



# E-CITIJENS

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



**#EDSS**

The E-CITIJENS project received funding from the European Union

## 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).  
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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](http://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.



# **Dashboard Manual E-CITIJENS platform**

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## 1 Description

The document is the quick guide for the operational activities of the E-CITIJENS platform. Access link <https://e-citijens.eu>.

The manual was created by Beta 80 Group S.r.l..

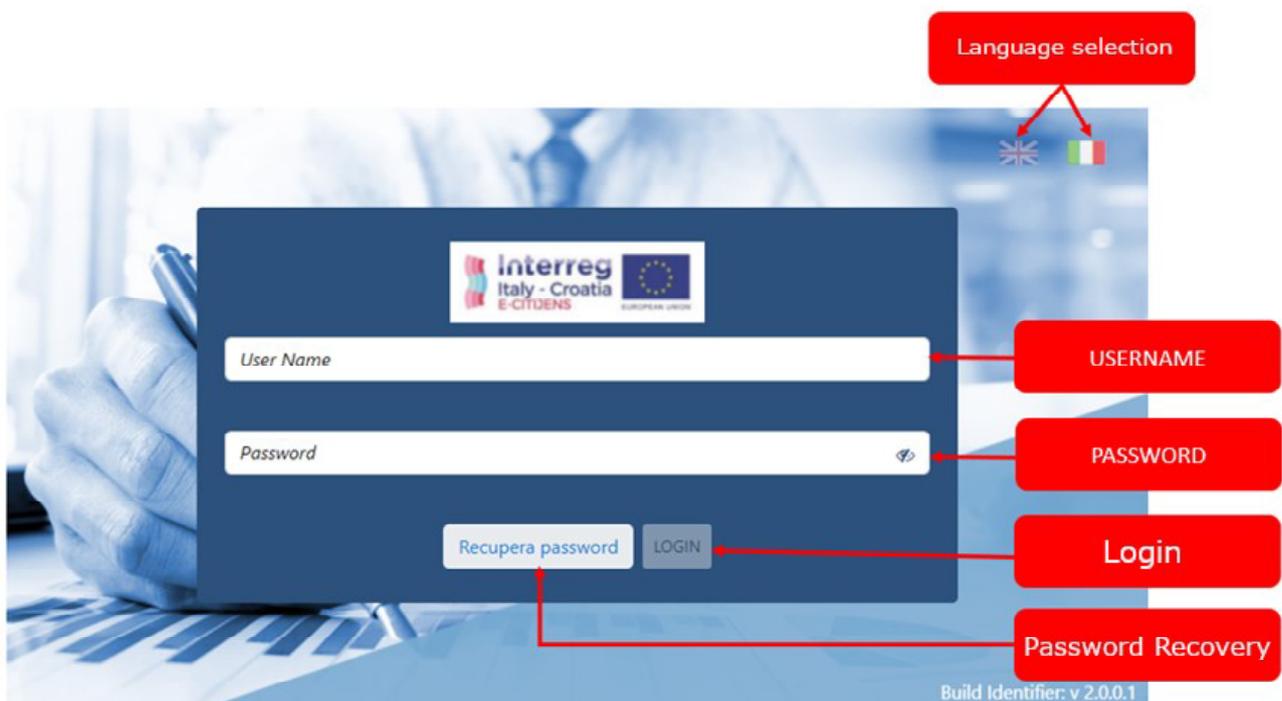
## 2 Glossary

TENANT: An organization or set of organizations that enjoys the same application context.

## 3 System access

You can access the application through your browser at the indicated web address.

By accessing the application, the following authentication mask is presented:



To access the system, you need to enter the following elements:

- 1) Username: system login user name.
- 2) Password.

Once the above fields have been filled in, press the «Login» button.

At the first access the system is presented in English, once the desired language is selected it will be stored.

## 4 Password recovery

In case you are no longer in possession of the password you can recover it by clicking on the «Recover password» button, the system presents the following screen:

Interreg  
Italy - Croatia  
E-CITIZENS

Hai dimenticato la Password?

Inserisci la Username associato al tuo account.  
Invieremo le istruzioni per la reimpostazione della password all'indirizzo e-mail di questo account.

