in three target risk categories: *floods*, *forest fires*, *earthquakes*
- Developing, testing and releasing a «social media based» Emergency Decision Support System (EDSS) platform also through 6 pilot deployments, simulations and exercises, aimed at assessing available methodologies, monitoring systems and technical knowledge across the cooperation area
- A Citizenship Awareness Raising Campaign targeting 150.000 people through a sustained programme of events including 12 Info Days and 30 Work Cafes, and participation in several international conferences in order to reach out to the widest scientific and civil protection community

- Definition of an Emergency Services Regulatory Framework and final Adoption Plan by directly involving local/regional elected members and public officials as well as representatives of civil protection and other emergency structures in 6 capacity building workshops

Main project outputs:

- A «social media based» Emergency Decision Support System (EDSS) platform, a Civil Protection Emergency System Model and a Cross-border Functional Centre, representing operational instruments to ameliorate the efficiency of emergency management
- A Citizens Participatory Awareness Raising Framework and a Cross-border Emergency Services Regulatory Framework, representing permanent guidelines for future actions and measures

Introduction

With a view to enhancing the safety and resilience of the cooperation area, the E-CITIJENS project developed a platform aimed at supporting the decision-making in emergency situations as part of the Emergency Decision-Support System (EDSS).

Various actors involved in emergency management will use the platform: emergency management administrators, technical administrators, and operations room personnel.

To ease the acquisition of the EDSS platform, a manual was created as a guide to the users. This manual is available at the project's webpage https://www.italy-croatia.eu/web/e-citijens

This publication illustrates the goal and functionalities of the platform to the general public. It complements a previous publication which explains in details the role of citizens in emergency communication.

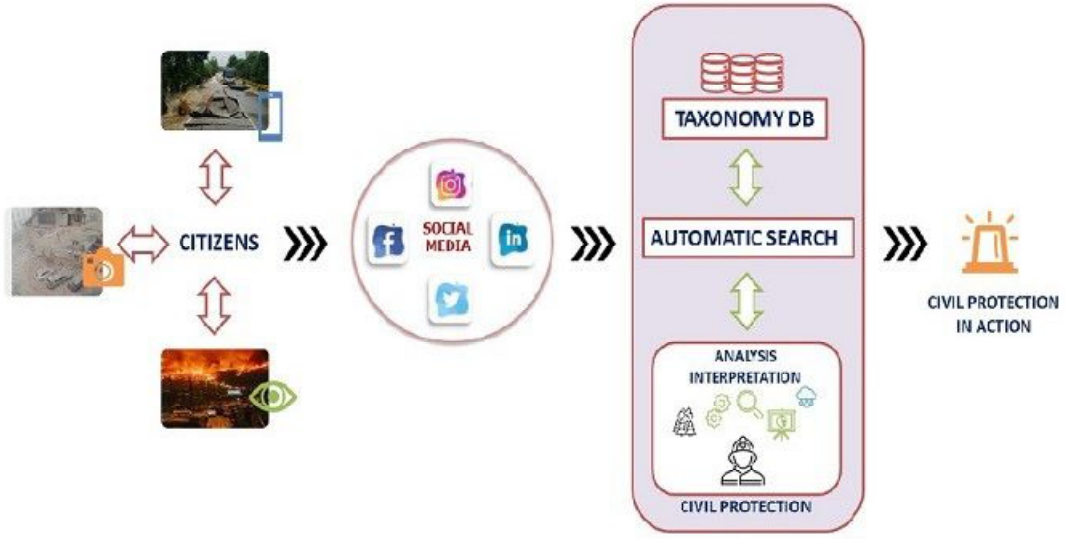
Activating citizens' role in emergency management

The EDSS platform is an **emergency decision support system structured in dynamic and interoperable components.** It is set to monitor three types of natural risks scenarios: floods, forest fires and earthquakes, and is capable of supplying emergency structures with real-time and verified information and thus to allow an effective decisions-making during emergencies.

Its innovativeness resides in the fact that the system is designed to integrate information provided by citizens through social media to institutionally-sourced data and localized sensors against concrete risk scenarios.

In this sense, the platform allows the citizens to have an active role in emergency management.

The platform allows to manage risks through active forecasting, prevention and combating of such disasters. In a nutshell, once the system receives the data, these are classified, aggregated and evaluated temporally and geographically by the platform in order to assess their risks.



How it works and when the citizen becomes part of the equation

A citizen having information about an on-going disaster or experiencing a sign of a new potential emergency takes a photo as evidence and posts it on one or more social media platforms. This is where the whole process starts.

