

Beckhoff Control Panel as operator interface for online channel



→ Skynet is an online channel that enables service providers to offer their services to customers in remote regions. Due to Finland's special geographic and climatic conditions and its infrastructure, the comprehensive provision of basic services such as those offered by employment, taxation and insurance authorities is relatively cost-intensive.

Skynet is gathering pace

Skynet enables services to be provided online in less densely populated areas. Beckhoff was chosen as the supplier for the IT hardware, which has to offer optimum performance and reliability. This application shows that Beckhoff Industrial PCs are also used outside the world of automation.

The Skynet system was commissioned in Finland in June 2003 on the Turku islands in the south-west of the country. Five service points at easily accessible locations, such as libraries or town halls, are available for customers. The main criteria for the selection of the locations were that customers should be able to deal with their affairs undisturbed and in privacy, and that the opening hours approximately match the office hours of other service providers.

The aim for the development of Skynet was simple operation both for the customer and for the service operator. The client station (CSS), i. e. the service point for the customer, consists of a table with built-in Beckhoff Control Panel, a scanner, a printer and a call button. The customer-specific Control Panel has a built-in

camera, a microphone and a speaker. Via the monitor, the customer is asked to press the call button. This action will establish the connection to the administration station (AST). The customer tells the AST which service, i. e. which service station (SST), he or she requires. The SST will then establish the appropriate connection. Customer and service provider can then easily communicate with each other. The advantages for customers: Long journeys and waiting times are avoided, and all services are available from a single access point. One could almost say that people in remote regions are offered a better quality of service through Skynet than the urban population.

Practical experience

Contacts with public authorities often involve sending, receiving and filling out of forms and documents. With Skynet, customer and service provider can view the documents on screen. Relevant documents can be printed out on both sides. Since Skynet enables the identity of the customer to be verified, there is also the option of working out and signing contracts.

Today, customer service staff must use and operate a large number of different systems. This was quite a challenge for the development of the Skynet user interfaces at the service provider end, which had to be clear, simple and intuitive. Only 2 or 3 hours of training are required. Initial user experience is very positive, both in terms of availability and usability. That the design of the Skynet user in-

The Skynet system makes public services available online. Long journeys and waiting times are avoided. Furthermore, all services are available via a single access point.



Customer-specific Control Panel from Beckhoff as a robust operating unit for the Skynet system.

The hardware requirements for Skynet

The development of Skynet started in 1999, and a first functional prototype was created in cooperation with Sonera Corp. and Nokia. Skynet uses the H.323 standard for video and audio compression, and currently a 1.5 MB synchronous data connection. The hardware consists of factory components without additional embedded devices. For increased operating comfort, high emphasis was placed on high-quality video/teleconferencing displays and on synchronous sound and image transmission, which naturally increases the requirements for the audio and video systems.

terface is a success is shown not least by the fact that so far the Skynet helpdesk has not received a single query regarding system operation. Researchers from the psychology department at Helsinki University carried out a study on the user-friendliness of the remote Skynet system, based on customer experience. This showed that, due to the simple operation, user acceptance of Skynet as a service is very high. The customers were unanimously impressed with the e-service.

Servicing and maintenance

Since Skynet is a highly integrated hardware system, maintenance work has to be carried out locally. The system is used in thinly populated areas, where the distances between locations are quite significant. On-site maintenance usually takes up a whole day, with 6 or 7 hours spent travelling. The main criterion for the selection of the hardware was therefore reliability, and this was the main reason why Beckhoff was chosen as the hardware supplier. The only way to reduce main-

tenance costs and maintain customer confidence is the use of highly reliable equipment. In terms of operability and operational concept, the Skynet service has proven to be a cost-effective way of extending a service network. It also enables cost reduction to be achieved in areas where a staffed service point would not be economically justifiable. Skynet therefore offers commercial service providers options for substantial cost reduction. For public service providers, Skynet not only offers potential for savings, but also ensures a consistent level of service across the country.

→ Skynet www.nsd.fi/skynet-en

→ Beckhoff Finland www.beckhoff.fi