Evaluation of pilot deployment reports

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Project Acronym	E-CITIJENS
Project ID Number	10044361
Project Title	Civil Protection Emergency DSS based on CITIzen Journalism to ENhance Safety of Adriatic Basin
Priority Axis	2
Specific objective	2.2
Work Package Number	4
Work Package Title	Development, testing and release of "social media based" Emergency Decision Support System platform
Activity Number	4.4.1
Activity Title	Assessment of Pilot Projects achievements
Partner in Charge	Veneto Region
Partners involved	LP, PP1, PP2, PP6, PP8, PP10
Status	Final
Distribution	Public

Summary

List of abbreviations and terms

(if applicable)

Lp Lead Partner

PP Project Partner

WP Work Package

Executive Summary

(if applicable)

The activity aims at assessing the technical and functional performances of EDSS Platform and its operational modes' impact on emergency system in use.

Target risks:

flood, forest fire; earthquake

Selected target groups:

children, school-age youths, adults and civil protection volunteers and crisis management associations

Minimum number of participants by the Applicaton Form: 400 students and 1200 adults

Period: 01.11.2021 – 30.06.2022

Pilot Deployment activity: LP Molise Region: results achieved

Participants: 1639 subdivided in 1122 Students and 517 Adults

A great number of students took part to this activity, thanks to the cooperation with the Regional School Office and the Civil Protection Regional Department

Period: 01.02.2022 – 30.05.2022

Social channels chosen to communicate during the drill:

N. Facebook posts : 350

N. Twitter posts: 385

N. Instagram posts: 899

N. Other Social Networks post: 1 - whatsapp

Number of Emergency types proposed by the system during the drill (Forest fire, Flooding, Earthquake):

Forest fire: 536

Flooding: 550

Earthquake: 549

The number of messages correctly interpreted by the EDSS Platform have been 1636 (550 flood – 536 forest fire – 549 – earthquake)

There are just three messages who have not been correctly interpreted by the Platform. Probably this happened because some scenario were poor detailed and, maybe, case study scenarios needed to be better described by us.

Hashtag employed by the participants have been 301. The majors were: #EDSS; #terremoto; #alluvione; #incendio; #piove; #fuoco; #fumo.

Critical issues faced:

It has not been easy to involve the population to participate at this pilot. Thanks to the cooperation with the Regional School Office many students have been involved

Evaluated impact of the pilot activity

This activity have had a good impact on the population who have participated to the Pilot because it has raised the awareness of the importance of writing effective messages.

Pilot Deployment activity: Split-Dalmatia County: results achieved

Participants: 1691 subdivided in 565 Students and 1226 Adults

Period: 16.12.2021 – 30.06.2022

Social channels chosen to communicate during the drill:

N. Facebook posts : 533

N. Twitter posts: 408

N. Instagram posts: 757

N. Other Social Networks post: 68

No social channel identified: 26

Number of Emergency types proposed by the system during the drill (Forest fire, Flooding, Earthquake):

Forest fire: 586

Flooding: 590

Earthquake: 589

The number of messages correctly interpreted by the EDSS Platform have been 1765 (590 flood – 586 forest fire – 590– earthquake)

According to the effectiveness of the messages, 26 have not been correctly interpreted by the Platform. More than 1179 hashtags were used to indicate the type of emergency as well as the different types of warning with 213 hashtags, call for help with 19 hashtags and around 480 hashtags for general remarks on the situation. For duty officer in operations center, clear location of the reported emergency with photos/videos is the most important information that could be useful to understand the scope and consequences of emergency. Adult users used small comments (1-3 words) for particular emergency while students used longer comment also emphasizing their emotions about the situations.

During the Pilot activity few hashtags indicating location of earthquake in City of Petrinja have been used. This municipality is not part of Split-Dalmatia County – but it is famous because of an earthquake the 29 December 2020. Still a lot of Croatian people associate earthquakes to Petrinja. Few hashtags indicating locations of floods in Cities of Sisak and Karlovac have been employed. Even these cities are not part of Split and Dalmatia County but are flood prone areas.