User Name

Indietro INVIA

USERNAME

Send reset link

Back to Home

Build Ide

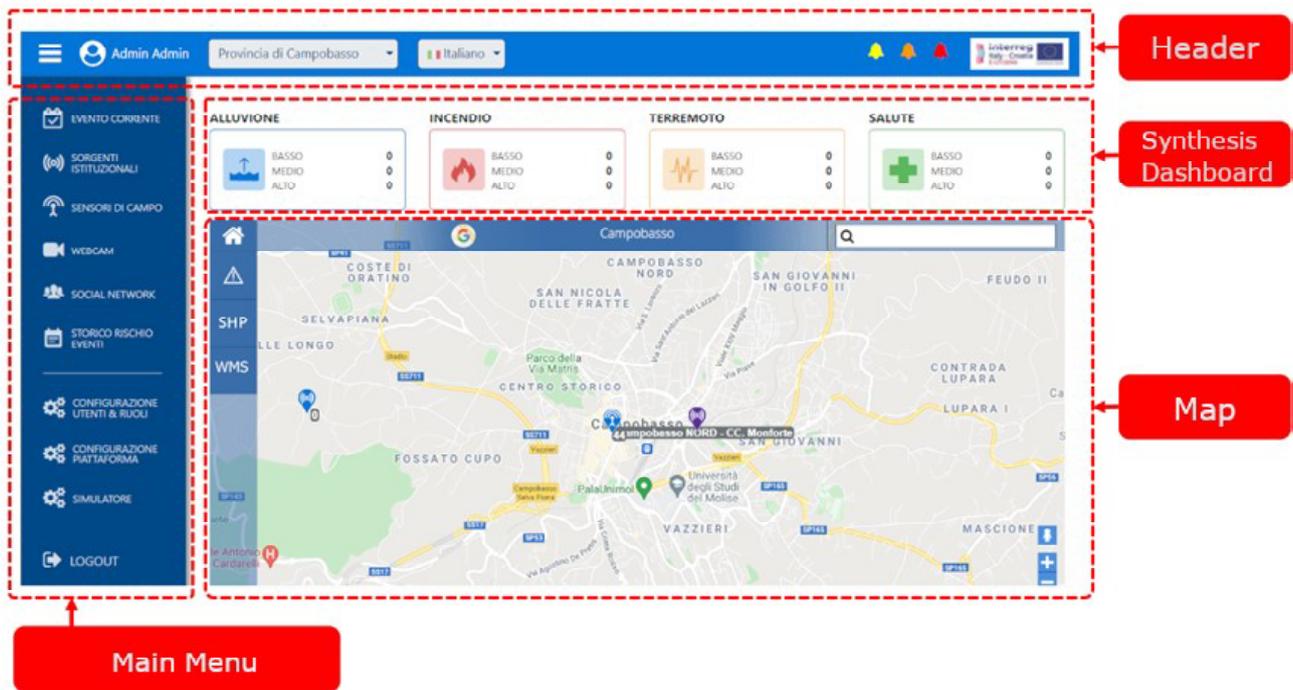
After filling in the «Username» field and clicking on the «Send» button, the system provides instructions for resetting the new password to the e-mail address associated with the entered Username.

You can return to the previous screen by clicking on the «Back» button.

## 5 Dashboard

Once authenticated, the system presents the Dashboard, which is an application component responsible for viewing the results of the analysis and aggregation of data. It allows the visualization of the current status of the risks of natural events in progress, also on a geolocalized basis, by means of a geographical viewer (Map: see point 6.3).

The Dashboard is divided into four workspaces.



They are:

- HEADING
- RISK MONITOR
- MAP
- NAVIGATION MENU

### 5. 1 Heading

This area, divided in turn into four micro-sections, is represented as follows:



#### 5.1.1 Swith menu

It is a *button* that manages the graphical representation of the «Menu», through which you can increase or decrease its width. The system stores the last choice made.

#### 5.1.2 Logged user

This section displays the name of the user who logged on to the system through the authentication mask.

### 5.1.3 Tenant

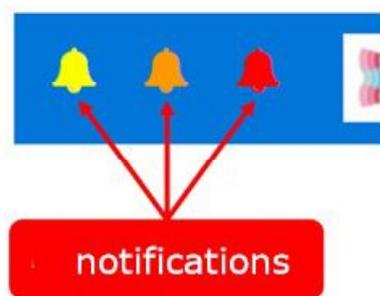
This section displays the current *Tenant*. In the event that the User can operate on multiple *Tenants*, a clickable drop-down menu will be displayed, thus allowing the modification of the Tenant on which to operate. The selected *Tenant* is bound to the context of all the information present on the system, in particular data from the «**Map**», «Risk **Monitor**» and «Workspace» sections. The system stores the last choice made.

### 5.1.4 Languages

Represents the list of available system languages. The system stores the last choice made.

