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TranSAFE-Alp

Connecting Transport regional networks to Security and Emergency Advanced Strategy Frameworks of European and Alpine regions

A NEW APPROACH TO THE JOINT MANAGEMENT OF EMERGENCY AND SECURITY FOR THE MAIN ALPINE TRANSPORT CORRIDORS WITH WEBGIS AND SIMULATION SOLUTIONS





Transport security management is a challenging background in Alpine Space cooperation area. The Alps connect all European regions with a road network of 4.200 km. This network ensures the passage of millions of people and a flow of almost 200 millions tons of goods per year across the Alps. The most important transnational passages, like Brenner, Gotthard, Frejus and Ventimiglia also contribute to the economic growths of Alpine regions and a full closure can turn into a logistic standstill in the Alps with negative effects on local businesses and environment.

Big Accidents and the forces of nature are unpredictable events, which are difficult to monitor, prevent and manage in the vulnerable transport infrastructures of the Alpine transport network. An explosion and large fire in a cross-border tunnel or a debris-fall and landslide along an important trans-national corridor section are an example of critical events which foresees a joint cooperation of key actors of Transports, Logistics and Civil Protection to face rescue operations and managing long-term closures of a vulnerable road transport section.





TranSAFE-Alp is an innovative joint cooperation initiative aiming at improving the decision-making processes for rescuing actions and traffic rerouting in critical events of the Alpine road transport network with joint security management approach, webGIS simulations and the capitalisation of ICT platforms for Decision Support Systems from other relevant Interreg and European projects for transport and environment.

The project is also addressed to the needs of reducing risks and impacts to environment and population aware by the Transport Protocol of Alpine Convention and the Zurich Process in the following ways:

- it explores the possibility to redirect freight flow from road to train in case of Frejus and Brenner full closures; - it awares about real risks and vulnerability of most important transalpine tunnels.





TranSAFE-Alp Objectives contribute to the creation of a transnational knowledge-sharing basis between Transport operators, Civil Protection and key decision-makers for vulnerability and crisis-management assessment.

Phase 1: implementation of a transport vulnerability assessment methodology that identifies consequences, actions and possible joint intervention scenarios on GIS applications.

Phase 2: Development of a web-GIS decision-making support tool called JITES, which is able to simulate closure scenarios on most important Alpine tunnels.

Phase 3: organization of a transnational PST (Preparedness and Simulation Training) actions to evaluate the support of JITES for the improvement of shared emergency and re-routing procedures.



JITES – Joint Integrated ICT-Technologies for Emergency and Security Management – is the core result of TranSAFE-Alp. Its main functionalities are:

- simulation of critical event scenarios and traffic flow impacts
- digitalization of emergency transport operative plans
- dynamic adaptation of actions and responsibilities
- awareness sharing of traffic information between Civil Protection and Infrastructure operators



JITES shifts decision making in emergency and traffic management from what "should be done" to what "really needs to be done." This is achieved enhancing cooperation of key actors through JITES tools, and can be further improved with real-time GMES satellite observation and DATEX2 integration.







