

REPUBLIC OF BULGARIA



NATIONAL STATISTICAL INSTITUTE

# STATISTICAL REFERENCE BOOK 2019





REPUBLIC OF BULGARIA



# STATISTICAL REFERENCE BOOK 2019

SOFIA, 2019









Dear users,

Since its establishment more than a century ago, the National Statistical Institute of Bulgaria has always been driven by the desire to respond to the needs of up-to-date, reliable and comprehensive information on the state and development of socio-economic processes in the country. Statistical data for demography, environment, education, health, culture and business are a sound basis for making responsible policy decisions for the future of Bulgarian society and state.

The latest edition of the Statistical Reference Book - for 2019, extends the tradition by presenting to users - government institutions, business, the academic community, non-governmental organizations and citizens the results of the latest statistical surveys for the period 2015 - 2018, on the basis of which they can make their analyses and forecasts.

Sources of the data included in the Statistical Reference Book are the National Statistical Institute, the Bulgarian National Bank and the bodies of statistics. Statistical information is produced on a common European methodology and standards that provide high quality and international comparability of the results obtained.

Each thematic section contains a brief analysis and is illustrated with tables and graphs, allowing quick and easy finding of the data searched, and reflects our aim to popularize statistical activity among an ever wider audience.

Today, our gaze is aimed at the youngest - school and university students. For them, we organize various initiatives aimed at raising their interest in statistical science and practice and enhance their statistical culture.

I hope that the new edition of the Statistical Reference Book will respond to the high requirements and needs of the Bulgarian public by objective and quality statistical information, presented in an accessible and understandable way.

I would like to express my thankfulness to all the authors, respondents and contributors who have provided to the publication of the Statistical Reference Book 2019.

Sergey Tsvetarsky

President of the National Statistical Institute

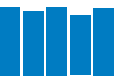




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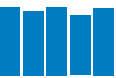
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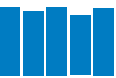
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*For information:  
Data for 2018 are preliminary.*



## ABBREVIATIONS AND SYMBOLS

|                  |   |  |
|------------------|---|--|
| BOP              | = | Balance of Payments                                    |
| BGL              | = | Bulgarian Lev  |
| BGN              | = | Bulgarian New Lev                                      |
| BNB              | = | Bulgarian National Bank                                |
| CB               | = | Commercial Bank  |
| CN               | = | Combined Nomenclature                                  |
| CPI              | = | Consumer Price Index                                   |
| COICOP           | = | Classification of Individual Consumption by Purpose    |
| CIF              | = | cost, insurance, freight                               |
| CIS              | = | Community of Independent States                        |
| cub. dm          | = | cubic decimetre  |
| cub. m           | = | cubic metre  |
| °C               | = | degree Celsius   |
| EC               | = | European Community                                     |
| EFTA             | = | European Free Trade Association                        |
| EU               | = | European Union   |
| ESA              | = | European System of Accounts                            |
| Eurostat         | = | Statistical Office of the European Union               |
| excl.            | = | excluding  |
| FISIM            | = | Financial intermediation services indirectly measured  |
| FAO              | = | Food and Agriculture Organization                      |
| FOB              | = | free on board  |
| FDI              | = | Foreign Direct Investments                             |
| FTE              | = | Full-time equivalent                                   |
| g                | = | gram   |
| GDP              | = | Gross Domestic Product                                 |
| GDPR             | = | Regional Gross Domestic Product                        |
| GERD             | = | Gross domestic expenditure on research and development |
| kg <sub>rt</sub> | = | gross registered ton                                   |
| GVA              | = | Gross Value Added                                      |
| HICP             | = | Harmonized Index of Consumer Prices                    |
| h.p.             | = | horsepower   |
| ha               | = | hectare  |
| HPa              | = | Hecto Pascal   |



|              |   |  |
|--------------|---|--|
| ICT          | = | Information and communication technologies         |
| ILO          | = | International Labour Organization                  |
| IMF          | = | International Monetary Fund                        |
| incl.        | = | including  |
| ISCED        | = | International Standard Classification of Education |
| IW           | = | Industrial waste                                   |
| kcal         | = | kilocalorie  |
| kg           | = | kilogram   |
| km           | = | kilometre  |
| km/h         | = | kilometre per hour                                 |
| kW           | = | kilowatt   |
| kwa          | = | kilowatt amper                                     |
| kWh          | = | kilowatt-hour                                      |
| LFS          | = | Labour force survey                                |
| LFSC         | = | Law for the Family Support for Children            |
| l            | = | litre  |
| LIPD         | = | Law of Integration of the People with Disabilities |
| LPC          | = | Law for Protection of the Child                    |
| LSS          | = | Law for Social Support                             |
| m            | = | metre  |
| mill. (mln.) | = | million  |
| mm           | = | millimetre   |
| MMFs         | = | Monetary Market Funds                              |
| MOEW         | = | Ministry of Environment and Water                  |
| NSI          | = | National Statistical Institute                     |
| NUTS         | = | Classification of Territorial Units for Statistics |
| NACE.BG      | = | National Classification of Economic Activities     |
| NIMH         | = | National Institute of Meteorology and Hydrology    |
| NPCA         | = | National Product Classification by Activities      |
| NC           | = | National currency                                  |
| NPI          | = | Non-profit institution                             |
| NPISHs       | = | Non-profit Institutions serving household sector   |
| NPP          | = | Nuclear Power Plant                                |
| n.p.r.s.     | = | not packaged for retail sale                       |
| num. (n)     | = | number   |





