

# Smart Verification of Geodata, with Open Source Approach

Martin Karlen and Peter Dütschler (Switzerland)

**Key words:** Cadastre; Digital cadastre; e-Governance; Geoinformation/GI; GIM; Professional practice;

## SUMMARY

1. BACKGROUND INFORMATION The verification of the data for the cadastral survey goes through tree levels: On the one hand the verification is made by the employer himself in his surveying-software and on the other hand also by competent departments at cantonal and federal level. For this purpose the competent departments dispose to the employer a free available and automatically Check-Service, which checks the INTERLIS-data on their formal correctness. The competent department of the canton of Berne uses the software BELUTI for verification work. This Software enables the examiner to identify complex and not automatically detectable errors and to judge them. The employer has no access to this application and get known the errors only by the examiners report. In the canton of Solothurn however the verification is differently managed: Producer and Examiner uses the same Software Application for testing the geodata. The competent office has developed the software Application named „VeriSO“ for the verification of the cadastral data. VeriSO has been developed as an Open Source Software and is at the employer’s disposal for independent verification before sending the data to the canton. 2. OBJECTIVE Every year about 40 project on average are verified in the canton of Berne. To ensure a standard verification on a high level, the decision was made to introduce a similar system as in the canton of Solothurn. For an easy, quick and cost-effective endorsement and maintenance of the verification software, they opted for a professional web-based application. 3. REALISATION The free accessible code of the VeriSO got adapted to the canton of Bern and got named VeriSO-BE. The management of this service, which is not done by the canton himself, was delegated to the company ALPGIS AG in Thun. The task then was to arrange the software as a web-service on the server. Every User gets his own workspace where his projects and test results are stored safely. Creating a testbed, up- and download of files is widely automated. With the help of VeriSO-BE as a web-service, important processes can be simplified 4. Outlook The possibility to check data models of cadastral survey by VeriSO-BE was only one first step. Development goes on with data models as utilities and use planning. Also the service get’s developed continuously. In the future no installations of additional programs should be necessary by using VeriSO-BE.