

Federal Digital Landscape Model of Germany Updated



The initial project phase of the ongoing update of the Federal Digital Landscape Model of Germany (DLM-DE) has been completed successfully: the working group ARGE-DLM-DE, coordinated by Infoterra GmbH, delivered a test map covering 2,700 square kilometres across the Munich metropolitan area to the German Federal Agency for Cartography and Geodesy (BKG). This product was thoroughly reviewed and accepted.

Infoterra, Delphi IMM and IABG comprise a working group tasked with updating and completing almost 360,000 square kilometres of geodata. Work on the main mapping project was started as planned in early October. The complete update is scheduled to be completed by the end of 2010.

In Potsdam and Dresden, 30 cartographic experts from Delphi IMM (Potsdam), IABG (Dresden) and Infoterra, an Astrium subsidiary, will examine the DLM-DE using up-to-date satellite imagery. This will include verification of land cover and land use, capture of thematic and geometrical changes and the addition of objects which are not included in the current DLM-DE. Recent expansions of settlements and industrial areas, changes in forest areas or agricultural and pasture lands are some examples of the elements to be mapped. The minimum mapping unit is 1 hectare and the reference year is 2009.

Highly efficient, semi-automated data processing techniques are used for the examination and updating of the data, ensuring a very high level of quality while complying with the time schedule and financial constraints.

DLM-DE project manager Marek Tinz describe the task as demanding, yet is confident: "To accomplish such a complex update in a fairly short time-frame is a true challenge; particularly as the BKG demands an overall accuracy of no less than 95 percent", states Tinz. "However, experiences with projects of similar sizes and this year's test mapping have shown that the teams of our working group can fulfil these demanding requirements."

Primary data source for this mapping project is the German satellite constellation RapidEye, which will now cover Germany nationwide for the first time: 750 tiles sized 25 ´ 25 square kilometres each are required and should preferably still be acquired during the vegetation period 2009.

As part of the update, the information in the DLM-DE will be amended to achieve a full consistency with the classes of the pan-European Land Cover Mapping CORINE Land Cover (CLC). This results in a geo-dataset for Germany that serves diverse applications ranging from environmental, agricultural and forestry applications to water quality protection, traffic control, security or spatial planning issues. For interdisciplinary issues which require precise surveying and environmental information, the new DLM-DE will be an up-to-date, sound data basis.

Finally the new DLM-DE will also comply with the specifications of the so-called "Land Monitoring Core Service" component of the European GMES program, and will soon be part of the cross-border harmonised European dataset.

For more information, visit the websites of InfoTerra, IABG and Delphi IMM.

https://www.gim-international.com/content/news/federal-digital-landscape-model-of-germany-updated