### 5.1.5 Notifica badge

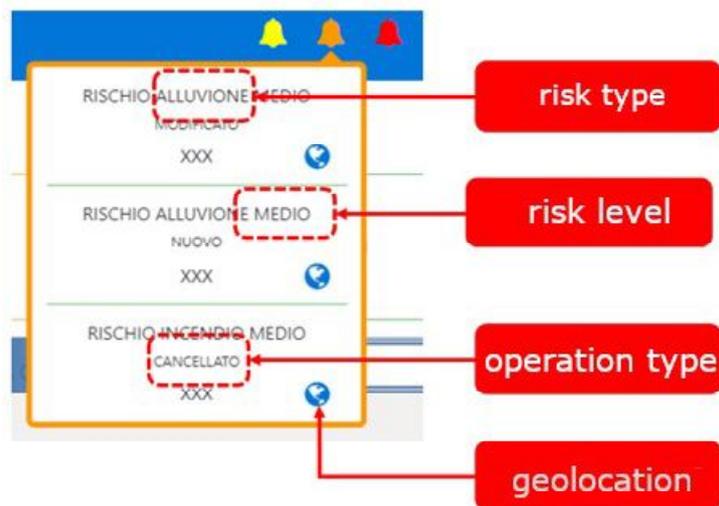
By means of this section it is possible to monitor in «Real Time» the risk events that the system intercepts. It is represented by three bell-shaped icons of different colors according to the **severity** of the risk (YELLOW: low risk – ORANGE: medium risk – RED: high risk).



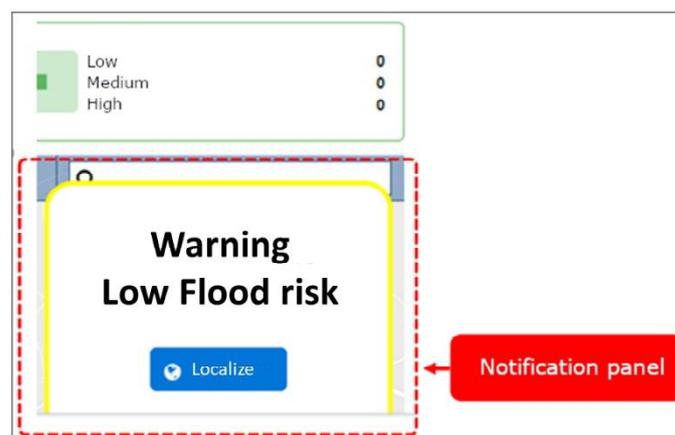
The number, possibly present on the icons, indicates how many notifications not yet read are present for the corresponding level of risk.



At any time, you can click on the notifications icon to view the list of risk events received during the work session (see point 8) and then the number of unread messages is reset.



When a new event arrives, the system, in addition to updating the number of unread notifications, displays a «**Notification Pane**» with the synthetic data of the risk itself, this pane will automatically disappear after 5 seconds.



## 5.2 Risk monitor

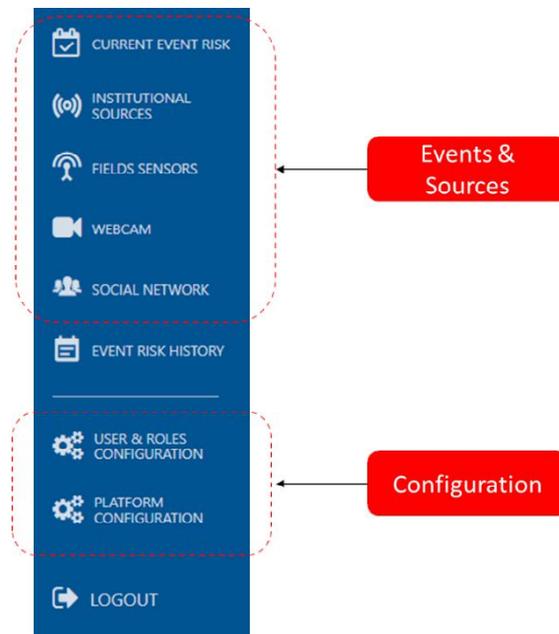
Represents aggregated information regarding the risks of natural events broken down by type and severity level (High, Medium, and Low).

## 5.3 Map

It is a fundamental tool in the process of identification and mapping of risks, through which it is possible to «evaluate» the risk in a visual way and therefore with great immediacy and effectiveness. It is also possible to view the geolocation of field sensors, webcams and institutional sources, which can be activated or deactivated according to the operator's need. Finally, the «Map», allows and the integration with one or more WMS for the visualization of vector maps, necessary to highlight particular scenarios of interest of the territory under consideration.

## 5.4 Navigation menu

The menu contains navigation links related to the accessory features of the system. All pages are opened in a new tab so as to always leave the Dashboard open (see step 7). The menu has been divided into two sections: «Event Sources» and «Configuration».



## 6 Workspace

By clicking on any item in the «Navigation Menu» of the **Dashboard**, the system starts a new «Workspace» with the data relating to the selected item in a new browser tab.

