Digitalization of the Franciscan Cadastral Survey (1817-1861) in Austria *

Submitted by Austria

* Prepared by Rupert Kugler and Franz Schönweiler, Austrian Federal Office of Metrology and Surveying
Digitalization of the Franciscan Cadastral Survey (1817-1861) in Austria

Summary

The Federal Office of Metrology and Surveying (BEV) is amongst other tasks responsible for the maintenance of the Austrian cadastral and the official Austrian maps and thus provides the Austrian geo-data. The same holds true for historical data.

The digitalization of about 54,000 original historical map sheets of the cadastral survey under Emperor Francis I (1817-1861) has been completed by now for the whole territory of modern Austria. This offers the user a whole range of new means and possibilities to view, to interpret or to edit the historical data including place names as well as to connect them to other data. The nearly 200 years old cadastral data are not reserved for a small group of specialists anymore, but are easily accessible to everybody.

The digitalization project

By Decree of 23 December 1817 the Austrian Emperor Francis I. ordered the survey for the land tax register. Its main purpose was the correct levying of land taxes. From 1817 to 1861 in all crownlands of the Austrian Empire all plots were measured and mapped in the scale 1:2,880. Due to standardized instructions and mapping operations survey as well as maps are homogenous throughout the territory of the Empire, i.e. a map sheet on Styria is completely identical with a map sheet of Bohemia as regards paper, scale, legend, map script, coloring etc. For the entire territory of the Empire eight base points of coordinates had been defined, three of them on current Austrian territory (see Fig. 1).

After the dissolution of the Empire in 1918 this map survey was divided among the successor states. 54,000 map sheets referred to the territory of modern Austria. They are stored in the Austrian Federal Office of Metrology and Surveying (BEV). BEV pays not only attention to adequate storing conditions, but has also documented and saved the cartographic originals by microfilms in the 1980s. These microfilms are store in a decentralized manner.

Between 2005 and 2011 all original map sheets were scanned, the tif and jpg files being stored on various disks. The original maps are accessible to the public, also color reproductions and digital data are available. Reference to the current state of affairs is given by the number of the cadastral commune and the sheet number. The original maps have been geo-referenced and in this way related to modern cadastral plans. A refining of this procedure is currently under way.
Fig. 1: Thee territory of the Austrian Empire and the eight base points of coordinates
Fig. 2: Sketch of the cadastral commune 19164 Stollhofen in Lower Austria
Fig. 3: Map section of the cadastral commune 19164 Stollhofen in Lower Austria
Fig. 4: Sheet line system of the cadastral commune 19164 Stollhofen in Lower Austria