



MODERN EMERGENCY SERVICES FOR ESTONIA TECHNOLOGICAL OPTIMISATION OF CONTROL CENTRES AND EMERGENCY SERVICES



In sparsely populated Estonia, the rapid response of the emergency services is a crucial factor in saving lives following accidents. By providing funds of CHF 3.3 million to finance two coordinated projects, Switzerland is helping to optimise the technology of control centres and emergency services in Estonia.

Despite considerable efforts by the Estonian government to reduce the number of fatal accidents, relative to the size of the population these happen almost three times as often as the average for the EU and in Switzerland. The reasons for this include problems in locating accidents and rescue vehicles in sparsely populated areas with difficult terrain, a lack of coordination between rescue crews and hospitals, and the use of different, incompatible radio systems and outdated maps.

To rectify these deficiencies, midway through the last decade Estonia launched a national strategy to integrate and network all emergency services such as ambulances, fire brigade, police and border patrols, as well as to introduce a standard national radio network and make coordinated use of the latest Internet technologies.

NEW TECHNOLOGY FOR EMERGENCY VEHICLES AND CONTROL CENTRES

As part of its enlargement contribution to Estonia, Switzerland is financing two parts of this ambitious project. In one, 120 ambulances and 55 medical centres are being equipped with modern radio systems and mobile software compliant with the national standard. The other part of the project encompasses replacing all the hardware and software at the national Emergency Response Centre, developing an interactive, constantly updated electronic map, and running training courses on the use of the new equipment. At the same time, further sub-projects financed by the Estonian government will be carried out to integrate the police, fire brigade and other emergency services.

These coordinated measures enable employees at the national Emergency Response Centre in Tallinn and in the four regional centres throughout the country to accurately locate incoming calls and emergency vehicles in the vicinity, give fast, precise instructions by radio, and also record these electronically. This enables fire brigade crews to instantly check when an ambulance or the police are due to arrive at the scene of an accident, for example. In addition, once the paramedics have performed first aid at the scene of the accident, they can create electronic cards containing vital information on the patient's condition in the ambulance and transmit this electronically to the hospital before they arrive.





TIME SAVINGS CAN BE LIFE-SAVING

This process greatly reduces the time between receipt of an emergency call and the arrival of emergency services on the scene, and noticeably improves the quality of the Estonian rescue and care services. Both sub-projects promote measures in the area of e-Health, which is also gaining in significance in Switzerland. The modernisation of the emergency call and ambulance systems financed by the Swiss contribution will thus enable emergency services to be deployed in a coordinated and much more efficient manner in the future. This Swiss-financed modernisation programme is due to be completed in 2013, and digitalisation of the entire Estonian emergency system should be concluded one year later.



The main aim of the projects of the Estonian Emergency Response Centre and the Health Board is to reduce the response time between the receipt of emergency calls (phone no. 112) and the time at which emergency services reach the scene, especially in rural areas, in order to secure a high-quality and evidence-based ambulance service throughout the country.

For this purpose, the Emergency Response Centre has obtained a digital operational map, which includes the necessary equipment for allocated rescue vehicles and the locations of ambulances and stations. The country's ambulance services and emergency care hospitals will be provided with the necessary radio communication equipment. Ambulance stations will be equipped with portable computerised wireless workstations linked to a central e-health database, and an electronic case history system for paper-free patient data management is to be developed.

Janek Laev, Director of the
Emergency Response Centre

THE PROJECT IN BRIEF

SUBJECT

Health/overcoming natural disasters

COUNTRY

Estonia

STARTING POINT / BACKGROUND INFORMATION

Owing to outdated maps and the use of different radio systems, it is often difficult for the Estonian emergency services to pinpoint the location of traffic accidents over wide expanses of sparsely populated areas. This is one of the reasons why Estonia has a relatively high number of fatal accidents compared with the EU average. The time taken to pinpoint the location of an accident can be crucial.

PURPOSE

The aim of the project is to greatly reduce the time between receipt of an emergency call and the arrival of emergency services on the scene, and to significantly improve the quality of the Estonian rescue and care services.

ACTIVITIES

- Equipping 120 ambulances and 55 medical centres with radio systems and mobile software
- Equipping the national Emergency Response Centre with hardware and software
- Developing a constantly updated interactive electronic map
- Carrying out training

TARGET GROUPS

The Estonian population and foreign visitors

COSTS

Total project budget of the two projects:

CHF 3.88 million

Swiss contribution to the two projects:

CHF 3.3 million

RESPONSIBILITY FOR PROJECT IMPLEMENTATION

Estonian Health Board and Estonia's national Emergency Response Centre

DURATION

2010 – 2014