This solution allows you to click, at any time, the «Locate position» button and center the «Map», present in the first tab of the browser, on the positioning of the relative event. Also, in the «Workspace», like the Dashboard, there is the **Header** area (see point 6.1)

The screenshot shows a web application interface for 'SORGENTI ISTITUZIONALI'. The interface includes a title bar, a search engine with filters for Region, Province, and City, a search button, and a table of results. The table has columns for ID, Type, Description, Status, Source, Position, Last Received Date, Received Data, and Localize. The results area is highlighted with a red dashed box, and the pagination is at the bottom.

ID	TIPO	DESCRIZIONE	STATO	SFONTE	POSIZIONE	ULTIMA DATA RICEVUTA	DATI RICEVUTI	LOCALIZZA
ir1	temperature	descrizione fonte istituzionale	ATTIVO	sysadm	41.4371 14.7313	26-01-2021 10:51		
mar8	temperature	descrizione fonte istituzionale	ATTIVO	sysadm	41.77 15.07	29-01-2021 21:12		
mar9	temperature	descrizione fonte istituzionale	ATTIVO		40.54700457 14.25261497	09-03-2021 09:46		
test	temperature	fake temperature sensor for simulation purpose	ATTIVO		41.4257 14.5239	24-03-2021 11:34		
test33	temperature	fake temperature sensor for simulation purpose	ATTIVO		41.4257 14.5239	24-03-2021 11:35		
abcde	Earthquake	abcde	ATTIVO		41.8187 14.2078	16-04-2021 17:25		
sad97asd98u	temperature	descrizione fonte istituzionale	ATTIVO		40.54700457 14.25261497	28-04-2021 11:57		
01	Non ufficiale	01	ATTIVO		16.15 50.14	15-06-2021 18:31		
stazioneagnone	Non ufficiale	stazioneagnone	ATTIVO		41.8 14.37	17-06-2021 10:43		
stazionebaranello1	Non ufficiale	stazionebaranello1	ATTIVO		41.512 14.551	17-06-2021 10:43		

All pages related to the «Event Sources» section are divided into four areas:

- Title – Represents the name of the selected menu item.
- Search engine – It allows you to search, in the selected section, according to the set parameters of the operator.
- Results area – Table with the result data of the filter that can be sorted by clicking on the headers of the table itself.
- Paginaton

## 6.1 Event sources

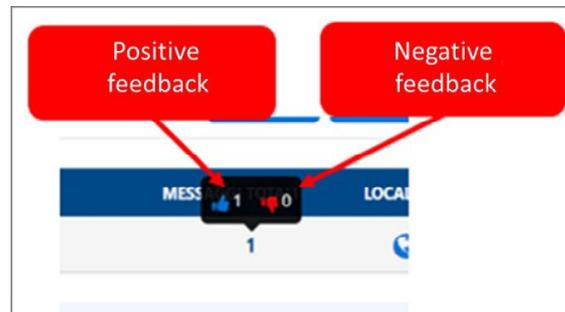
The items in the «Event Sources» section of the menu are:

**1. Current event** - list of risks of events. In the «Results Area» of this page there is the list of event risks considered current. The maximum time that elapses between the detection of the risk of natural event and its historicization, i.e. time for which the risk of an event can be defined as ongoing, is a configurable parameter.

For each element you can:

- a) **change its state** (only «lit up» events are visible on the map);
- b) **center** the map on the selected event;
- c) **view the sources** that contributed to the identification of the risk. For each data from a source, it is possible to express feedback. Such feedback will be taken into account by the Machine Learning engine as learning;
- d) **download a report** of the events list resulting from the filter set;
- e) assign negative feedback by clicking on the relevant icon (thumbs down);

**f) view the total messages.** Pointing the mouse over the number corresponding to the «Messages» column, the total of messages divided between those with positive (blue thumb) and negative (thumb to red) **feedback** is displayed;



**g) merge events.** Through the checkbox in the «Merge» column you can select two or more events of the same type. As a result of this action, a single event is obtained that will contain all the data of the selected events; the resulting severity level will be the maximum among the selected events and the detection date will be the lowest.



**2) Institutional sources** - list of all institutional sources. You can view the data collected by institutional sources, you can also disable the receipt of data from a specific source.

**3) Field sensors** - list of field sensors. You can view the data of each sensor, you can also disable the reception of data from a specific sensor by clicking on its icon:



- 4) **Webcam** - list of previews of all webcams used.
- 5) **Social network** - list of messages received from social networks.
- 6) **Historical risk events** – list of historical events. In the «results area» of this page there is a list of event risks that are no longer current. The maximum time that elapses between the detection of a natural event risk and its historicization, i.e. time for which the risk of an event can be defined as in progress is a configurable parameter (see point 8.1.2.2). As for current events, it will also be possible to download a document (report) of the list resulting from the filters set from this page.