|            |   |  |
|------------|---|--|
| OECD       | = | Organization for Economic Cooperation and Development            |
| pkm        | = | passenger-kilometre  |
| %          | = | per cent   |
| PC         | = | Personal computer  |
| PPPs       | = | Purchasing power parities  |
| PRODCOM.BG | = | National Nomenclature of Industrial Production                   |
| p.r.s.     | = | packaged for retail sale   |
| RES        | = | Renewable Energy Sources   |
| R&D        | = | Research and development activity                                |
| SAD        | = | Single Administrative Document                                   |
| SITC       | = | Standard International Trade Classification                      |
| SIC        | = | Social Insurance Code  |
| SNA        | = | System of National Accounts                                      |
| sq. km     | = | square kilometre   |
| sq. m      | = | square metre   |
| t          | = | metric ton   |
| tkm        | = | ton-kilometre  |
| TJ         | = | terajoule  |
| toe        | = | tons oil equivalent  |
| UAA        | = | utilized agricultural area                                       |
| UN         | = | United Nations   |
| UNESCO     | = | United Nations Educational, Scientific and Cultural Organization |
| UDC        | = | Universal Decimal Classification                                 |
| USD        | = | United States Dollar   |
| UWWTP      | = | Urban waste water treatment plant                                |
| VAT        | = | Value Added Tax  |
| WHO        | = | World Health Organization  |
| .          | = | data not available   |
| ..         | = | confidential data  |
| -          | = | figures not applicable   |
| 0          | = | less than half of unit employed                                  |
| *          | = | preliminary data   |
| x          | = | category not applicable  |
| ( )        | = | due to a small figures in brackets are not reliable              |
| #          | = | break in series  |



## **I. GEOGRAPHICAL FEATURES AND CLIMATE**



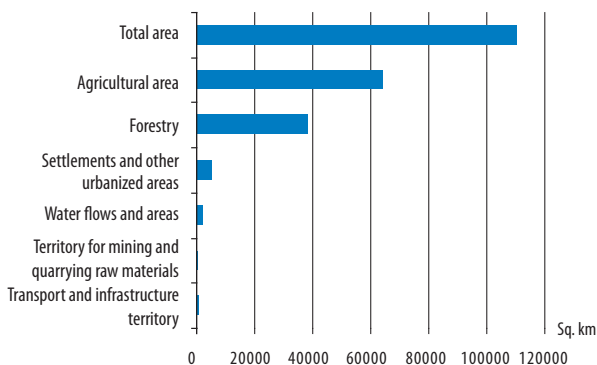
## Territory and climate

The Republic of Bulgaria is situated on the Eastern Balkan Peninsula in Southeastern Europe, along the Black Sea. Total area is 110 371.9 sq. km (excl. the aquatory of the Danube river and Black Sea).

The climate of Bulgaria is temperate continental with a transition towards a subtropical climate in its Mediterranean version (in the southern parts of the country), with four seasons.

34% of the country's territory is covered with forests (non-coniferous and coniferous). The varied environment is a natural habitat for valuable animal species.

Figure 1. Territory of Bulgaria<sup>1</sup>



<sup>1</sup> Source: The Ministry of Agriculture and Food -, Balance of the Agricultural land as of 31.12.2011<sup>1</sup>.

### 1. Frontiers of Bulgaria<sup>1</sup>

|              |  | (Kilometres) |             |            |            |
|--------------|--|--------------|-------------|------------|------------|
| Frontiers    |  | Total        | Land        | Rivers     | Coastal    |
| <b>Total</b> |  | <b>2245</b>  | <b>1181</b> | <b>686</b> | <b>378</b> |
| Northern     | - with Romania                         | 609          | 139         | 470        | -          |
| Eastern      | - with the Black Sea                   | 378          | -           | -          | 378        |
| Southern     | - with Turkey                          | 259          | 133         | 126        | -          |
|              | - with Greece                          | 493          | 429         | 64         | -          |
| Western      | - with Serbia                          | 341          | 315         | 26         | -          |
|              | - with the Republic of North Macedonia | 165          | 165         | -          | -          |

<sup>1</sup> Source: The Geodesy, Cartography and Cadastre Agency at the Ministry of Regional Development and Public Works.



