No borders for commu for Norway-Sweden project

nication

With a border between them stretching for over 1,600 km and both being part of the Schengen area, Sweden and Norway have a joint challenge managing and safeguarding activities on their frontiers.

The Norway-Sweden ISI project was established to ensure that emergency services can use their terminals in both countries and communicate with those from another nation, as well as with their own team and home control room.

To get the inside information on the project, we talked to Marianne N. Storrøsten, DNK and Anita Galin, MSB, both ISI project managers in respective countries.

1. Why was this project started? What are the challenges that authorities face in the border areas?
Norway and Sweden have a long tradition of collaboration. Providing effective communication by interconnecting our public safety communications networks is another way to add to this history.

The border shared by Norway and Sweden is 1600 kilometers long. With ISI, seamless communication during a rescue or other public safety mission does not have to end at the national border.

This is becoming increasingly important as extreme weather events become more frequent and crime becomes more international. The benefits of ISI will also be apparent in the day-to-day work and planned operations between the two countries' first responders as well as communication between Customs officers at the border.

2. When did the project start and when it will be finished?
The formal start of the project was the signing of a four-party agreement between DNK, MSB, Motorola and Airbus in September 2012. The corresponding EU-project ISITEP started September 1, 2013. The project period ends in December 2016. On November 16 we will demonstrate ISI to a wider community in a cross-border field exercise between Norwegian and Swedish first responders. Swedish, Norwegian and international guests and media will be present. The ISI gateway and transmission, end-user functionalities, radio terminal migration (same as roaming in commercial networks), control rooms, fleet map, end-user procedures and training will be put to the test in the exercise. The project group is working to ensure that all technical and user preparations are ready for operational use in 2017.

Credit: Olav Heggø

Anita Galin, MSB

Marianne N. Storrøsten, DNK

3. What will the Norwegian and Swedish authorities gain when the project is ready? How will their daily work be made easier?

Even before the ISI-connection, the first responders and Customs in the border areas co-operate in the day-to-day handling of accidents and other incidents. This co-operation will be strengthened through efficient communication.

4. What do you need for this kind of project (on both sides of the border)? Is it co-operation, resources, enough time for planning, technological development, operational development?

It is difficult to prioritize as they are so important. Our project is led by network owners DNK and MSB. The technical development is definitely an important aspect, but in our experience, involvement of resources from the agencies from both sides of the border has been a key factor for success. The user implementation subproject involves Norwegian and Swedish representatives from the health service, the fire & rescue service, as well as the police and customs. In addition, MSB and DNK are developing a bilateral agreement to regulate operational aspects of the interconnection between our networks. The agreement will regulate: a. The interconnection technical setup and security, b. Operations and fault handling, c. Governance model, d. End-user services, and f. Cost sharing.

5. How to succeed with a huge project like this?

High degree of cooperation and flexibility on all partners, high visibility of the project combined with a fixed deadline (here: November 16, 2016) are key success factors to drive it forwards.

6. What was the most difficult part of the project?

The most difficult part is to align the expected subset of TETRA functionalities offered through the ISI solution and new radio terminal software for migration to end-user procedures and guidelines. ISI defines standard functionalities. In cross-border communication over ISI, it is only possible to use those functionalities that are supported by both connected networks. What's more, the functionalities may work together only in a certain way because their implementation in the two different networks may vary. The cross-border communicating organizations have adjusted their operational procedures to account for these limitations. This part will be easier in the next ISI project as all parties will have tangible references and will be able to get a feeling for the new communication possibilities.

7. Can you give advice to other similar projects in progress or starting elsewhere in the Nordic countries or the rest of the world?

A key lesson is that there are not just two networks to be integrated. Radio terminals and control rooms must also be able to handle cross-border communication and foreign users. Enabling cross-border communication requires connecting different public safety organizations across the two nations. This task of aligning complex network functionality and end-user devices, as well as different organizations and organizational structures, has been a long process.