## 7 Configuration

Through this section it is possible to manage and configure: **Users** and **Platform**

### 7.1.1 Users and roles

In this area you can manage the users of the platform and their *Tenant*. In particular, you can:

- Create a new user.
- Edit a user's data –e-mail address, *Tenant*, roles and the state (active/disabled)
- Reset a user's password

The screenshot shows the 'CONFIGURAZIONE UTENTI & RUOLI' interface. At the top, there is a breadcrumb 'CONFIGURAZIONE UTENTI & RUOLI / GESTIONE UTENTI' and a '+ Crea utente' button labeled 'CREATE USER'. Below this are input fields for 'Tenant' (dropdown), 'Nome' (text), 'Cognome' (text), 'Username' (text), 'Stato' (dropdown), and 'E-mail' (text). A 'Cerca' button labeled 'FIND USER' is also present. A table of users is shown below, with columns for 'NOME E COGNOME', 'USERNAME', 'E-MAIL', 'TENANT', 'STATO', and 'DETTAGLI'. The table contains three rows of user data. A red dashed box highlights the table, and red arrows point from labels 'RESULT LIST', 'USER DETAIL', and 'USER STATUS' to the table's header, a detail icon, and a status icon respectively.

NOME E COGNOME	USERNAME	E-MAIL	TENANT	STATO	DETTAGLI
Admin Admin	sysadm	maurizio.polidori@beta80group.it	Tenant di test - Provincia di Campobasso		
Marcello De Stefano	Operatore2	marcello.destefano@beta80group.it	Tenant di test - Provincia di Campobasso		
operatore3 front end	operatore	mrossi@testmail.it	Tenant di test - Provincia di Campobasso		

### 7.1.1.1 Create user

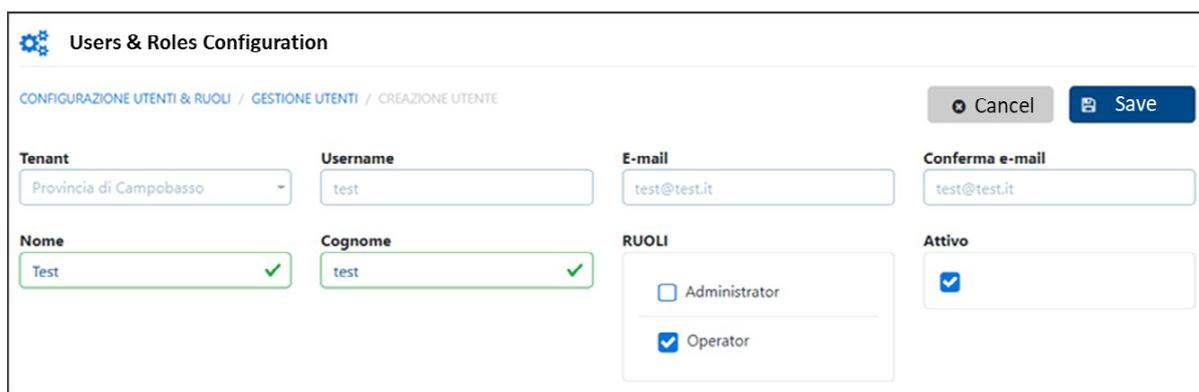
Clicked the «Create user» button, the system presents the following screen, where you can select the *Tenant* to belong to and enter the **mandatory identification data** of the new user:

- a) Username
- b) E-mail address

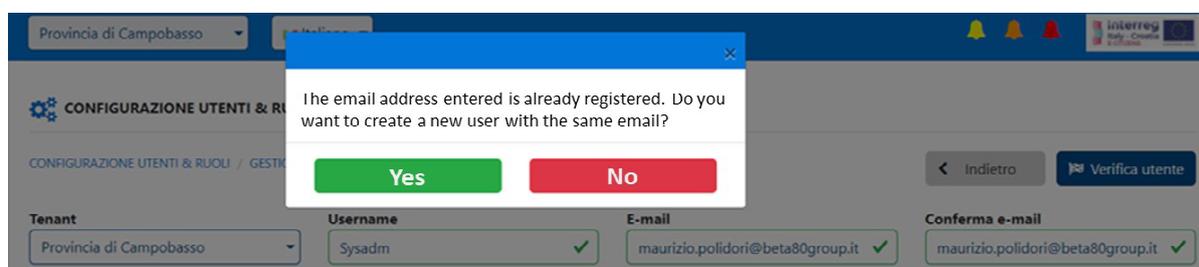


Once you have filled in the above fields press the «Verify user» button. The system performs checks on the data entered and presents different masks according to the following cases:

- a) There is no data entered in the system - You can continue with the registration of the new user.



