

Container tracking monitoring device offers security and business benefits

Containerships is providing the real-world testing ground for Isotrack prototypes. *Felicity Landon reports*

Finnish shortsea shipping specialist Containerships is playing a starring role in a new EU-funded project that could change the face of container tracking and security.

Isotrack, an innovative container tracking monitoring device, has been developed in a project funded by the EU Framework Seven (FP7) programme, and Containerships is providing the real-world testing ground for the prototypes already produced.

"We are partners in the project and our role is providing the containers for testing purposes. There are also plans to put some equipment on a number of our vessels for testing," said Antanas Bernikas, the line's container control manager.

Containerships offers a significant advantage to the project in that it operates its own in-house fleet of 14,000 containers. The trials will focus on its services in the Baltic and North Sea – possibly extending to its Mediterranean services later.

Supply chain security, including not only the threat of a 'dirty bomb' but also of theft, smuggling and human trafficking, is a hot topic across the shipping and logistics industry. Scanning containers when they reach their destination throws up obvious problems – if there's something dangerous inside, it's already too late.

The Isotrack device, which is integrated into the container, is designed to detect low-level radiation and volatile organic compounds (VOCs) just as soon as any such material is put inside the container, and to send out an alert immediately. It also detects motion and



heat. Its virtues can be extended, too – sensors can be added to detect specific threats or disturbances, and it has the capacity to report on any tampering or removal/alteration of container contents, in real time, via GPS, GPRS or Iridium satellites.

Isotrack consortium partner TTS (Shipping), the specialist timber shipping line based in Melton Mowbray, is acting as project coordinator and dissemination and exploitation manager.

TTS director Dougie Bryce said: "As well as detecting specific threats, Isotrack offers some important commercial benefits. As it is radio frequency and X-ray permeable, it could be developed to enable instant manifesting as tagged goods are inserted or removed, adding an important level of protection against a wide range of cargo crime."

The partners in Isotrack I, from the UK, Slovenia, France, Finland and Norway, developed the Isotrack prototype with the support of €2.2m of FP7 funding. Last year an additional €750,000 of funding was confirmed for Isotrack II, to take the

device from prototype to market reality.

"This funding is allowing us to produce the product in sufficient numbers for meaningful tests in the real world, develop the software and market it at trade shows and exhibitions worldwide, where we can demonstrate to potential clients exactly what this product can do," said Bryce.

Containerships started by testing the device on one 40-ft high-cube, pallet-wide container. Over the next few months it will be fitted to more and more containers being transported all over its Baltic and North Sea network, visiting numerous ports. By using Isotrack, the line will be able to pinpoint exactly where each individual container is at any given time and, as the first container company to make use of this technology, it will offer the option to selected customers who are interested in testing additional security features.

"Isotrack has the potential to be a big step forward in countering terrorism," said Bryce. "But its benefits for business are clear too."