

New GPS technology to drive growth for Celtrak

Pay-as you drive insurance, perishable goods transport and utility company fleets are just some of the areas that may benefit from new GPS technology being developed in Galway, writes Gordon Smith.

Galway-based telematics company Celtrak has developed new GPS (global positioning system) technology that it claims offers a number of breakthroughs. Called Razor, the product is an auto vehicle location device that is intended to solve complex transportation problems. Razor has been in development for almost nine months and is currently being field-tested ahead of a commercial launch later this year.

The product is a combination of hardware and software and is designed to act as a gateway to other vehicle technology devices such as engine management units or in-cab displays.

"We've invested heavily in hardware, whereas a lot of other manufacturers tend to focus on the software," said Celtrak sales director Helen McBreen. Competing systems in the telematics field tend to focus on one technology area rather than combining multiple features into a single unit, she claimed. Moreover, Celtrak developed the Razor technology so that it can be sold in high volumes and it has a low cost of manufacture.

According to McBreen, the Razor is a technological breakthrough because traditionally, telematics systems have only been able to achieve a GPS fix at one minute intervals. The Razor uses the latest GPS technology for quad-band GSM/GPRS/EDGE connections over the mobile network, so it can report a vehicle journey on a second-by-second basis.

"This breakthrough means the technology would be very applicable to the insurance sector. If you are using telematics devices for pay-as-you-drive insurance, it's important that the GPS fix is extremely frequent," said McBreen.

Celtrak also sees opportunities in the area of refrigerated transport. Historically, sectors such as chilled goods and pharmaceuticals have encountered a problem known as 'time to first fix', which is a critical issue refrigerated goods are being carried across long distances. "This gives you full auditable data of the temperature," said McBreen.

The Razor was specifically designed to handle a lot of data processing, whereas previously GPS units had very little 'intelligence' and needed to be connected to a server in order to process the information. "It means the data is ready in real time when you want it, for example alerts and alarms if

the temperature drops in a van," she added.

In addition, the Razor has a 'geo-fencing' feature, which is able to tell when a vehicle enters or exits a defined geographical boundary. This has applications in the utility sector, which is a growing area for Celtrak.

A service provider such as a gas company could, for example, use this facility to monitor its vehicle fleet. According to McBreen, this

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would help with issues such as operational efficiency, cost reduction, and improving quality of service. "When it's launched, the product will provide the utility sector with new capabilities and business intelligence to increase their effectiveness and improve their business processes," she said.

Celtrak expects to increase its revenue by 50 per cent over the next 12 months, primarily through export sales to the UK, continental Europe and the US. McBreen anticipates some of that growth will be driven by the Razor product.

"Our focus since incorporation has always been on innovation. We're always researching and developing new features

that will benefit the market and give us a competitive advantage," she said.

Techie-minded people might be interested to know that the product's hardware combines an embedded PC, a uBlox GPS receiver and a Cinterion unit for machine-to-machine communication. The device also includes several connectivity ports and a wireless antenna, as well as a giro accelerator and a compass.

The Razor uses the Java ME open platform for application development. This means customers will also be able to use the device to run their own proprietary software applications that have already been developed in-house.