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Territorial preparation for the 2021 CENSUS of Slovakia

Group of Experts on Population and Housing Census



Abstract

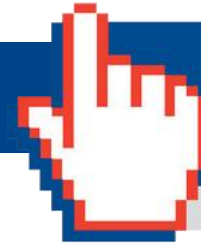
Territorial Preparation for 2021 Census was based on the use of **several administrative data sources** and at the same time it assumed the **involvement of relevant actors**. Except for of the Statistical Office of the Slovak Republic, it was the Ministry of the Interior of the Slovak Republic and the Office of Geodesy, Cartography and Cadastre of the Slovak Republic. **The success of the Territorial Preparation project is indisputable**. This is also evidenced by the subsequent population and housing censuses and the implementation of the population census.



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Klik k lepšej budúcnosti





The aim of the Territorial Preparation:

- integration of administrative data sources
- field survey

The concept of territorial preparation significantly contributed to the creation of a set of **all inhabited and habitable objects**, which, in addition to administrative sources with reference **address points**, also included **statistical address points**.



The Territorial Preparation for the 2021 Population and Housing Census was based on the use of several administrative data sources with the aim of **identifying all dwellings** in which the inhabitants of the Slovak Republic could at the decisive moment of the census to live.



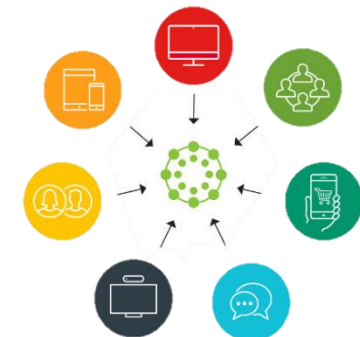
1. **the Address Register (AR)**, Ministry of the Interior of the Slovak Republic
2. **the Register of Natural Persons (RNP)**, Ministry of the Interior of the Slovak Republic
3. **the Information System of Cadastre of Real Estate (ISCRE)**, Geodesy, Cartography and Cadastre Authority of the Slovak Republic
4. **Basic base for geographic information system (BB GIS)**, Institute of Geodesy and Cartography
5. **Basic database from the 2011 Census**
6. **Statistical address points** created by the Statistical Office of the Slovak Republic



- **importing data from administrators of administrative data sources in a valid form** – separate set of geoprocessing tools and consisted of an extension of ArcGIS Pro - a thick client
- **the Address Register** – directly integrated into the Territorial Preparation system, the changes made in the Address Register – regularly every 24 hours to the TP
- **tool for extracting ADS** – new data from administrative data sources were imported
- **address matching tools** – to find identical addresses within multiple administrative data sources
- **Territorial Preparation dataset** – ETRS89 coordinate system, UTM34N cartographic representation set
- Slovak Republic (SK, NUTS1), the code and name of the region, district, municipality, part of the municipality, basic residential unit, street name, inventory and reference number (if the municipality has a street system in place) and coordinates of the address point

