In the past two decades, several pilot projects of a small non – governmental Czech organisation of specialists on rural heritage and vernacular architecture SOVAMM (*Atlas of vernacular architecture of Bohemia, Moravia and Silesia* - basic inventorial survey, detailed inventorial survey of the National Park of Dyje Valley / Thayathal and of the Litomyšl – Vysoké Mýto region) enabled the developement of the actual GIS data model used since 2007 in the Czech Heritage Integrated Information System IISPP (*https://iispp.npu.cz*). The system can be consulted so far only in Czech.

The project of creating IISPP was launched in 2006. It is built with the support of the Ministry of Culture under the research project of the National Heritage Institute n° MK0750323301. National Heritage Institute participates as a member of the consortium for an international project CARARE (Connecting ARchaelogy and ARchitecture in Europeana / grant agreement n° 250445 / *http://www.carare.eu*) and will contribute heritage data from IISPP to this project.

IISPP provides the environment in which significant cultural heritage data are collected, interpreted, presented and archived in order to facilitate understanding of the configuration, evolution, condition, and context of heritage sites and objects.

The IISPP GIS is based on the object data model with seamless datasets for the whole territory of Czech Republic. The GIS is not only used to inventory and analyze (13 thematic maps for ArcGIS Desktop and 10 internal and 3 public web mapping projects (*http://gis.up.npu.cz*) are available), but it also offers the unique spatial identifiers for other databases of IISPP (e.g. MIS – system for the management of the digital and digitalized documentation (*http://iispp.npu.cz/mis*), that is used also for the storage of the GIS data, that could not be included in the seamless datasets of Czech Republic, and other databases planned for integration such as Heritage Catalogue – list of unmovable and movable cultural monuments, conservation areas and protection zones and objects and sites of cultural heritage interest). Thanks to unique spatial identifiers the visualization of the documentation stored in MIS is possible in GIS map projects and MIS can benefit from spatial analysis tools of GIS.

The interoperability with other institutions is provided by public web map services and mapping projects, that enable the use of the IISPP spatial identifiers.

