## Interoperability in Surveying

## **Bloksma Ron (Netherlands)**

**Key words:** Cadastre; Digital cadastre; GNSS/GPS; Standards; interoperabilty; surveying

equipment; standard tablets; field data collection; geo-processing software

## **SUMMARY**

Interoperability is essential to SDI's (Spatial Data Infrastructures), in exchanging and using geo-information between and within organisations. You don't want to be restricted in solutions and datasets being provided from a single software package or a single software reseller.

With regards to GIS, the Open Geospatial Consortium (OGC) has done a good job at setting standards and today interoperability is widely recognized and understood. However, the world of surveying is far less interoperable. Until recently, this was not a problem. Surveying equipment had it's own software and was known as 'firmware'. Today, the newest surveying equipment is different in that it can be used together on a tablet-PC with a Windows-based O.S., instead of its proprietary controllers. Nevertheless, this is still tightly coupled to the manufacturer of the equipment. Sometimes you even have to buy 'their' brand of Windows-tablet.

The Dutch Land Registry ("Kadaster") employs it's own surveyors. From the technical viewpoint, we are bound to E.E.C. agreements regulating the competition for the provision of individual contracts for software, IT-hardware and surveying equipment. We would prefer an interoperable solution in which we could use our standard tablets - which would be both independent of our chosen surveying equipment (vendor) - and of our field data collection (surveying) software and calculation (geo-processing) software.

In this presentation we show our (re-)search for a solution, our specific requirements and the direction we have chosen.