### 2. Meteorological data for 2018<sup>1</sup>

| Meteorological stations | Annual average atmospheric pressure | Air temperature |                                     |       |                                     |      |
|-------------------------|-------------------------------------|-----------------|-------------------------------------|-------|-------------------------------------|------|
|                         |                                     | Annual average  | Annual absolute maximum temperature |       | Annual absolute minimum temperature |      |
|                         | hPa                                 |                 | °C                                  | Date  | °C                                  | Date |
| Vidin                   | 1012.2                              | 12.2            | 34.1                                | 2.09  | -13.6                               | 1.03 |
| Pleven                  | 996.4                               | 12.8            | 34.2                                | 26.08 | -11.6                               | 1.03 |
| Veliko Tarnovo          | 992.4                               | 13.0            | 34.6                                | 13.06 | -15.8                               | 1.03 |
| Dobrich                 | 992                                 | 12.0            | 34.6                                | 31.08 | -15.9                               | 1.03 |
| Varna                   | 1011.3                              | 13.8            | 32.8                                | 16.08 | -11.8                               | 1.03 |
| Burgas                  | 1012.7                              | 14.0            | 33.6                                | 17.07 | -10.8                               | 1.03 |
| Haskovo                 | 988.4                               | 13.6            | 34.2                                | 22.07 | -14                                 | 1.03 |
| Kazanlak                | 968.9                               | 12.1            | 33.2                                | 3.09  | -19                                 | 1.03 |
| Pazardzhik              | 991                                 | 13.0            | 33.7                                | 2.09  | -16.8                               | 1.03 |
| Sofia - NIMH            | 947.1                               | 11.5            | 30.2                                | 22.07 | -18                                 | 1.03 |
| Kyustendil              | 954.2                               | 12.1            | 34.0                                | 22.07 | -18.5                               | 1.03 |
| Cherni Vrah             | 770.9                               | 1.9             | 17.0                                | 22.07 | -17                                 | 1.03 |
| Sandanski               | 990.9                               | 15.1            | 36.0                                | 2.09  | -8.2                                | 1.03 |

### 2. Meteorological data for 2018<sup>1</sup>

(Continued and end)

| Meteorological stations | Average annual relative humidity | Maximum annual 24-hour precipitations |       | Annual amount precipitations | Average annual cloudiness |
|-------------------------|----------------------------------|---------------------------------------|-------|------------------------------|---------------------------|
|                         | %                                | mm                                    | Date  | mm                           | (0 - 10)                  |
| Vidin                   | 77                               | 40                                    | 14.06 | 651                          | 5.5                       |
| Pleven                  | 72                               | 84                                    | 30.06 | 689                          | 5.8                       |
| Veliko Tarnovo          | 72                               | 45                                    | 8.07  | 735                          | 6.1                       |
| Dobrich                 | 75                               | 27                                    | 17.06 | 617                          | 5.8                       |
| Varna                   | 74                               | 72                                    | 5.06  | 637                          | 5.7                       |
| Burgas                  | 76                               | 52                                    | 28.11 | 694                          | 6.3                       |
| Haskovo                 | 70                               | 52                                    | 22.11 | 826                          | 6.1                       |
| Kazanlak                | 74                               | 38                                    | 8.07  | 685                          | 5.7                       |
| Pazardzhik              | 70                               | 43                                    | 29.06 | 549                          | 5.5                       |
| Sofia - NIMH            | 70                               | 42                                    | 10.07 | 701                          | 5.7                       |
| Kyustendil              | 69                               | 29                                    | 28.11 | 629                          | 5.5                       |
| Cherni Vrah             | 82                               | 59                                    | 30.06 | 870                          | 6.6                       |
| Sandanski               | 63                               | 24                                    | 28.06 | 489                          | 5.4                       |

<sup>1</sup> Source: National Institute of Meteorology and Hydrology at the Bulgarian Academy of Sciences.

### Rivers, lakes and mountains

The rivers are comparatively short and low-water. The longest river in Bulgaria is Iskur - 368 km long, while the river with the highest flow is Maritsa. The main rivers of Bulgaria are the Danube (470 km bordering Romania), Vit, Osum, Yantra (tributaries of the Danube), Tundzha, Kamchiya, Arda, Mesta and Struma.

60% of the total area is covered with hills and mountains. The mountains are part of the Alpine-Himalayan mountain chain situated on two continents - Europe and Asia. The mountains are accessible throughout the year and offer unlimited opportunities for entertainment, sports and tourism. The highest mountain in Bulgaria and in the Balkan Peninsula is Rila with its highest peak Musala (2 925 m of altitude).

#### 3. Main rivers<sup>1</sup> and natural lakes<sup>2</sup> within the territory of Bulgaria

| Rivers  | Length - km | Lakes                   | Surface - sq. km |
|---------|-------------|-------------------------|------------------|
| Iskar   | 352.3       | Burgasko                | 27.6             |
| Tundzha | 328.4       | Varnensko               | 17.4             |
| Maritsa | 309.0       | Atanasovsko             | 16.9             |
| Osam    | 204.6       | Mandrensko              | 10.0             |
| Struma  | 275.1       | Pomoriysko <sup>3</sup> | 5.0              |
| Yantra  | 222.0       | Beloslavsko             | 3.9              |
| Kamchia | 190.7       |                         |                  |
| Arda    | 229.1       |                         |                  |

<sup>1</sup> Source: National Institute of Meteorology and Hydrology at the Bulgarian Academy of Sciences.

<sup>2</sup> Source: The Geodesy, Cartography and Cadastre Agency at the Ministry of Regional Development and Public Works.

<sup>3</sup> Excl. salterns.