- b) A user is registered in the system with the same identification data entered but *with* a different tenant membership. - The following message is presented inviting you to cancel the operation or continue with the registration of the new user.



- c) A user is registered in the system with the same identification data entered and with the same *Tenant* to which he belongs. - A «blocking» message is presented indicating that the user who is registering is already present with the same identification data on the selected *Tenant*.

Provincia di Campobasso

User already registered in the current tenant

### Users & Roles Configuration

CONFIGURAZIONE UTENTI & RUOLI / GESTIONE UTENTI / CREAZIONE UTENTE

< Cancel    Check User

Tenant: Provincia di Campobasso    Username: operatore ✓    E-mail: mrossi@testmail.it ✓    Conferma e-mail: mrossi@testmail.it ✓

### 7.1.1.2 User detail

Once the result of a user search has been obtained, from the «Results Area» (see point 8.1.1) it is possible to go into detail of a user where the data of the selected user can be modified.

Users & Roles Configuration

CONFIGURAZIONE UTENTI & RUOLI / GESTIONE UTENTI / DETTAGLIO UTENTE

< Indietro    Modifica

Nome: operatore3    Cognome: front end    Username: operatore    E-mail: mrossi@testmail.it

Tenant: Tenant di test, Provincia di Campobasso

RUOLI:  Administrator,  Operator

Attivo:

Cancel

Modify

Status

Role

TENANT

### 7.1.1.3 Password reset

By clicking on the «Reset password» button, the system sends instructions to reset the new password to the e-mail address associated with the selected user.

Users & Roles Configuration

CONFIGURAZIONE UTENTI & RUOLI / GESTIONE UTENTI / DETTAGLIO UTENTE

Cancel    Password Reset    Save

Nome: operatore3    Cognome: front end    Username: operatore    E-mail: mrossi@testmail.it

Tenant: Tenant di test, Provincia di Campobasso

RUOLI:  Administrator,  Operator

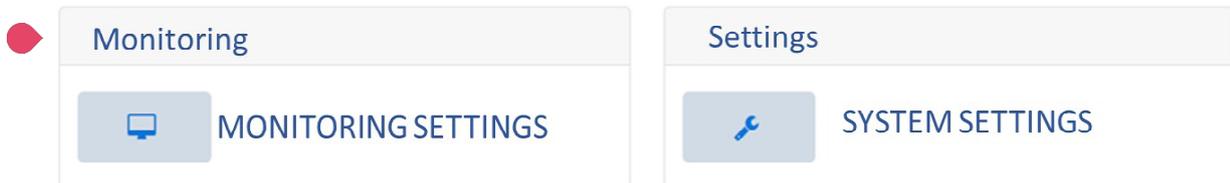
Attivo:

## 7.1.2 Platform Configuration

Through the configuration of the platform, you can manage:

- a) Monitoring
- b) System settings

### Platform Configuration



### 7.1.2.1 Monitoring

in this section you can choose between the two different monitoring modes:

**a) Continuous** – The system will be active by monitoring the entire area of interest of the *Tenant*, acquiring and processing the data continuously until the monitoring is deactivated by one of the users of the system.

● Ray of the circumference area that uniquely identifies a single natural event with respect to Earthquake, HealthAlert, Flood, Fire

Enabled

Radius

**b) On demand** - the system will be active by monitoring a specific area, on a possible subset of input data and looking for a specific output.

in this case the system requires that you include the following additional configurations:

- The minimum level of risk to be monitored.
- Monitoring start date.
- Monitoring end date.
- List of keywords or hashtags to consider.
- Area: list of point polygons in geo-json format.

Start

Stop

Hashtags

Area 

```
{ "type": "FeatureCollection", "features": [ { "type": "Feature", "properties": {}, "geometry": { "type": "Polygon", "coordinates": [ [ [ [ 14.337158203125, 41.62776153144345 ], [ 14.297332763671875, 41.714955194565164 ], [ 14.165496826171873, 41.67393759473024 ], [ 14.0899658203125, 41.6154123246811 ], [ 14.23828125,
```

Enabled

Radius

Minimum level to monitor

0  100

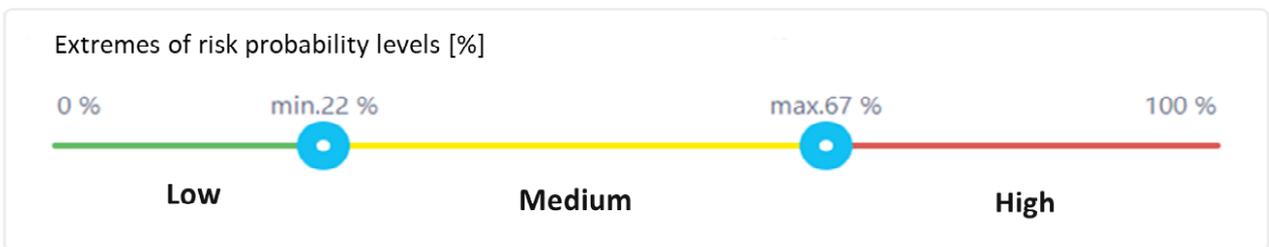
In both cases the possibility is given to enable / disable the monitoring status for specific data sources.



