

# OGC Spin-off: lat/lon

In 1998 the GIS working group of the Geographical Institute of Bonn University started to work with the OpenGIS Simple Features Specification, which had just recently been adopted by OGC members. We experimented with this specification and at the 1998 OGC Technical Committee meeting in Munich we presented our Simple Features for Java Implementation. Since then we have used and tested OpenGIS specifications whenever this was feasible in our university projects. These implementations became the first components of JaGO, a Java framework for GIS components.

## OGC Opened New Business Opportunities

In the year 2000 the GIS working group founded the company lat/lon, whose main business areas are Spatial Data Infrastructure (SDI), OGC standards and Free Software/Open Source. At about the same time JaGO became "deegree"™ and we established it as an Open Source project and published its source code under LGPL (LGPL, the GNU Lesser General Public License, is a Free Software Foundation approved Free Software license); deegree now includes a number of OGC Reference Implementations. The development of our company is closely connected to the OGC and our commitment to open, interoperable standards. Business opportunities based on open-source geospatial software would have been very limited without OGC, and lat/lon would not exist if the OGC process had not been so successful.

## Projects

The company's main activities continue to be consulting and developing SDI solutions using OGC standards. It has been involved, for example, in the "GDI-Berlin"™ project and the geoportal of the municipality of Wuppertal. GDI-Berlin is a consulting project within which organisational, technical and financial aspects of the development of the SDI of Berlin are defined. The Wuppertal geoportal (<http://geoportal.wuppertal.de/> in German only) implements only a Web application based on deegree iGeoPortal that uses OGC standards such as the OpenGIS Web Map Service (WMS) Specification, the OpenGIS Web Map Context Specification and the Gazetteer profile for the OpenGIS Web Feature Service (WFS) Specification.

## Addressing Security Issues

The steady progress shown by OGC standards efforts has kept us busy. After Simple Features it was the WMS and Catalogue Services specifications, then the WFS and Geography Markup Language (GML) specifications, and later the OpenGIS Web Terrain Service specification. At the moment we are busy developing a (free) Sensor Observation Service and we are involved in the Geospatial Digital Rights (GeoDRM) thread of OGC's third OGC Web Services initiative (OWS-3) to help us address our clients' security issues.

## Good to Have Taken Risk

For us, our business and OGC activities are inseparable. We started our company at a time when many people were as yet unconvinced that OGC and its mission of interoperability would become a success story. Obviously, it is good that we took that risk at that time, because OGC standards are now a "must"™ for most modern geospatial information projects. By embracing these standards lat/lon also became a success story.