

**Pointtools Laser Models Helps Belgium Mapping Project**

A hi-tech digital map captured using laser scanning technology is being created for the Flanders region of Belgium using British developed 3D mapping software. Using the Pointtools 'point cloud' software, Belgian surveying company Teccon has processed billions of individual measurements to create high accuracy data for use by central and regional government, plus utility companies and the transport sector. A combination of surveying techniques including mobile laser mapping, satellite navigation and more traditional field and office data capture methodologies has resulted in an attributed base map which now covers more than 1,200 square kilometres.

The Grootchalig Referentie Bestand (GRB) is a project by the Agency for Geographic Information Flanders (AGIV) to create large scale mapping for the region. Unlike traditional paper based mapping the project aims to create an 'inventory' of ground features – including waterways, railways, roads and administrative plots, etc – recording the position, extent and characteristics of every feature. Using a combination of mobile laser mapping, total station measurements, Global Navigation Satellite Systems (GNSS), stereo photography and existing data Teccon has compiled millions of point, line and polygon map features.

"In order to obtain the highest positional accuracies our mobile laser scanning system has proved to be the most cost effective solution," commented Bruno Van Bastelaere, Co-owner of Teecon. "Having tested several software packages to process this data we selected Pointtools 'point cloud' software together with the Rhinoceros modelling package as the combined solution offered high productivity with a small learning curve."

Using the mobile laser scanning or LiDAR (Light Detection and Ranging) system Teccon travelled over 6,000 kilometres along Flemish roads capturing billions of laser scanned measurements or points. Different features are extracted from the 'point cloud' data and mapped to different layers. Existing data can be overlaid with the newly captured measurements to identify areas of change or missing base data.

"The speed at which Pointtools is able to render these huge point clouds is amazing," continued Bruno Van Bastelaere. "In fact we sometimes find ourselves panning through a new data set just for the fun of it! Before, good point cloud software was expensive and limited in the number of points – a maximum of 50 million on a workstation. Using Pointtools' free viewer we can load and visualise a billion plus points on a standard laptop. This has unlocked the potential of laser scanners for us and for our customers and we are proud to act as resellers for this industry leading software."

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**Note to editors:**

**Pointtools** is an independent technology company focussed on developing state of the art software solutions to maximise the potential of point cloud data – the millions of 3D measurements usually collected by laser scanning devices. With applications in a wide range of markets including design, manufacturing, construction, engineering, heritage and surveying to name but a few the Pointtools software portfolio includes the market leading manufacturer independent point cloud visualisation and presentation solution.

The Pointtools product suite includes *Pointtools Edit*, *Pointtools View Pro*, *Pointtools 4 Rhino*, *Pointtools Model* and *Pointtools Vortex* API – recently selected by Bentley as the engine for their portfolio of solutions including Bentley MicroStation. For further information visit [www.pointtools.com](http://www.pointtools.com)

**Teccon** is a Belgium base surveying company specialising in the capture of high accuracy (1- 30cm) geographic data. At the cutting edge of technology Teccon adopts state of the art solutions to complement more traditional surveying techniques. With a staff of 50 plus multi disciplinary specialists Teccon can offer classic surveying, ground penetrating radar, static laser scanning and mobile LiDAR mapping.

Teccon is a reseller of the Pointtools software range offering frontline customer service and support for the Benelux region. For further information visit [www.teccon.be](http://www.teccon.be)