

The Port Of Helsingborg Goes Wireless Without A Hiccup... Well There Was One Hiccup.

CASE STUDY

THE PORT OF HELSINGBORG is one of northern Europe's leading ports. Located in southern Sweden, the port is a primary link for commerce and travelers between Scandinavia and Europe. It has an annual turnover of cargo of 7.5 million metric tons, and every year 12 million passengers travel through the port.



The Port needed a wireless solution that would improve the tracking and tracing of containers. Simple enough, except for the fact that working conditions can get awfully nasty in a port - especially a port in Sweden. A typical day, depending on the season, can bring any combination of salt spray, rain, snow, ice and dust, making it an extremely harsh environment for wireless data computers and wireless networking devices. Therefore, it was essential the Port purchase wireless equipment that was truly ruggedized to withstand this extremely harsh environment.

The Solution

The Port of Helsingborg decided on a 2.4GHz wireless network, LXE's Spire® Solution, and LXE forklift-mounted and handheld computers. "We researched a number of RF suppliers and eventually decided on LXE," explains Lars Cronsioe, Administrative Manager. "We were impressed at their breadth of experience in port installations around the world and the lifetime of their products in the most demanding environments." The advantages of a 2.4GHz wireless network, simply put, include a higher data rate and that it's an IEEE open standard - enabling mobile devices to communicate with a wired network and run any software, just like an ordinary work station. According to Frans Kok of LXE, "For a port, a 2.4GHz wireless LAN is the proper technical foundation for the future. It allows remote computers to use a GUI, transfer files and can support the emerging Voice-over-IP technology." The Port of Helsingborg solution also incorporates a wireless bridge. The bridge enables networks in various buildings throughout the port to connect wirelessly, and provides online connection to vehicles in the

container yard. The LXE Spire Solution is expanding the the coverage, minimizing the number of access points required to cover the port which reduces the cost of implementing the system. Port workers have been particularly impressed by the coverage provided in between high stacks of containers.

The Hiccup

The installation was completed successfully and was running smoothly - then radio signals began to suffer from extraneous interference. Initially, hardware or software problems were thought to be the cause. After none could be identified, other potential sources of the problem were investigated. It was discovered that a nearby company had installed a wireless system operating on the same frequency and with a directional antenna pointing directly at the Port of Helsingborg. After some negotiations, both companies changed their operating frequencies and the problem was solved.

The Results

"The Port of Helsingborg uses the wireless network to achieve 100% real-time control of container location and handling equipment," says Cronsioe. "The benefits include more efficient tracking and tracing of containers, comprehensive status reporting, smoother inventory control, better utilization of yard resources, and fewer errors. It also improves customer service, as it enables our customers to track the location of their containers on-line."

About LXE Inc. LXE Inc. improves supply chain performance by applying over 30 years' experience developing wireless products and solutions. From wireless computers, advanced auto-ID technologies, and wireless network infrastructure, to our award-winning customer support - LXE's easy-to-use products are as reliable as the people who install and support them.

Based in Norcross, Georgia, LXE also offers a full range of turnkey services, including radio integration, project and installation management, network design, technical support, and repair services. LXE is a wholly-owned subsidiary of EMS Technologies, Inc. (DAQ: ELMG), and has offices worldwide. For more information, visit www.lxe.com.

The LXE logo consists of the letters "LXE" in a bold, blue, sans-serif font. A stylized blue wave or swoosh is positioned beneath the letters.