### 4. Mountains in Bulgaria, highest peaks and their altitude<sup>1</sup>

| Mountain            | Peak            | Altitude - m |
|---------------------|-----------------|--------------|
| Rila                | Musala          | 2925         |
| Pirin               | Vihren          | 2914         |
| Stara planina       | Botev           | 2376         |
| Vitosha             | Cherni vrah     | 2290         |
| Osogovska planina   | Ruen            | 2251         |
| Slavyanka           | Gotsev vrah     | 2212         |
| Rodopi              | Golyam Perelik  | 2191         |
| Belasitsa           | Radomir         | 2029         |
| Vlahina             | Ogreyak         | 1924         |
| Maleshevska planina | Ilyov vrah      | 1803         |
| Karvav Kamak        | Bilo            | 1737         |
| Milevska planina    | Milevets        | 1733         |
| Ruy                 | Ruy             | 1706         |
| Ograzhden           | Bilska chuka    | 1643         |
| Sredna Gora         | Bogdan          | 1604         |
| Lisets              | Vrashnik        | 1500         |
| Chudinska planina   | Aramlia         | 1496         |
| Konyavska planina   | Viden           | 1487         |
| Erulska planina     | Golemi vrah     | 1481         |
| Verila              | Golyam Debelets | 1415         |
| Lyubash             | Lyubash         | 1398         |
| Strazha             | Strazha         | 1389         |
| Plana               | Manastirishte   | 1338         |
| Elovishka planina   | Plocha          | 1329         |
| Zemenska planina    | Tichak          | 1295         |
| Vidlich             | Vuchibaba       | 1294         |
| Lyulin              | Dupevitsa       | 1256         |
| Ezdimirska planina  | Golemi vrah     | 1219         |
| Stargach            | Asenov vrah     | 1218         |
| Lozenska planina    | Popov del       | 1190         |
| Penkyovska planina  | Konski vrah     | 1187         |
| Zavalska planina    | Kitka           | 1181         |
| Golo Bardo          | Vetrushka       | 1158         |
| Rudini              | Banderata       | 1155         |
| Cherna gora         | Tumba           | 1129         |
| Sakar               | Vishegrad       | 856          |
| Strandzha           | Gradishte       | 710          |

<sup>1</sup> Source: The Geodesy, Cartography and Cadastre Agency at the Ministry of Regional Development and Public Works.





## **II. POPULATION**





## Population and demographic processes

Survey objects of demographic statistics are the population sets and demographic events.

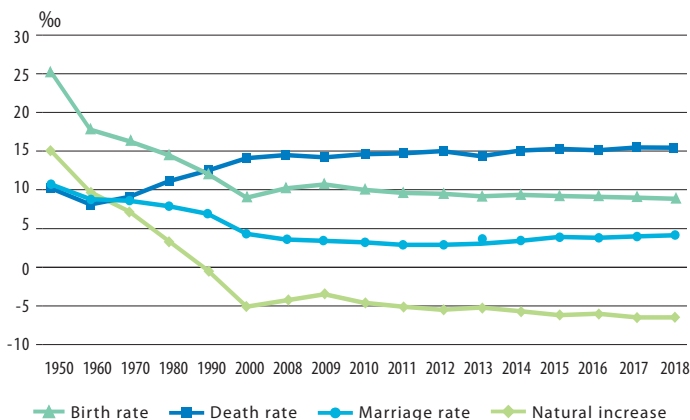
The population sets and its structures are calculated as of 31.12. based on the number and structures of population of the previous year and the demographic events (live births, deaths, immigrants and emigrants) registered during the year.

Demographic events include births, deaths, marriages, divorces and migration. They are registered at the moment of their occurrence during the reporting year.

Data source for the natural population movement and its migration is the Unified System for Civil Registration and Administrative Services of the Population.

Crude birth rate is decrease, as well crude death rate is decrease in 2018 compare with 2017. Natural growth rate is minus 6.5 per 1000 population.

Figure 1. Marriage, birth and death rates and natural increase of the population





## 1. Main demographic indicators

|  | 2015   | 2016   | 2017   | 2018   |
|--|--------|--------|--------|--------|
| Population as of 31.12. - in thousands   | 7153.8 | 7101.9 | 7050.0 | 7000.0 |
| Population density per sq. km            | 64.8   | 64.3   | 63.9   | 63.4   |
| Sex ratio (women per 1 000 men)          | 1057   | 1059   | 1060   | 1061   |
| Age dependency ratio - %                 | 52.4   | 53.4   | 54.5   | 55.5   |
| Ageing index                             | 101.1  | 100.4  | 100.8  | 100.5  |
| Share of urban population - %            | 73.1   | 73.3   | 73.5   | 73.7   |
| Crude birth rate - ‰                     | 9.2    | 9.1    | 9.0    | 8.9    |
| Crude death rate - ‰                     | 15.3   | 15.1   | 15.5   | 15.4   |
| Natural increase - ‰                     | -6.2   | -6.0   | -6.5   | -6.5   |
| Crude marriage rate - ‰                  | 3.9    | 3.8    | 4.0    | 4.1    |
| Infant mortality (per 1 000 live births) | 6.6    | 6.5    | 6.4    | 5.8    |
| Net fertility rate                       | 0.73   | 0.74   | 0.75   | 0.74   |
| Total fertility rate                     | 1.53   | 1.54   | 1.56   | 1.56   |

