

Category :**ICU organization**

A286 - Intrepid project: intelligent toolkit for reconnaissance and assessment in perilous incidents

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Introduction:

The objective is to develop technologies that help to improve disaster response, facilitating safe and efficient performance of first responders in emergencies, taking into account the different risks, whether natural or man-made[1]

The objectives that have been set are:

- To develop tools to facilitate the exploration and assessment of potentially hazardous inhabited spaces.
- To improve the safety and efficiency of first responders[2].

Methods:

The INTREPID project is based on the collaborative work of research, technology and communications organizations focus on technology development within drones and robots unmanned. This tolls are testing by European emergency services.

- Mobile platform for scanning and assessment of a disaster area, for multidisciplinary teams i
- Drones and robots that will act as cybernetic assistants.
- Positioning, mapping and environmental assessment module.
- Tactical communications system for disasters.

The first testing exercise was developed in Stockholm [2]:

- Metro flooding on 2 November 2021

Results:

KEY PERFORMANCE INDICATORS [2]

Unmanned Aerial Vehicles have been tested in emergencies indoor with these new capabilities

- Positioning accuracy of indoor UAV 10 cm 50

Unmanned Ground Vehicles with target value of:

- Ability to climb stairs and an arm reach of 1.3 m
- Min range of network full unit 1 km
- Max deployment time of network full unit 10
- Number of concurrent users of network full unit 20 Subject

Conclusion:

Innovation with Information Technology (ICT), building sensors, mixed reality and autonomous vehicles, increases the efficiency in the attention to major catastrophes.

Effective inter-group communication, obtaining information in real time and coordination through technology adapted to our needs, helps to reduce the initial chaos of the catastrophe, improve our assistance to patients and increase our safety in the intervention[2].

References:

1. <https://cordis.europa.eu/project/id/883345/es> Last access 01/12/2021
2. <https://intrepid-project.eu/> Last access 01/12/2021