### 7.1.2.2 System settings

This section specifies all the settings that must be taken into account by the system, for the display of data and for the management of the functionality of the web application.

Maximum time between risk detection and its historicization [hours]



## 8 Collaborative management

The EDSS platform is a multitenant platform, and the data of each tenant is segregated in a way that prevents a user from seeing information about a tenant other than the tenant to which it belongs.

In the application menu selecting the item «collaboration between tenants» (arrow 1 in Figure 1) you get to the area from which you can enable or disable the «collaborative mode» (arrow 2 in Figure 1) of your tenant.

Thanks to this feature, each tenant can let users know about other tenants that you are ready to be involved in a collaboration.

A tenant who has activated a collaboration will no longer be willing to be involved in a collaboration by other tenants.

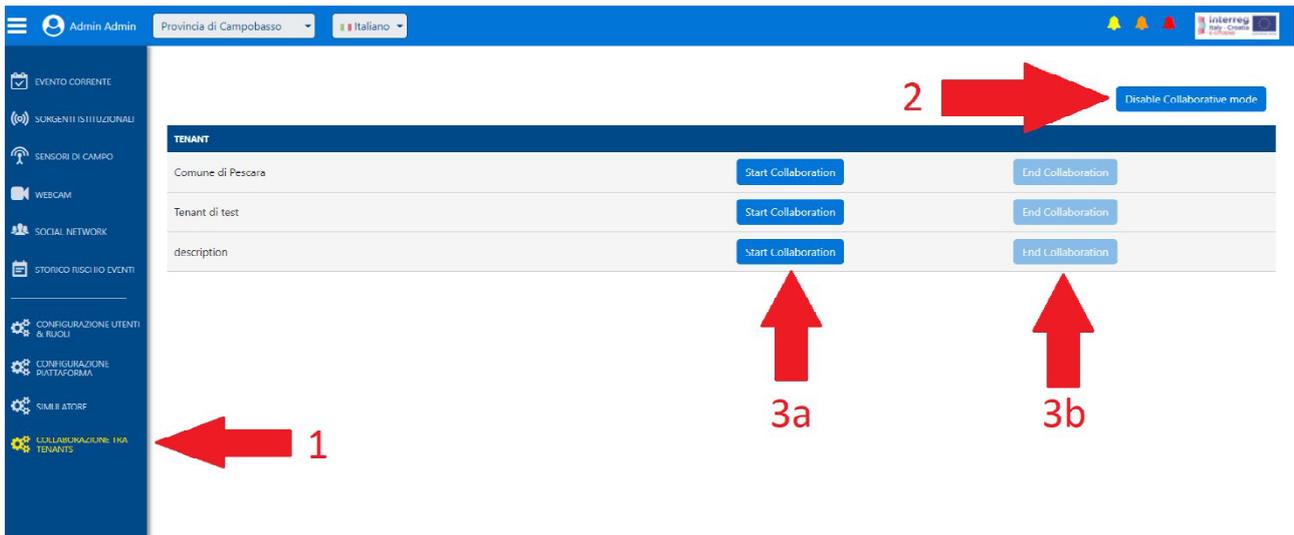


Figure 1

Thanks to this feature, each tenant can let users know about other tenants that you are ready to be involved in a collaboration. Beside the name of each tenant there are start/stop collaborating controls (arrows 3a and 3b respectively in Figure 1).

A tenant's user can then activate a collaboration with another tenant who had already made himself available to cooperate.

Starting from this moment the invited tenant users have the possibility to switch on the tenant from which they were invited, using the appropriate control placed at the top of the screen (see arrow in Figure 2). In this mode, guest users will have read-only access to the sections:

- Current event
- Institutional sources
- Field sensor
- Webcam
- Social Network
- History event



Figure 2

Invited users will receive, within the system, a message that will notify them of the receipt of the invitation to collaborate.

The inviting tenant has the responsibility to end the collaboration thus removing the possibility for guest users to view their data.

## 9 Chat between tenants

The Chat between tenants will be possible only between tenants who have activated the collaborative management (see in this sense the previous paragraph).