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Figure 001 - 002: Thematic view of seamless IISPP GIS data with detail of protected area of historical town Uherské Hradiště and its buffer zone.
Figure 003: Thematic view of the A2 dataset - State Archeological Register (SAS) * archeological investigations and inventories at scale of 1:25000.
Figure 004 - 008: Thematic view of the A1 dataset and its basic feature classes: 005 Man made objects * 006 Cultural landscape objects * 007 Elements of urban structure * 008 Spatial extents of the cultural heritage units.
Figure 009 - 016: Catalogue view of the feature class of buildings with thematic maps generated from its attributes: 010 Historical maps (so called stable cadastre) * 011 Comparative analysis of stable cadastre * 012 Historic structures analysis (periods of construction) * 013 Architectural evaluation * 014 Architectural and urban evaluation * 015 Evaluation in terms of spatial planning * 016 Cultural heritage protection and objects of interest
Figure 017 - 018: Historical maps: 017 Second military survey (1806 - 1869) * 018 So called stable cadastre (1827).
Figure 019 - 020: Retrospective analysis: 019 Georeferenced cadastral maps (1827, 1896, 1911 and 1930) * 020 Comparison with the current state (extinct structures are marked in yellow).
Figure 021: IISPP spatial identifiers (definition points of paGIS objects with unique identifier IDOB_PG and definition points and polygons of historic localities with unique identifier KOD_CZ) and their join through the spatial relation with attributes of GIS data of the Czech Statistical Office (polygons of enumeration districts with unique identifier IDSO).
