



The usage of GIS at the Swiss Administration

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Abstract

The presentation will cover the following examples:

Federal Office of Topography swisstopo

Swisstopo have over the last 15 years revolutionized their map production including the data capture, updating and production procedures. Starting with the topographic landscape model (TLM), a unique and complete 3D dataset covering the entire country, they are now producing a 1:10'000 National Map fully automatically, as well both a 1:25'000 and 1:50'000 National Map series. The 1:25 and 1:50'000 are both based on the 1:10'000 TLM, they are produced 80% automatically (including the generalization) with just 20% manual work.

Swiss Federal Roads Office, MISTRA (Management- Informationsystem for road network and road traffic)

MISTRA manages georeferenced data for the whole national road network in Switzerland. It is an integrated, modular information system consisting of a base system, a data warehouse and specialized applications (e.g. road construction layers, tunnels, bridges, road traffic accidents).

MISTRA is used for strategic, conceptual and operational control of the road network and as well for its design and maintenance.

Federal Office of Civil Aviation FOCA

FOCA is responsible for monitoring civil aviation in Switzerland and aviation development. It is also responsible for ensuring that civil aviation in Switzerland has a high safety standard and one that it is in keeping with sustainable development. A new aircraft noise calculation model is currently being developed at the laboratory for Acoustics / Noise Control of Empa, an Institute of ETH Domain. The new aircraft noise calculation model shall be implemented in a GIS platform for the development of low-noise landing and take-off procedures and thus contribute a minimization of entailed annoyance during the day and sleep disturbance during the night, as well as of noise-induced costs, This platform shall supports the objectification of a very political discussion on many level, from the expert level to the public level.