A messaging area will be made available, in the operating interface, for the user who has started the collaboration with another tenant. When the first message is sent, the same messaging area will appear to the users of the receiving tenant.

Even if the communication is between tenants in each message the name of the user who wrote the message will still be traceable.

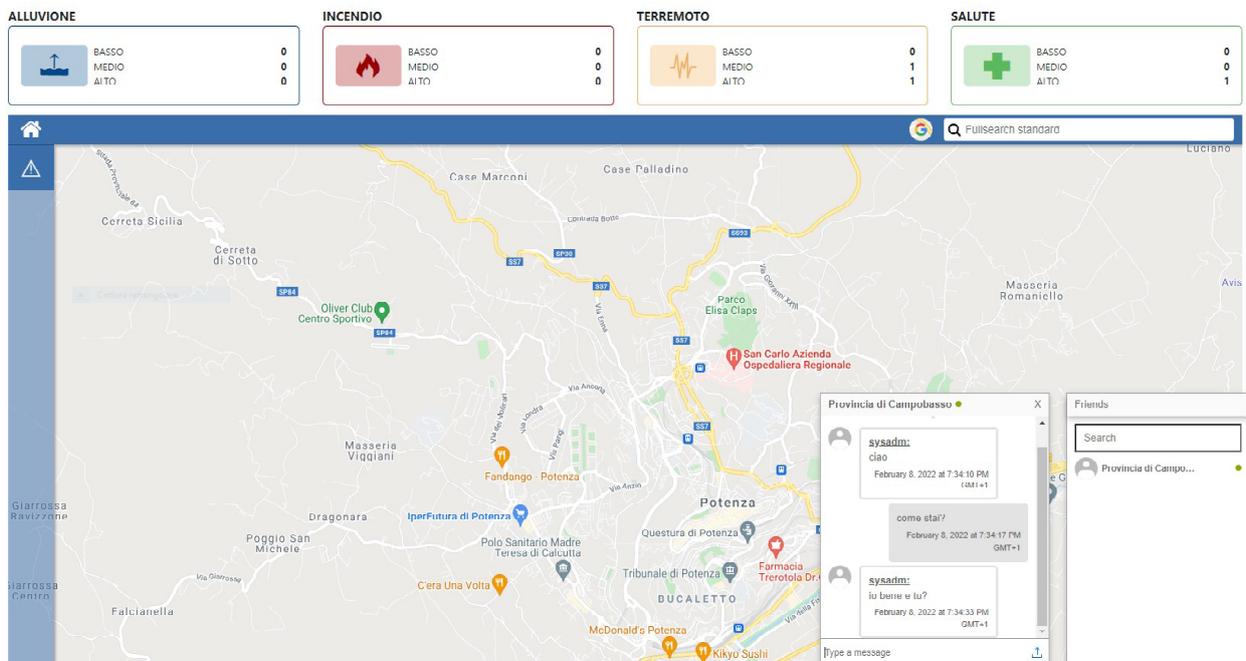


Figure 3

From the first post created, each user of the tenants involved can add additional comments that will be visible by all. The username and the referring tenant will always be reachable. The user's experience will be similar to that of a chat. Please note that once you create the first message that starts the chat, the tenants of the recipients of these messages will no longer be editable. Users will be able to exchange through the chat as well as text messages also files, recipients will be able to download the shared file through the chat and open it on their pc.

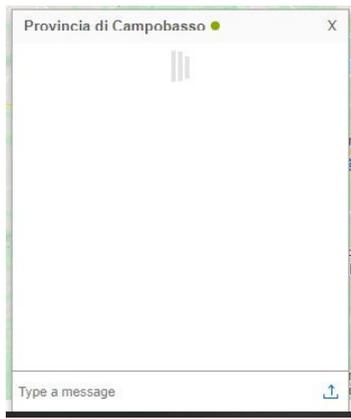


Figure 4



Figure 5

In the chat component, next to the message area, there is a  symbol (see red arrow *Figure 4*). Clicking on this symbol will open a window to select a file on the user's pc

Other users will receive within the chat a message containing the symbol  followed by the name of the file sent. Clicking on this message you can start the download specifying the location where to save the file inside your PC (see red arrow *Figure 5*).

## 10 Work session, duration and closure

At the time of authentication (see point 4) a session cookie is created that guarantees the confidentiality of sensitive data; it is therefore appropriate to configure the browser so that these cookies are enabled. Cookies of this type are temporary and have a life limited to the work session.

In case of prolonged inactivity of 120 minutes, the system will automatically close the authentication session and you will need to reauthenticate.

It is advisable in any case, at the end of the activities, to close the work session using the «LOGOUT» function present in the «Navigation Menu» of the **Dashboard**.



**MOLISE REGION  
LEAD PARTNER**

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