## 2. Population by census year<sup>1</sup>

| Census year | Total        | Male | Female | Share of urban population - % |
|-------------|--------------|------|--------|-------------------------------|
|             | In thousands |      |        |                               |
| 1887        | 3154         | 1605 | 1549   | 18.8                          |
| 1892        | 3311         | 1691 | 1620   | 19.7                          |
| 1900        | 3744         | 1910 | 1834   | 19.8                          |
| 1905        | 4036         | 2057 | 1979   | 19.6                          |
| 1910        | 4338         | 2207 | 2131   | 19.1                          |
| 1920        | 4847         | 2421 | 2426   | 19.9                          |
| 1926        | 5479         | 2743 | 2736   | 20.6                          |
| 1934        | 6078         | 3054 | 3024   | 21.4                          |
| 1946        | 7029         | 3517 | 3512   | 24.7                          |
| 1956        | 7614         | 3799 | 3815   | 33.6                          |
| 1965        | 8228         | 4114 | 4114   | 46.5                          |
| 1975        | 8728         | 4358 | 4370   | 58.0                          |
| 1985        | 8949         | 4433 | 4516   | 64.8                          |
| 1992        | 8487         | 4171 | 4316   | 67.2                          |
| 2001        | 7929         | 3863 | 4066   | 69.0                          |
| 2011        | 7365         | 3587 | 3778   | 72.5                          |

<sup>1</sup> Up to 1956 - resident population, since 1965 - permanent population.

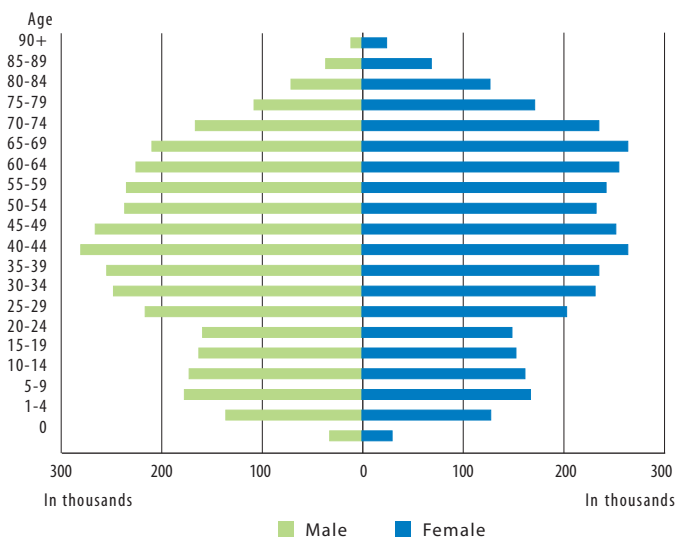
## Age-sex structure

The population age structure is represented by the distribution of the population by age groups. Population age is calculated in completed years as of 31.12. of the respective year.

The process of population ageing continues like in most European countries. In 2018 the share of population under 15 years is 14.4%, but the share of population 65 years and over increases continuously and is 21.3% compare with 2017 (21.0). The population ageing leads to changes in the main population age structure - distribution of the population under, at and over working age. Share of population at working age decreases, while the share of population over working age increases.

The population ageing leads to increase of the mean age of population from 41.2 years in 2005 to 43.8 years in 2018.

Figure 2. Age structure of the population by sex as of 31.12.2018





### 3. Population by age and sex as of 31.12.2018

| Age          | Total          | Male           | Female         | Share of urban population - % |
|--------------|----------------|----------------|----------------|-------------------------------|
|              | In numbers     |                |                |                               |
| <b>Total</b> | <b>7000039</b> | <b>3395701</b> | <b>3604338</b> | <b>73.7</b>                   |
| 0 - 4        | 325725         | 167547         | 158178         | 75.9                          |
| 5 - 9        | 344667         | 176901         | 167766         | 76.0                          |
| 10 - 14      | 334453         | 172140         | 162313         | 74.0                          |
| 15 - 19      | 315547         | 162291         | 153256         | 73.1                          |
| 20 - 24      | 307744         | 158591         | 149153         | 75.4                          |
| 25 - 29      | 419624         | 215814         | 203810         | 76.8                          |
| 30 - 34      | 479506         | 247397         | 232109         | 78.4                          |
| 35 - 39      | 489908         | 254064         | 235844         | 77.8                          |
| 40 - 44      | 544398         | 279842         | 264556         | 78.1                          |
| 45 - 49      | 518322         | 265640         | 252682         | 76.0                          |
| 50 - 54      | 469131         | 236143         | 232988         | 73.9                          |
| 55 - 59      | 477398         | 234382         | 243016         | 73.3                          |
| 60 - 64      | 480497         | 224905         | 255592         | 72.4                          |
| 65 - 69      | 473587         | 209008         | 264579         | 70.5                          |
| 70 - 74      | 401524         | 165752         | 235772         | 67.1                          |
| 75 - 79      | 279398         | 107489         | 171909         | 63.5                          |
| 80 and over  | 338610         | 117795         | 220815         | 63.8                          |

