

Civil Protection Sector

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01 Real-time snow removal progress monitoring system using sensors on snowplows

The snow removal progress monitoring system offers advanced management and optimization of snow removal operations. By installing sensors, GPS and telematics systems, the system collects and analyses data in real time, providing accurate information on the progress of operations, road conditions and snow conditions.

- ✓ Scheduling of snow removal routes for maximum efficiency.
- ✓ Faster response to emergencies and snow removal needs.
- ✓ Reducing operating costs through better management of resources.
- ✓ Route History
- ✓ Real-time location tracking
- ✓ Providing live information to relevant stakeholders and citizens through apps and websites.



02 Logging and management information system of real estate and movable property for better usage during emergencies

The objective of the Integrated Innovative Intelligent System is to support civil protection stakeholders in crisis situations - Natural and Technological Disasters and Human and Social Crises - through the effective use of information and communication technologies.

The platform gives all stakeholders a common operational picture as well as the tools for collaborative management of human resources, infrastructure and equipment.

The Central Platform for Management and Coordination of Civil Protection Resources includes:

- The **resource inventory subsystem** such as building equipment, materials, human resources, shelter and health infrastructure
- The **incident management subsystem** through which both available resources and events related to citizens are managed, e.g., recording and managing the entry/exit of guests to shelters, recording of health incidents that occur during the activation of the crisis management mechanism, etc.
- The **information subsystem** to inform stakeholders and citizens
- The **request management subsystem** which covers both the management of requests from stakeholders to the control center for the provision of equipment/materials/human resources/vehicles and the management of requests from citizens for assistance/support

03 Incident and property logging application after natural disasters

The Incident and property logging application after natural disasters is an innovative tool that allows the immediate and accurate recording of damage caused by natural disasters. With a user-friendly interface, the app allows users to register incidents, track their location via GPS, and upload photos and videos of the damage. Secure cloud storage of data and collaboration with the relevant agencies ensure quick restoration and compensation. The app makes a significant contribution to faster and more efficient management of the consequences of natural disasters, providing relief and support to those affected.



Through the app we achieve:

- Easy geographical identification of the affected points (buildings/ agricultural land etc.)
- Immediate reporting the results of the checks to the stakeholders
- Geographical system mapping of the relevant information
- Facilitate coordination and exchange of information between the competent authorities



04 Surveillance systems for peri-urban forests and groves using micro-sensors to prevent fires

The aim of the system is to monitor climatic conditions in peri-urban forests, with the ultimate goal of providing timely information in case of fire.



The system includes:

- 1 Solar-powered microsensors record climate data and transmit it over a LoRa network to gateways.
- 2 Gateways, also powered by solar energy, receive the data from the sensors and send it to the central platform.
- 3 Cloud platform through which climate data is monitored and alerts are sent for each event.
- 4 For better surveillance, the system can be expanded with the use of optical/thermal cameras and drones

05 Voluntary organisations and volunteers registry

The Voluntary organisations and volunteers registry is an important tool for collecting and managing information. It includes voluntary organisations and volunteers, with information such as names, contact details and skills.

The aim is to speed up the coordinated response to crises and civil protection emergencies by providing effective communication and cooperation between stakeholders.



- Collecting and managing information on voluntary organizations and volunteers on civil protection matters
- Coordination and information on protection activities
- More effective response to crises and emergencies



Thank you!