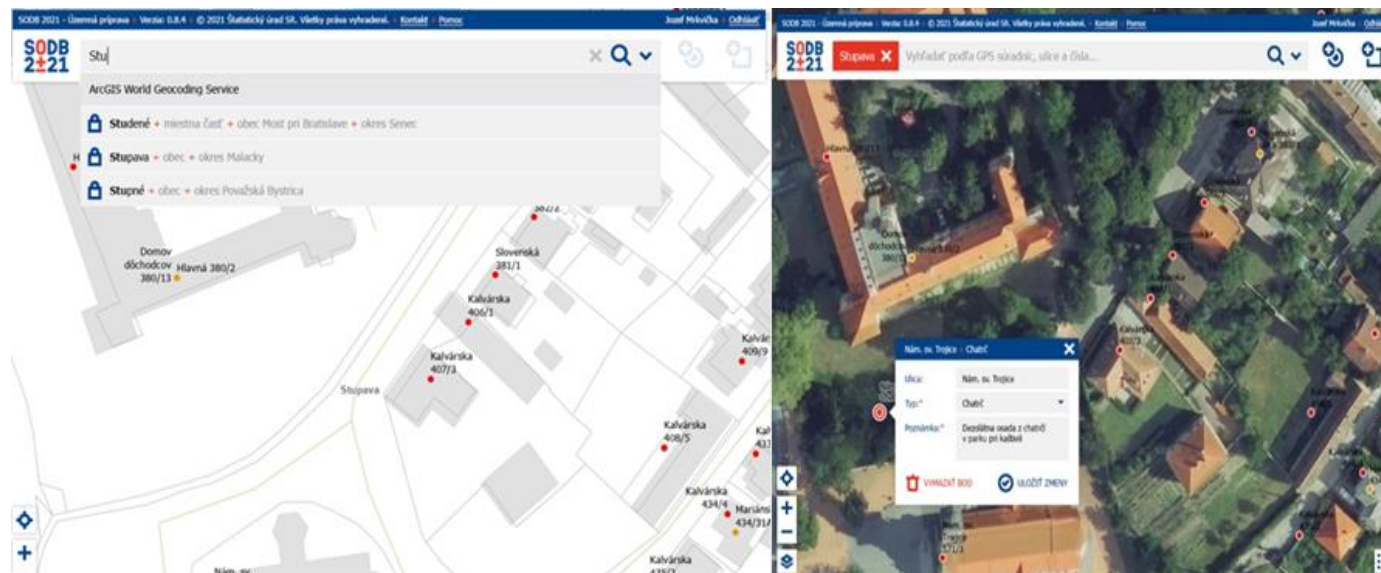
- **the aim** – maximum possible set of addresses
- approx. 4 million addresses obtained from **the Address Register, the Register of Natural Persons, the Information System of Cadastre of Real Estate and the Basic database** from the 2011 Census
- **1,867,015 unique addresses:**
 - 1,519,240 spatially located in the respective municipality
 - 347,775 records do not have or could not be located
- 59,403 were from the Address Register and 276,496 from the Cadastre of Real Estate
- missing X, Y coordinates were filled in by municipalities during the Housing Census
- those that could not be completed even during the Housing Census were completed in processing using ESRI geocoding

- **database of statistical address points** – all inhabited buildings that do not have or cannot have a properly assigned address point with inventory number in the Register of Addresses
- geolocation of inhabited non-conventional objects in space
- **an unapproved family house, a mobile home** (caravan, houseboat, trailer), **emergency objects** not intended for living (shack, shed, garage, warehouse, shelter), **recreational objects** (hut, garden cabin, cabin), **specific cases** of the house type family house - family house and specific cases of the house type apartment building - entrance of an apartment building; apartment building entrances, if more than one apartment building entrance is identified on the title deed, but only one address point is assigned in the AR



Applications for Territorial Preparation

- created to identify dwellings that were subject to the creation of a statistical address point
- the application – central map component, identifying features in the map and switching underlying maps
- **search** (name of the village, name of the street, inventory and reference number, X, Y coordinates) and **zoom** in on the selected address
- every inhabited non-conventional dwelling
- the web and mobile application operated on the principle of plotting address points for dwellings
- the statistical census number was supplemented in the form of 1,000,001 to 1,000,..n within one municipality



SAP creation review

- 14,617 statistical address points were identified
- 879 municipalities in Slovakia

Region	Number of municipalities	Number of SAP
Bratislava Region	34	979
Trnava Region	104	862
Trenčín Region	56	472
Nitra Region	115	643
Žilina Region	92	874
Banská Bystrica Region	156	1 179
Prešov Region	162	5 011
Košice Region	160	4 597
TOTAL	879	14 617



The result of the Territorial Preparation

- the result of the Territorial Preparation is a **list of addresses**, which consists of the maximum set of all possible inhabited and habitable objects (family houses, apartment buildings, cottages, garden cottages, schools, etc.) obtained from ADS and field survey (SAP) together with the geographical layer of address points of these objects on the map base



ISCRE (yellow polygon), Building from BB GIS (light red polygon), red points (address points from AR), black points (SAP created in web or mobile application of TP), yellow points that are overlapped with black dots (processed by the SAP on the side of the SO SR in ArcGIS Pro)

The Territorial Preparation was processed on the reference date of the Census (January 1, 2021).

The system is set for sustainability and it is possible to update the Territorial Preparation every year.



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Thank you for your attention