In general, the Hashtag employed by the participants have been 1179. The major were: #EDSS; #potres; #poplava; #hearthquakes;

Critical issues faced:

From time to time, both pilot and EDSS were not responsive. Data from pilot were visible in the EDSS platform but sometimes were not possible to open data since platform was not responsive.

The double listings in the menu "Archive" of the Platform was a little bit confusing since the PP1 could not compare the inputs and have a correct feedback by the users.

PP1 wanted to use EDSS Platform during two field exercises with scenario (sea accident and earthquake) on the local/regional level. Exercises were organized in June 2002 in Split-Dalmatia County. PP1 opened exercise Facebook account to collect posts from exercise observers, but it wasn't able to connect FB account with EDSS platform.

Evaluated impact of the pilot activity

It helped raise citizen's awareness on the importance of play an active role during an emergency. PP1 would suggest to organize training activities to explain people how to use social media in an effective way during an emergency.

Pilot Deployment activity: Veneto Region: results achieved

Participants: 1559 subdivided in 308 Students and 1251 Adults

Period: 01.11.2022 – 30.05.2022

Social channels chosen to communicate during the drill:

N. Facebook posts : 826

N. Twitter posts: 116

N. Instagram posts: 483

N. Other Social Networks post: 156

Number of Emergency types proposed by the system during the drill (Forest fire, Flooding, Earthquake):

Forest fire: 493

Flooding: 489

Earthquake: 558

The number of messages not correctly interpreted by the EDSS Platform have been 43 but it is not clear the reason why they have not been read by the platform.

745 is the number of the hashtags employed. The principle ones are #terremoto; #alluvione, #incendio, #aiuto, #edss.

There is a consistent difference between messages written by young people then the ones written by adults. Young people tend to write more emphatic messages, often without a geolocation of the event. The problem is that messages written in this way can create panic and are not useful for Civil Protection operators

Critical issues faced:

No specific problems have been encountered during the activity. It has been easy to participate because before starting the drill, there has been a clear explanation on how to do it. Veneto Region Civil Protection Operators have presented the project, illustrated the main objectives and explained how to participate to the Pilot test.

The initial issue has been just to promote this test in our Community.

Evaluated impact of the pilot activity

Participants enjoyed to take part to this Pilot test because they realized they could play an active role during an emergency. They said It has been very interesting to image to write a post during a simulated emergency because , for most of them, it was their first time and it was not that easy to write a message who could be useful without creating panic to readers.

Pilot Deployment activity: Municipality of Pescara: results achieved

Participants: 108 subdivided in 40 Students and 68 Adults

Period: 17.11.2021 – 26.05.2022

Social channels chosen to communicate during the drill:

N. Facebook posts : 26

N. Twitter posts: 13

N. Instagram posts: 68

N. Other Social Networks post: 1

Number of Emergency types proposed by the system during the drill (Forest fire, Flooding, Earthquake):

Forest fire: 32

Flooding: 48

Earthquake: 28

The number of messages correctly interpreted by the EDSS Platform have been 108 (48 flood – 32 forest fire – 28– earthquake)

In general, the Hashtag employed by the participants have been 79. The major were: #EDSS; #terremoto; #incendio; #alluvione; #fuoco; #paura

Critical issues faced:

Initially, participants showed some skepticism about the use of social networks to support this type of decision, but it was explained to them that all the necessary elements were in place to filter the information in order to achieve a high degree of reliability (decision maker).

Evaluated impact of the pilot activity

Students would need specific training on the conscious use of social as messages are often too long and contain information that is not useful for a correct definition of the risk scenario.

Many comments concerns emergency situation really happened in previous period, this demonstrates how people in particular students really identified with the situation. Ex: I'm under the parasol and flame are reaching me or I'm in the "pineta" (pine forest) and it looks like hell because of how high the flames are, exactly what happened in Pescara in August 2021.

The 31% of participants used the hashtag #edss.