The decision support platform automatically searches for posts from social media platforms in a certain geographic area and selects them based on a pre-determined taxonomy.

Civil protection personnel will analyse data against risk scenarios and sensors data, so to identify whether the selected posts are connected to real threats to be taken into serious account and checked on-site. Moreover, they will have the chance to create a brand-new risk scenario, which is relevant for a particular situation connected to citizens' posts.

Main functionalities

Although the platform uses complex technologies, it was designed as a highly intuitive and ergonomic web-based interface. In this way, it ensures that useful (relevant), usable (intuitive), and (institutionally) exchangeable information for emergency decision support are processed.

The main functionalities of the platform include:

Configuration, where users and roles are defined, and the risks to be monitored are selected.

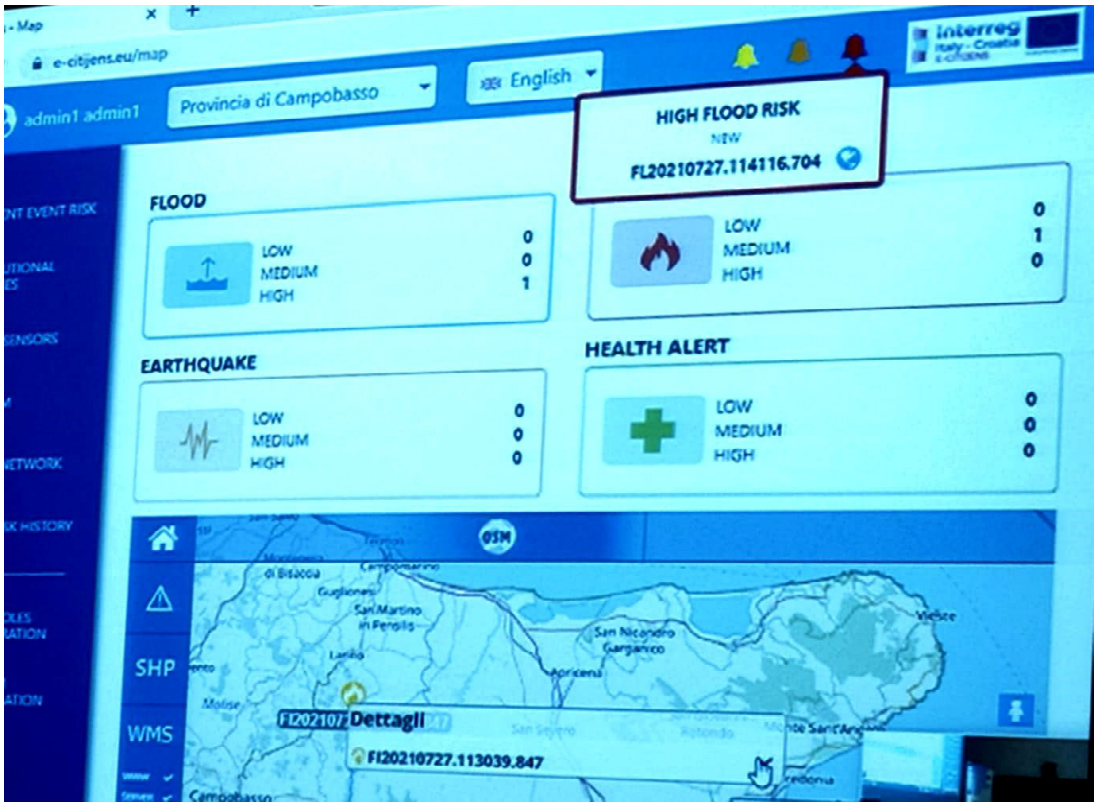
Data capture, where data from three different sources (institutional sources, sensors and social media) are captured, semantically catalogued against the severity threshold, and analysed.

Aggregation, where classified data are processed with a view to:

- aggregate the data and link them to events previously managed;
- revise the severity of a potential event, already detected, according to new information received;
- notify the alert to the room operators.

Dashboard of the monitoring system, which allows operators to manage the potential events as a result of the data acquired.

Graphic notifications, widgets, maps and other features are included as well.



Ultimate result

The E-CITIJENS EDSS platform provides a solution to a technological challenge faced by emergency structures as it guarantees the ingestion of valid, trustworthy and relevant social media sourced information into the platform, based on their examination against both institutional data and risk scenarios. This approach puts bidirectional communication between civil protection and affected populations one step further, while leading to an optimal emergency response.

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