

Representation of material objects of cultural heritage in the national topographic database

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Computer topographic information systems are created in the various countries to satisfy the socio-economic needs. Systems are independently built in different countries, and usually contain the details of the topographic maps in scale 1:25 000 (ATKIS, VECTOR25, TOPO25...) or 1:10 000 (TOP10DK, TOP10NL, TBD...). The databases are up-to-date for the time of their elaboration, and are periodically updated. The open database structure allows the modification and creation of new categories of objects. Such conditions give the possibility to create categories that describe the former state of the place. Historical data can be used as the documentation of location of already not existed relicts of material culture. They can be also used for the development of economic analyses and forecasting of future developments.

It has been proposed a way of expansion of the Polish standard of TBD (Topographic Data Base) with objects of material culture for a typical nineteenth-century village of Wielkopolska voivodeship. Technical issues include the definition of new categories of database objects, collection of cartographic and descriptive data sources and their geometric and thematic elaboration.

In the paper the technical aspects of the extension of the TBD database by objects of old material culture will be presented on the example of village Bukowiec. As the source data sets was used old maps that had to be converted to a common coordinate system and vectorized. The data which do not have cartographic representation were located on the map based on a descriptive indication. The verification was performed using the field locator GPS. Individual groups of objects had been classified in order to define new categories in the database. In order to update the existing database the method of transfer had been developed in the recommended XML format. This way, data about historic objects was saved in TBD in vector form. This allows joint processing them with contemporary objects. The solution will be developed toward studies on land use changes and cartographic representation of these changes. In summary the principles and examples of presentation of changes of some objects will be indicated.