### 4. Structure of population by working age status and place of residence as of 31.12.<sup>1</sup>

(Per cent)

|                   | 2015         | 2016         | 2017         | 2018         |
|-------------------|--------------|--------------|--------------|--------------|
| <b>Total</b>      | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Under working age | 14.9         | 15.0         | 15.1         | 15.2         |
| Working age       | 60.8         | 60.6         | 60.3         | 60.0         |
| Over working age  | 24.3         | 24.4         | 24.6         | 24.8         |
| <b>Urban</b>      | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Under working age | 15.1         | 15.2         | 15.4         | 15.6         |
| Working age       | 62.9         | 62.6         | 62.1         | 61.7         |
| Over working age  | 22.0         | 22.2         | 22.5         | 22.7         |
| <b>Rural</b>      | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Under working age | 14.3         | 14.3         | 14.4         | 14.4         |
| Working age       | 55.2         | 55.2         | 55.1         | 55.2         |
| Over working age  | 30.5         | 30.5         | 30.5         | 30.4         |

<sup>1</sup> Working age status according to the Pension Ordinance adopted by the Council of Ministers (Ordinance No. 30, State Gazette No. 21/17.03.2000).

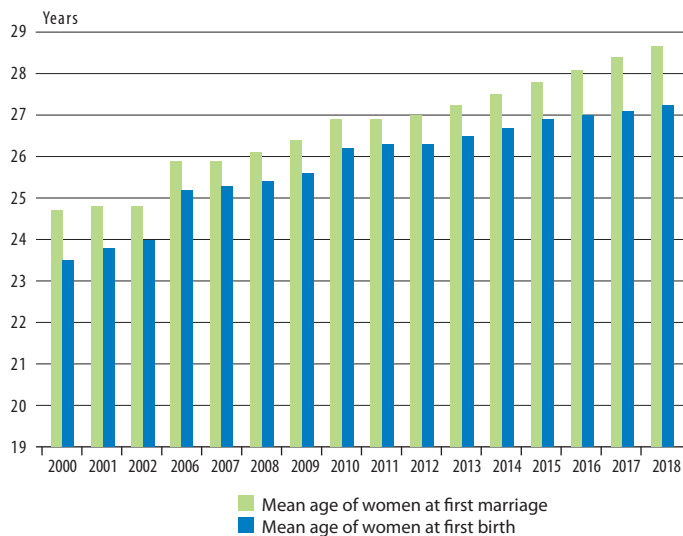
## Fertility

Births include the number of live-born and stillborn children, and not the cases of giving a birth where one, two or more children could be born.

There are 62 576 births registered in 2018, of which 62 197 (99.4%) - live births. The crude birth rate (number of live births per 1000 population) increases from 8.6‰ in 2001 to 8.9‰ in 2018.

Total fertility rate (TFR) representing the average number of children that could be born by a woman during her fertile period is 1.56 children in 2018.

Figure 3. Mean age of women at first marriage and first birth





## 5. Live births by mother's age and place of residence

(Number)

| Place of residence<br>Age | 2014         | 2015         | 2016         | 2017         | 2018         |
|---------------------------|--------------|--------------|--------------|--------------|--------------|
| <b>Total</b>              | <b>67585</b> | <b>65950</b> | <b>64984</b> | <b>63955</b> | <b>62197</b> |
| Up to 15                  | 324          | 294          | 259          | 269          | 252          |
| 15 - 19                   | 6331         | 5980         | 5772         | 5769         | 5939         |
| 20 - 24                   | 14454        | 13157        | 12341        | 11690        | 10625        |
| 25 - 29                   | 20770        | 20655        | 20315        | 19565        | 18644        |
| 30 - 34                   | 16204        | 16257        | 16530        | 16586        | 16770        |
| 35 - 39                   | 7978         | 7917         | 7837         | 7986         | 7825         |
| 40 - 44                   | 1401         | 1522         | 1731         | 1874         | 1917         |
| 45 - 49                   | 105          | 152          | 181          | 190          | 192          |
| 50 and over               | 11           | 13           | 17           | 25           | 30           |
| Unknown                   | 7            | 3            | 1            | 1            | 3            |
| <b>Urban</b>              |              |              |              |              |              |
| <b>Total</b>              | <b>50704</b> | <b>49486</b> | <b>48733</b> | <b>48005</b> | <b>46877</b> |
| Up to 15                  | 203          | 188          | 169          | 154          | 172          |
| 15 - 19                   | 3601         | 3404         | 3294         | 3244         | 3323         |
| 20 - 24                   | 9039         | 8198         | 7607         | 7225         | 6675         |
| 25 - 29                   | 16059        | 15856        | 15455        | 14826        | 14136        |
| 30 - 34                   | 13563        | 13486        | 13825        | 13834        | 14005        |
| 35 - 39                   | 6922         | 6895         | 6731         | 6902         | 6684         |
| 40 - 44                   | 1207         | 1308         | 1484         | 1626         | 1677         |
| 45 - 49                   | 92           | 136          | 152          | 171          | 176          |
| 50 and over               | 11           | 12           | 15           | 22           | 27           |
| Unknown                   | 7            | 3            | 1            | 1            | 2            |
| <b>Rural</b>              |              |              |              |              |              |
| <b>Total</b>              | <b>16881</b> | <b>16464</b> | <b>16251</b> | <b>15950</b> | <b>15320</b> |
| Под 15                    | 121          | 106          | 90           | 115          | 80           |
| 15 - 19                   | 2730         | 2576         | 2478         | 2525         | 2616         |
| 20 - 24                   | 5415         | 4959         | 4734         | 4465         | 3950         |
| 25 - 29                   | 4711         | 4799         | 4860         | 4739         | 4508         |
| 30 - 34                   | 2641         | 2771         | 2705         | 2752         | 2765         |
| 35 - 39                   | 1056         | 1022         | 1106         | 1084         | 1141         |
| 40 - 44                   | 194          | 214          | 247          | 248          | 240          |
| 45 - 49                   | 13           | 16           | 29           | 19           | 16           |
| 50 and over               | -            | 1            | 2            | 3            | 3            |
| Unknown                   | -            | -            | -            | -            | 1            |

