

Case Study

Industry: Public Safety & Security

Frontier Guard: Gulf of Finland Coast Guard District

Project: New command center

Major challenge: Custom KVM switching solution



The background.

The Frontier Guard Gulf of Finland Coast Guard District operates in the coastal area, and in the harbors and airports around the gulf. Its main duties are border surveillance and checks, and search and rescue operations at sea.

For some years, the Guard had been planning a new command center since their old center, built in 1945, was too small, bunker-like, and technologically lacking. As the role of information technology has grown over the years, clear, instantaneous communications is more and more critical. To help plan and manage the information technology for the new center, the Guard called Black Box.

The new command center.

The Guard had a number of requirements for the new command center. First, it had to have enough space plus extra workstations available for training and rescue operations. Next, the layout of the center needed to be efficient and ergonomic. The desks were even designed with motors so users could adjust the height and stand at their desks, which happens frequently in crisis situations.

Most importantly, the system had to be a very advanced control center solution involving switching and transferring high-resolution pictures. Duty officers need to scan weather charts, locations and situations of units at sea, and radio and telephone communications. This means monitoring multiple audio and video links, and giving each member of staff the ability to control displays.

Thanks to Black Box and the ServSwitch Multi, the Finnish Frontier Guard is able to monitor weather, location, and situation of ships at sea, and radio and telephone communications in the Gulf of Finland.

ServSwitch and the shipping news.

Black Box came up with a custom solution using off-the-shelf products in an innovative, custom configuration. The heart of the system is the Black Box® ServSwitch™ Multi, a keyboard/video/mouse switch, which enables the connection of multiple CPUs to one keyboard, monitor, and mouse.

The system needed to connect everything so any duty officer can take control of any computer or information source and pass it on to any display unit. There are at least three panel displays, a keyboard, and a mouse at every desk. Some desks also have an additional matrix of four display panels for monitoring radio broadcasts. These desks have a total of seven to eight displays. For safety, the CPUs are in a monitored and locked location 100 meters away.

In addition to the desk displays, there are video projectors and a large wall display consisting of six background projection cubes. When necessary, the wall display can be used as a single display or as multiple separate displays. There are nearly 40 display units in the system. The system was quite successful. With one glance, everyone in the guard duty room can see which ships are on the move.

"I feel everybody involved in this project was very enthusiastic. This was not a 'mold' solution that comes straight from the warehouse shelf, although the solution was built with stock equipment. Everyone was committed to a well-designed solution, not just an easy, fast-delivered one. That's why it has been such a pleasure to work with all the people at Black Box. And best of all, the final result is just what we were looking for!"

Lieutenant Commander Petteri Leppänen, Frontier Guard Gulf of Finland Coast Guard



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