Figure 022 - 028: Links between Spatial identification web mapping project and the documention stored in the IISPP Metainformation system (MIS): 022 Search results of the document stored in MIS linked to the definition point of paGIS objects (IDOB_PG = 1136900) * 023 Detail of the document G0001019 (doc_id = 1678) with link to the definition point of paGIS object and locality in the Spatial identification web mapping project and to the record in the central register of Czech cultural heritage * 024 Document preview (doc_id = 1678) * 025 Record in the central register of Czech cultural heritage (IDREG = 121582) * 026 Spatial identification web mapping project - definition point of the locality (KOD_CZ = 16992) with hyperlinks to the documents stored in MIS * 027 / 028 Spatial identification web mapping project - definition point of paGIS object (IDOB_PG = 1136900) with hyperlinks to the documents stored in MIS. Objects documents are visualised as a brown circle; the coordinates X,Y (in the coordinate system S-JTSK) of the definition point the creation of which is required by IISPP users is visualised as an orange star.
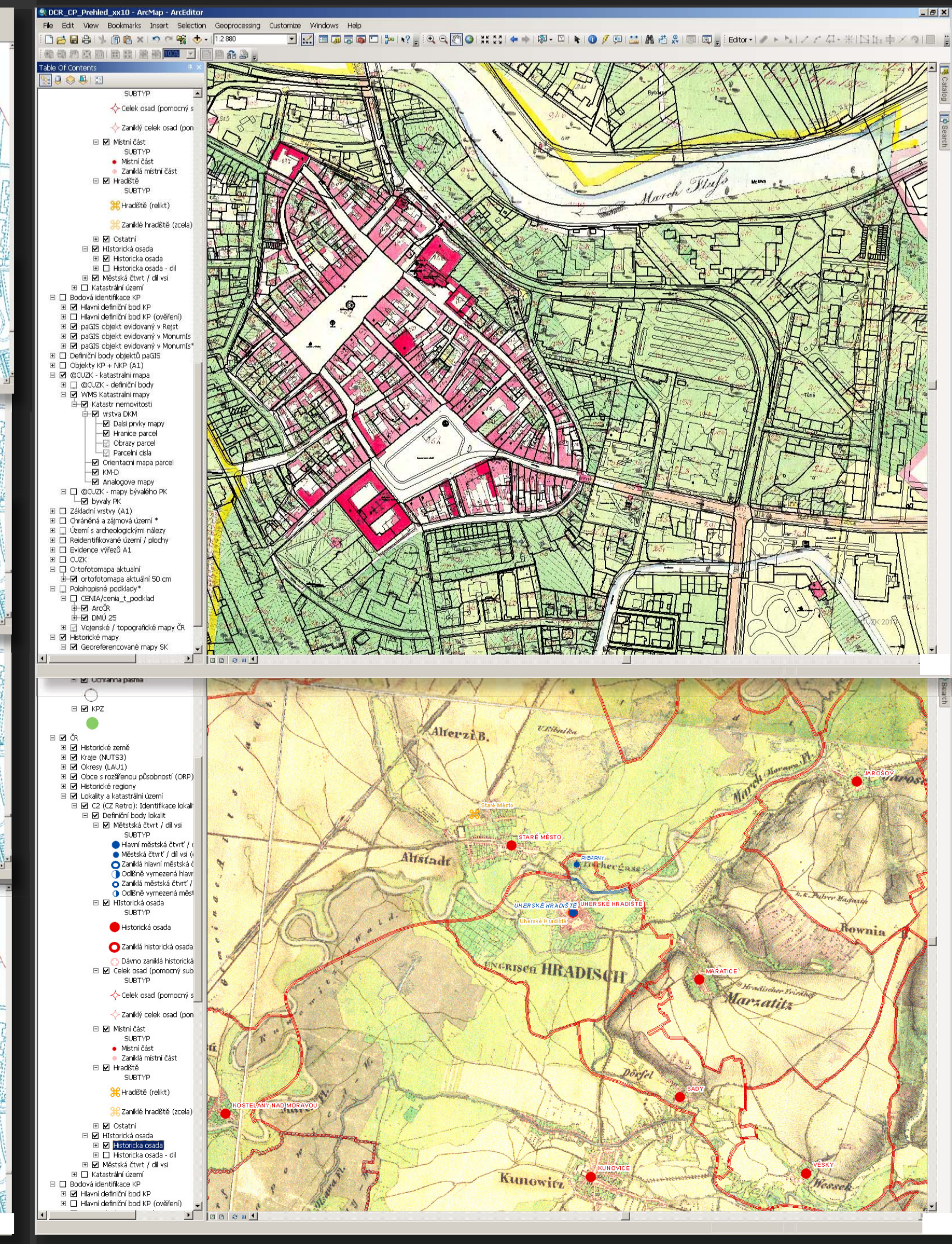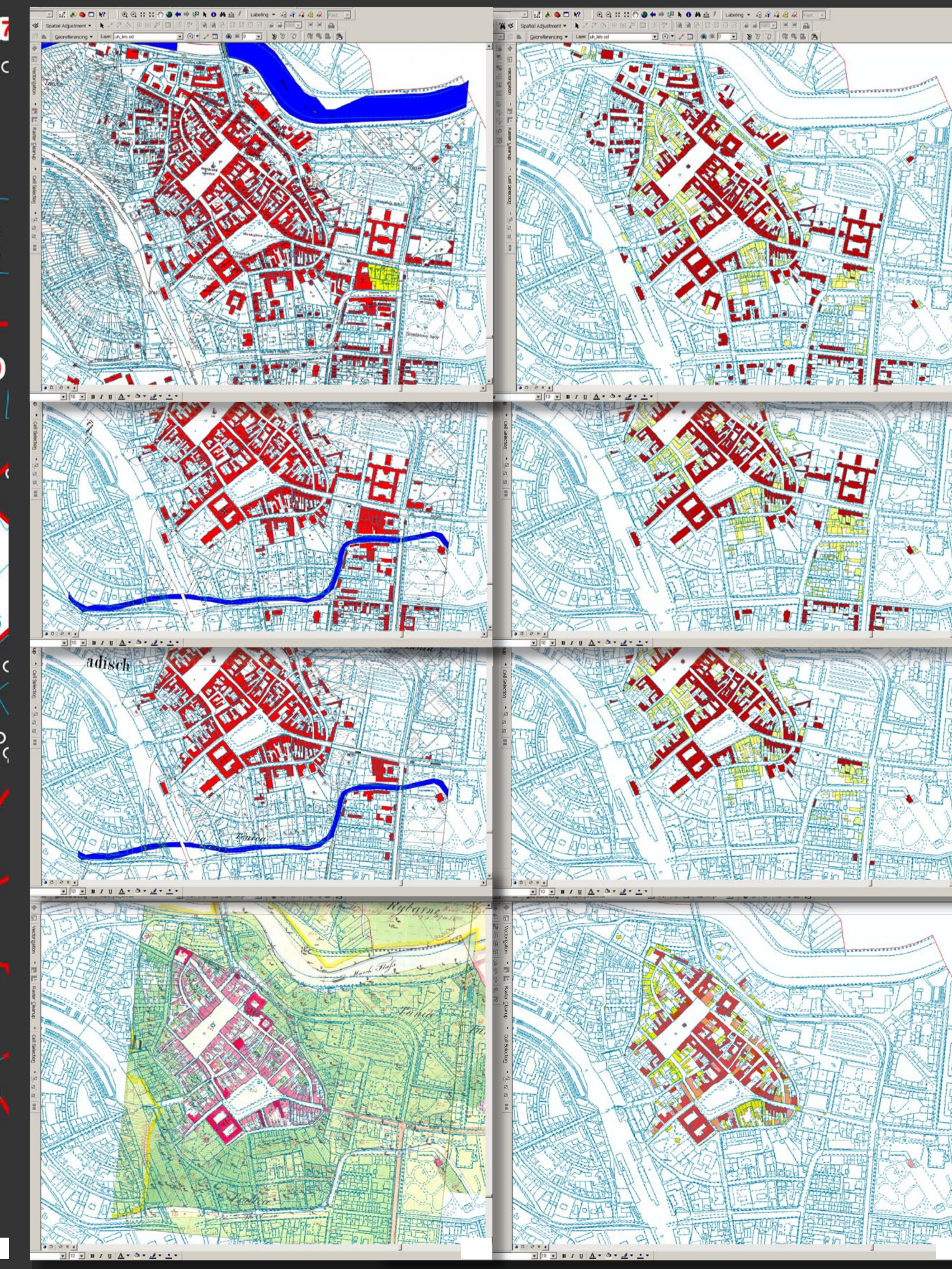
GIS AS A PART OF THE CZECH HERITAGE INTEGRATED INFORMATION SYSTEM

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