Czech Republic

Delivering the most accurate data available for the Czech Republic

Positional accuracy refinements are ensuring even greater accuracy of the Czech Republic’s most detailed topographic database.

The Fundamental Base of Geographic Data of the Czech Republic (ZABAGED®) is administered by the Czech Office for Surveying, Mapping and Cadastre (ČÚZK) and originates from 1995 to 2004. It was created by digitising information from 1:10 000 scale base topographic maps and, as well as position data. It contains approximately 350 qualitative attributes and descriptive information, and altimetry models – Digital Terrain Model and Digital Surface Model. ZABAGED® is also the base source for positional determination of orthophotos together with the information system of the real estate cadastre.

Positional accuracy of individual geographic objects within ZABAGED® varies from 0.14 metres to 1 metre. Objects that are difficult to identify, such as forest borders, are digitised approximately using orthophoto and airborne laser scanning data. The comprehensive refinement of position data will enable their positional adjustment to the highest accuracy.

ZABAGED® is provided to users as datasets and web services. Web file services or web map services meet national specifications, as well as the standardised INSPIRE product specifications formats. Derived and generalised ZABAGED®-based 1:50 000 and 1:250 000 scale data is provided as open data under the licence CC BY 4.0. Following the new Directive of the European Parliament and Council EU 2019/1024, on open data, ČÚZK is also preparing the publication of ZABAGED® as open data, the first step being the implementation of this Directive into the Czech legal system.

Descriptive and qualitative information is obtained from the owners and administrators of individual objects, or are collected in the field by ČÚZK surveyors. How up to date this information is varies significantly, however many datasets are updated and verified in cooperation with primary object and information administrators at least once a year. ČÚZK completes the revision of the entire ZABAGED® content over a four year period.

The present trend in the Czech Republic is to develop integrated geographic systems. ČÚZK strives to develop computer-supported interfaces for data migration between information systems of the public administration, including online web services for delivery of updated information from thematic information systems.