## Mortality

The number of deaths includes the dead persons registered during the year.

Mortality level remains too high. Crude death rate (number of dead persons per 1 000 population) is 15.4‰ in 2018.

The infant mortality rate (number of children who die up to 1 year of age per 1 000 live births) is 5.8‰ in 2018 or 0.6‰ lower than in 2017. The infant mortality in the last years is the lowest in the demographic development of the country, but continues to be higher than in other European countries.

Life expectancy showing the life expectancy of the new-born under the hypothesis that the age-specific mortality observed during the respective year will remain the same. According to preliminary data for the period 2016 – 2018, the life expectancy is 71.4 years for males and 78.4 years for females.

Figure 4. Crude death rate and infant mortality rate

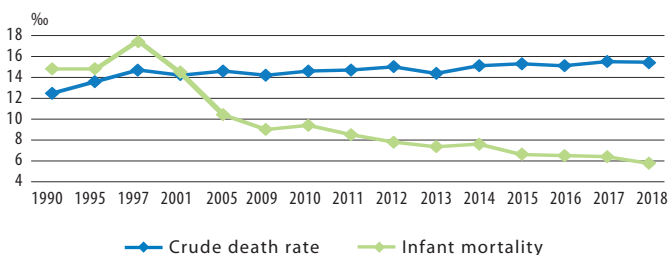
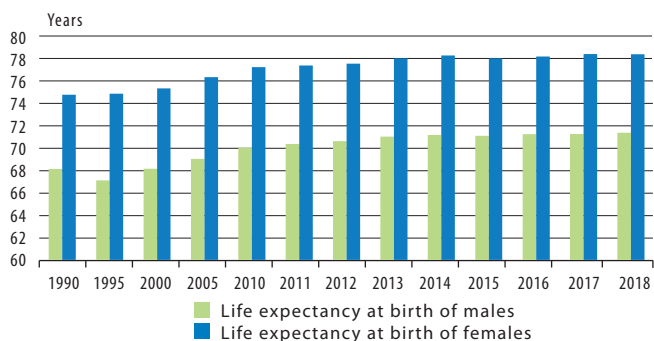


Figure 5. Life expectancy at birth







## 6. Deaths by age and place of residence

(Number)

