

Customer:

EnviroCentre

Project:

Environmental surveys

Solution:

Trimble TDC100 GNSS smartphone and K-Mobile software

Case Study



contaminated land areas.

The company regularly needs to record positional and attribute information and had been doing this with a combination of GPS, in the form of a Garmin Etrex, and a **KOREC** supplied Trimble GeoXT shared across departments. Pen and paper is also used.

Recently EnviroCentre was looking to improve both the accuracy and efficiency of its field data collection and felt an equipment upgrade was required. Under the guidance of the senior environmental

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**Martin Nichols,
EnviroCentre**

consultant Martin Nichols, a number of options were considered including some iPad and smartphone apps. However, with EnviroCentre working on projects across a variety of areas including EIA, ecology, flood risk, hydrology, river restoration and contaminated land,

Martin felt a familiar professional GIS solution that combined ease of use with a 1-2m accuracy would be the best option. He contacted **KOREC** and following a couple of demonstrations, EnviroCentre opted for a Trimble TDC100 combined smartphone and GNSS handheld with **KOREC**'s K-Mobile data capture software on-board. This system was supplemented with a Trimble Kenai tablet with multiple ports as a lighter upgrade to their old Toughbook laptop.



The new devices are being used across the EnviroCentre teams and offices on a range of applications and most recently for tree condition/character surveys. Whilst each survey is different, EnviroCentre field collectors can walk up to 10km a day and collect 100+ points. Just having to take out a single TDC100 device, weighing in at only 310g, makes a big difference.

EnviroCentre have created a number of

Smartphone familiarity and professional GNSS functionality

The user-friendly interface provided by Trimble's TDC100 GNSS smartphone and K-Mobile software has provided accuracy, consistency and efficiency for EnviroCentre's wide range of data collection projects.

The smartphone has changed the way we communicate, view the world and even play. It's also changed the way that we can collect geospatial data.

Its ubiquity means that manufacturers and software developers alike have been fast to exploit the smartphone's popularity either through accuracy boosting hardware – a Bluetooth link to a Trimble R1 or R8 receiver can elevate a smartphone's accuracy from 5-10, to sub metre or cm respectively, or through data capture apps designed to run on a range of Android data collectors, including smartphones, such as **KOREC**'s K-Mobile software. With these additions, there's no doubt that smartphones have earned a place in the geospatial world.

Trimble has addressed this trend with its development of the TDC100, a GNSS handheld that has exactly the same form factor and functionality as a smartphone ensuring familiarity and ease of use. By combining ruggedness, a Gorilla glass screen readable in strong sunlight, all day rechargeable battery life, a 13 MP camera and 1.5m real-time accuracy, the TDC100 is also a tool that's built for the outdoors.

One of the first companies in the UK to take up this technology is leading Scottish environmental consultancy, EnviroCentre. The business operates through a network of four Scottish offices and specialises in a range of services in the ecology, environmental impact assessment, water management and engineering and

tailored data collection forms for each technical specialism, including their tree form, in K-Mobile to ensure consistency of data. The TDC's built in 13 MP camera provides high quality photographs which are tagged to the recorded location. Data is then synced to the cloud, downloaded in the office and exported directly to GIS eliminating the need for time consuming manual data entry and cutting down on transcription errors.

"We liked the TDC100 for its familiarity and user friendly interface because everyone is used to using smartphones," explains Martin Nichols. "Whilst we are saving time in the field, we are also seeing benefits back in the office with time savings of around an hour for each set of data which cuts costs for the company and enables us to provide an even better service for our clients. Our projects are all different and for some of them accuracy is the key factor, for others consistency and efficiency – the TDC100 with K-Mobile software delivers on all three."

Tree 9RI-138	
Species	Birch
Easting	258707.634
Northing	654934.882
ACC	0.5
Height	10
Diameter	0.4
Age	Semi-mature
Crown north	3



▲ EnviroCentre projects above and below



Contact us:

Please do get in touch for further information on any of the products or services mentioned in this case study, a demonstration, support or just a chat about your requirements.

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