Pilot Deployment activity: Zadar County Rural Development Agency (AGGRA): results achieved

Participants: 1958 subdivided in 544 Students and 1414 Adults

Period: 26.12.2021 – 28.02.2022

Social channels chosen to communicate during the drill:

N. Facebook posts : 736

N. Twitter posts: 179

N. Instagram posts: 1308

N. Other Social Networks post:

Number of Emergency types proposed by the system during the drill (Forest fire, Flooding, Earthquake):

Forest fire: 603

Flooding: 612

Earthquake: 742

The number of messages correctly interpreted by the EDSS Platform have been 1957. Over the 1500 hashtags were used in messages such as #vatra #poplava #112, #Zadar, #potres, #vatrogasci that are some of the most used ones that shows common understanding of social networks that hashtags could be useful in helping emergency services in a way they are usually used for a search purpose on a social platforms or similar activities and that most of the participants in the pilot see the EDSS test platform for

sending a short and clear alert message. Most of the Emojis are used by students on Facebook and Instagram like fire emoji, water emoji, storm, firefighter etc.

There have been 56 messages not correctly interpreted, 18 (Facebook), 31 (Instagram), 5 (Twitter), 2 (other platform). It could be a reason of more frequent emoji usage on Instagram that could interfere with the interpretation by the platform or overall, mostly younger audience using it. Most of incorrect messages are using some sort of special symbols not recognized by the platform. Clear hashtags are interpreted correctly.

Participants are copying their standard social media posts regarding various events and testing the platform in a short message on different platforms sometimes using similar hashtags for alerts. There is not yet a standardized procedure for using EDSS platform (#edss hashtag used for severe events could be useful for data scraping on social networks). Participants used various platforms to test the platform in a Pilot activity that cannot fully represent actual percentage of used social platforms in their real life. Most of the messages were short alerts using basic hashtags for earthquake/fire/flooding events in a way that platform could interpretate their location and alert emergency services with a message and location.

Critical issues faced:

The problems encountered during the pilot deployment are mostly related to the incorrect interpretation of messages. It could be a reason of more frequent emoji usage on Instagram that could interfere with the interpretation by the platform or overall, mostly younger audience using it. Most of incorrect messages are using some sort of special symbols not recognized by the platform. Clear hashtags are interpreted correctly.

Evaluated impact of the pilot activity

There has been a great participation to this activity. This shows how people feel part of the Community and believe how important is to have an active role during an emergency.

Pilot Deployment activity: City of Dubrovnik: results achieved

Participants: 509 subdivided in 240 Students and 269 Adults

Period: 09.12.2021 – 06.06.2022

Social channels chosen to communicate during the drill:

N. Facebook posts : 205

N. Twitter posts: 24

N. Instagram posts: 215

N. Other Social Networks post: 65

Number of Emergency types proposed by the system during the drill (Forest fire, Flooding, Earthquake):

Forest fire: 164

Flooding: 169

Earthquake: 169

During this pilot test 56 messages were not correctly interpreted maybe because the use of emoji, especially on Instagram, can have caused interpretation's problems. In most of the incorrect messages there were special symbols not recognized by the platform while clear hashtags have been correctly interpreted.

Participants have used various channels to test the platform, during Pilot activity, that cannot fully represent actual percentage of used social platforms in their real life. Still, social networks as Facebook, Twitter and Instagram were stated as used the most during the Pilot. Most of the messages were short alerts using basic hashtags for earthquake/fire/flooding events in a way that platform could interpret their location and alert emergency services with a message and location. It was seen that civil protection experts write clearer and more detailed information concerning the incidents and they added value. On the other hand, students write simple massages with an hashtag or sometimes they write very long messages describing the situation that was happening during their case in the Pilot.

During the Pilot activity, depending on their case study students have written short messages, including hashtags like #fire #eartquake, #flood, # apokalipsa or longer messages describing the situation occurring at the moment that in few cases tent to become a bit confusing. In these cases, they included also different emojis.

On the other hand, adults' tent to have clearer messages with important key notes describing the situation occurring. Such as: # strong earthquake just occurred #sos #without panic #edss, etc.

Critical issues faced:

Not specific issued has arisen during this test. It is evident the need to educate people on how to write effective messages during emergencies

Evaluated impact of the pilot activity

Participants have found interesting to take part to this activity. The feedback are positive. The initial fear was that their posts could be published on their real profile, but when they realized it was not like that they wanted to "play this game".

A bad functionality of the platform represent a fear for the participants. There is a general concern that, in real life, the platform can not really function or can collect false news.