Integration of geospatial information and statistical data for the production of official statistics
Population Census Geographic Information System (Population Census GIS) is the basis for cartographic material for the population census.
Main tasks of the Population Census GIS

- Compilation of a database of spatial and attributive data;
- Automation of spatial analysis and preparation of cartographic representations of the final data of the population census by standard ArcGIS tools;
- Use of cartographic material in the preparation of the organizational plan of the population census;
- Use of cartographic material by enumerators during census taking.
Use of GIS technologies at the stage of preparing and taking the population census

- Drawing up lists of housing and premises in them;
- Building census areas and enumeration districts;
- Tracking the movement of temporary census staff during the census exercise.
Source data for the Population Census GIS

- Address register
- Single register of ATU and TU
- Population register

Национальное кадастровое агентство

Перепись населения 2019
Building of census areas and enumeration districts
Enumeration districts in rural areas
Space and GIS technologies are used to build statistical capacity for monitoring SDGs and filling data gaps, which allows for obtaining new types of high-quality data and enables more accurate measurement of results as well as assessment of the impact of various factors on the achievement of sustainable development.
Infrastructure

BELARUSIAN EARTH REMOTE SENSING SYSTEM

Meteorological satellites

Manned and unmanned air means

Receiving antenna system

BELARUSIAN SPACECRAFT

Ground control system

Database
Working group on the use of space technologies and GIS for monitoring progress towards SDGs

9 responsible government bodies:

- National Statistical Committee
- National Academy of Sciences
- Ministry of Communications
- Ministry of Architecture and Construction
- State Committee for Property
- Ministry of Natural Resources and Environmental Protection
- Ministry of Transport
- Ministry of Agriculture
- Ministry of Forestry

7 SDG indicators that are monitored using GIS
6.6.1 Change in the extent of water-related ecosystems over time

11.3.1 Ratio of building and population growth rates

11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities

“Report on land availability and distribution”,
departmental reporting of the State Committee for Property

Land Information System of the Republic of Belarus (LIS) is a software and hardware system providing for automation of the accumulation, processing, storage and presentation of data on the condition, distribution and use of land resources
9.1.1 Proportion of the rural population who live within 2 km of an all-season road

The road network is compiled with the help of geodesic basis, high resolution space images, information of motor road owners and such open cartographic sources and resources as "Public cadastral map of the Republic of Belarus", "Public land information map of Belarus", "Yandex", "Google", "OpenStreetMap" and others.
15.1.1 Forest area as a proportion of total land area

15.2.1.1 Forest coverage

Data on the area of land covered with forest are produced on the basis of:

- information from forest management activities (including aerial surveying and/or space imaging of forest management units);
- information obtained as a result of various surveys of forest sites and other.

15.3.1 Proportion of land that is degraded over total land area

Data from global and/or national sources obtained through Earth remote sensing and GIS

Forest coverage by districts as at 1 January 2019
Next steps: Establishing geostatistical portal

The OBJECTIVE is to provide users with an interactive graphical visualization of spatial data and the associated final data of the 2019 population census.
Next steps:
Making wider use of GIS for monitoring and dissemination of data on SDG indicators

- Expanding the list of SDG indicators to be produced using GIS
- Finetuning the National Reporting Platform for SDG indicators to enable visualization of subnational data
Next steps: introduction of geographical coordinates in the Statistical Register

Statistical Business Register

Address Register

Statistical data

Geo-based statistical data visualization

Geospatial data visualization tools
Thank you for your attention!