

# LAND USE DISTRIBUTION OF THE REPUBLIC OF BULGARIA AS OF 31.12.2021

## METHODOLOGICAL NOTES

The aim of the statistical survey on the land use distribution (land use balance) is to provide up-to-date information on the structure of land use at the national and regional level, and in long term to enable monitoring of changes in the structure of the main land use types.

The source of the data, on the basis of which the survey was conducted, is the current digital cadastral map and the cadastral registers at the end of the reference year.

The unit of observation is the land property, together with the main cadastral data on the durable land use of the land property and the purpose of use of the territory, recorded in the cadastral registers.

*Land property* - part of the territory, including areas permanently covered by water, defined by boundaries in conformity with the right of ownership.

*Durable land use* (specific purpose of use) of the land properties shall be determined by the relevant detailed plan and recorded in the cadastral registers.

The classification of the durable land use of the land properties as well the relevant codes are determined in Annex 3 of Regulation No. RD-02-20-5 of 15 December 2016 on the content, creation and maintenance of the cadastral map and cadastral registers, issued by the Minister of the Regional Development and Public Works.

The area of the land property shall be assigned to the territory of one of the main classes of land resources (land use types), according to the durable land use of the land property.

The results of the survey are presented at a national level, statistical zones, statistical regions, districts and municipalities according to the current administrative-territorial division as of 31.12.2021 and according to the Classification of Territorial Units for Statistics (NUTS).

#### Main land use types

*Urbanized areas* include land properties for residential use, public buildings and complexes, greened areas and sports facilities, resort and recreational facilities, production and storage facilities as well as land properties with a special purpose and use.

*Transport areas* include land properties for traffic and transportation facilities and land properties for conduit facilities.

Agricultural areas include land properties - crop fields, permanent crops, meadows and pastures.

Forest areas include land properties - wood producing and non-wood-producing forest areas.

Areas occupied by water and water bodies include land properties for watercourses, water bodies and facilities.

*Protected areas* include land properties for a protected natural environment and for cultural heritage sites. In this category, by type of durable land use, includes mainly land properties that are state owned.



*Disturbed areas* include land properties for mineral extraction sites, land properties, occupied by industrial and municipal waste, degraded land.

*Not classified* - This category includes all areas without digital cadastral map coverage. It also includes individual land properties from the cadastral map for which there is no value for the durable land use and for the purpose of use of the territory.

### **Data sources**

The data source of the spatial data layers is the Geodesy, Cartography and Cadastre Agency

- Layer with data for the land properties;
- Layer with boundaries of municipalities.

#### **Computation method**

The calculations of the area size of different land use types were carried out on the spatial data from the cadastral map, using GIS tools and the BGS2005 UTM35N coordinate system.

Initially, an analysis to determine the size and the administrative-territorial belonging of the land for which there is no coverage in the digital cadastral map was carried out. These areas have been assigned to the category "Not classified". As a next step, the durable land use values of the land properties are recoded with main land use type codes. Land properties without defined specific economic use, such as rocks, sands, sandbanks, gullies, ravines, washes and pits, as well as those with mixed or undefined durable land use, have been recoded using the purpose of use values, in order to assign them to the appropriate land use type. The area of the land properties is summed by main land use type for each of the territorial levels.

| Main categories for durable land use                         | Code for durable land use  | Code for<br>main land<br>use type | Main land use<br>type |
|--|--|-----------------------------------|-----------------------|
| 1. Land properties for residential use                       | 1000, 1010, 1020, 1030, 1040, 1050   | 1                                 | Urbanised area        |
| 2. Land properties for public buildings and complexes        | 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170,<br>1180, 1190, 1200, 1210  | 1                                 | Urbanised area        |
| 3. Land properties for greened areas                         | 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370   | 1                                 | Urbanised area        |
| 4. Land properties for sports facilities                     | 1400,1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500  | 1                                 | Urbanised area        |
| 5. Land properties for resort and recreational facilities    | 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1685, 1690   | 1                                 | Urbanised area        |
| 6. Land properties for production and storage facilities     | 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770,<br>1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850,<br>1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930 | 1                                 | Urbanised area        |
| 7. Land properties for cultural heritage sites               | 2000, 2010, 2020, 2030, 2040   | 6                                 | Protected area        |
| 8. Land properties for traffic and transportation facilities | 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170,<br>2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250,<br>2260, 2270, 2280, 2290, 2300, 2310             | 2                                 | Transport area        |

#### Recoding of the values for durable land use with codes for main land use type

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### Recoding of the values for durable land use with codes for main land use type

| Main categories for durable land use                                 | Codes for durable land use  | Code for<br>main land<br>use type | Main land use<br>type   |
|--|---|-----------------------------------|---|
| 9. Land properties for conduit facilities                            | 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2471, 2472  | 2                                 | Transport area  |
| 10. Land properties - crop fields                                    | 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580  | 3                                 | Agricultural area   |
| 11. Land properties – permanent crops                                | 2600, 2610, 2620, 2630, 2640, 2650, 2660  | 3                                 | Agricultural area   |
| 12. Land properties – meadows  | 2700, 2710, 2720, 2730  | 3                                 | Agricultural area   |
| 13. Land properties – pastures                                       | 2800, 2810, 2820, 2830, 2840  | 3                                 | Agricultural area   |
| 14. Land properties – wood-producing forests                         | 2900, 2910, 2920, 2930, 2940, 2950  | 4                                 | Forest area   |
| 15. Land properties – non-wood-producing forests                     | 3000, 3010, 3020, 3030, 3040, 3050, 3060  | 4                                 | Forest area   |
| 16. Land properties for watercourses, water<br>bodies and facilities | 3100, 3110, 3120, 3130, 3140, 3150, 3160,<br>3170, 3180, 3190, 3200, 3210, 3220, 3230,<br>3240, 3245, 3246, 3250, 3260, 3300, 3301,<br>3302, 3303, 3304 | 5                                 | Area occupied by<br>water and water<br>bodies   |
| 17. Land properties for a protected natural environment              | 3400, 3410, 3420, 3430, 3431, 3432, 3440,<br>3441, 3442, 3443, 3450, 3460   | 6                                 | Protected area  |
| 18. Land properties for mineral extraction sites                     | 3500, 3510, 3520, 3530, 3540, 3550, 3560  | 7                                 | Disturbed area  |
| 19. Land properties, occupied by industrial and municipal waste      | 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680  | 7                                 | Disturbed area  |
| 20. Land properties for degraded land                                | 3700, 3710, 3720, 3730  | 7                                 | Disturbed area  |
| 21. Land properties with a special purpose and use                   | 3800, 3810  | 1                                 | Urbanised area  |
| 22. Land properties without defined specific economic use            | 3900, 3910, 3920, 3930, 3940, 3950, 3960,<br>4000, 4100   | 1 - 7                             | According to the<br>basic purpose of<br>use of the territory<br>of the land<br>property |

#### Legal references

- <u>Statistics Act</u>
- <u>National Statistical Programme</u>
- Administrative and Territorial Structure of the Republic of Bulgaria Act
- <u>Spatial Development Act</u>
- Cadastre and Property Register Act
- <u>Regulation № 02-20-5 from 15 December 2016 for the content, development and maintenance of the cadastral</u> map and the cadastral registers (BG version only)