| Place of residence<br>Age | 2014          | 2015          | 2016          | 2017          | 2018          |
|---------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Total</b>              | <b>108952</b> | <b>110117</b> | <b>107580</b> | <b>109791</b> | <b>108526</b> |
| Up to 1                   | 517           | 434           | 423           | 408           | 358           |
| 1 - 4                     | 89            | 82            | 68            | 91            | 93            |
| 5 - 9                     | 55            | 70            | 56            | 46            | 61            |
| 10 - 14                   | 63            | 60            | 56            | 56            | 70            |
| 15 - 19                   | 150           | 150           | 141           | 140           | 145           |
| 20 - 24                   | 263           | 241           | 217           | 191           | 176           |
| 25 - 29                   | 324           | 357           | 335           | 320           | 304           |
| 30 - 34                   | 522           | 509           | 474           | 447           | 488           |
| 35 - 39                   | 898           | 775           | 804           | 729           | 757           |
| 40 - 44                   | 1365          | 1318          | 1323          | 1395          | 1331          |
| 45 - 49                   | 2111          | 2188          | 2251          | 2223          | 2203          |
| 50 - 54                   | 3798          | 3499          | 3420          | 3395          | 3285          |
| 55 - 59                   | 5711          | 5574          | 5607          | 5430          | 5474          |
| 60 - 64                   | 8515          | 8258          | 8261          | 8074          | 8001          |
| 65 - 69                   | 11090         | 11356         | 11295         | 11496         | 11132         |
| 70 - 74                   | 11995         | 12517         | 12460         | 13195         | 13510         |
| 75 - 79                   | 16347         | 15599         | 15148         | 15154         | 15069         |
| 80 - 84                   | 20514         | 21027         | 19635         | 20017         | 18976         |
| 85 and over               | 24625         | 26103         | 25606         | 26984         | 27093         |
| <b>Urban</b>              |               |               |               |               |               |
| <b>Total</b>              | <b>67008</b>  | <b>67749</b>  | <b>67192</b>  | <b>68418</b>  | <b>68011</b>  |
| Up to 1                   | 340           | 255           | 285           | 257           | 234           |
| 1 - 4                     | 56            | 49            | 48            | 63            | 54            |
| 5 - 9                     | 36            | 45            | 41            | 30            | 42            |
| 10 - 14                   | 48            | 36            | 41            | 41            | 34            |
| 15 - 19                   | 106           | 101           | 91            | 99            | 99            |
| 20 - 24                   | 176           | 168           | 158           | 133           | 112           |
| 25 - 29                   | 230           | 259           | 246           | 221           | 228           |
| 30 - 34                   | 371           | 384           | 341           | 337           | 345           |
| 35 - 39                   | 658           | 569           | 588           | 528           | 550           |
| 40 - 44                   | 944           | 942           | 944           | 985           | 963           |
| 45 - 49                   | 1477          | 1486          | 1561          | 1496          | 1475          |
| 50 - 54                   | 2601          | 2347          | 2263          | 2274          | 2212          |
| 55 - 59                   | 3848          | 3759          | 3782          | 3664          | 3598          |
| 60 - 64                   | 5629          | 5471          | 5611          | 5372          | 5301          |
| 65 - 69                   | 7144          | 7399          | 7404          | 7471          | 7288          |
| 70 - 74                   | 7161          | 7480          | 7674          | 8162          | 8518          |
| 75 - 79                   | 9392          | 8924          | 8868          | 8961          | 9085          |
| 80 - 84                   | 12007         | 12104         | 11486         | 11740         | 11202         |
| 85 and over               | 14784         | 15971         | 15760         | 16584         | 16671         |
| <b>Rural</b>              |               |               |               |               |               |
| <b>Total</b>              | <b>41944</b>  | <b>42368</b>  | <b>40388</b>  | <b>41373</b>  | <b>40515</b>  |
| Up to 1                   | 177           | 179           | 138           | 151           | 124           |
| 1 - 4                     | 33            | 33            | 20            | 28            | 39            |
| 5 - 9                     | 19            | 25            | 15            | 16            | 19            |
| 10 - 14                   | 15            | 24            | 15            | 15            | 36            |
| 15 - 19                   | 44            | 49            | 50            | 41            | 46            |
| 20 - 24                   | 87            | 73            | 59            | 58            | 64            |
| 25 - 29                   | 94            | 98            | 89            | 99            | 76            |
| 30 - 34                   | 151           | 125           | 133           | 110           | 143           |
| 35 - 39                   | 240           | 206           | 216           | 201           | 207           |
| 40 - 44                   | 421           | 376           | 379           | 410           | 368           |
| 45 - 49                   | 634           | 702           | 690           | 727           | 728           |
| 50 - 54                   | 1197          | 1152          | 1157          | 1121          | 1073          |
| 55 - 59                   | 1863          | 1815          | 1825          | 1766          | 1876          |
| 60 - 64                   | 2886          | 2787          | 2650          | 2702          | 2700          |
| 65 - 69                   | 3946          | 3957          | 3891          | 4025          | 3844          |
| 70 - 74                   | 4834          | 5037          | 4786          | 5033          | 4992          |
| 75 - 79                   | 6955          | 6675          | 6280          | 6193          | 5984          |
| 80 - 84                   | 8507          | 8923          | 8149          | 8277          | 7774          |
| 85 and over               | 9841          | 10132         | 9846          | 10400         | 10422         |



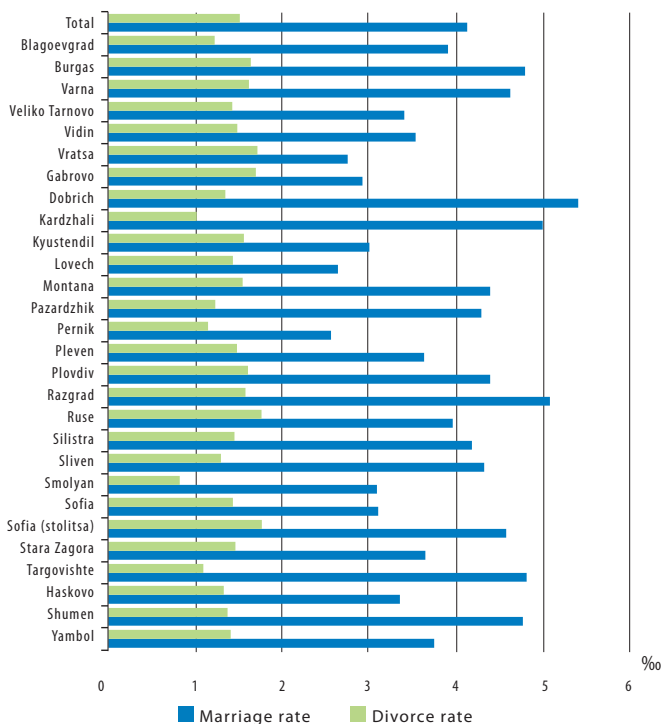
## Marriages and divorces

In territorial aspect, the marriages and divorces are referred to the settlement where the husband's present address is or in case the present address of the husband is abroad - to the settlement where the wife's present address is.

There is a tendency of decrease of the number of marriages during the last years due to increasing number of young people living in consensual union, without official marriage. As it is number of marriages in 2018 increases compared to the previous year - 28 961 or 368 more than in 2017. The crude marriage rate (number of marriages per 1 000 population) in 2018 is 4.1‰.

The number of divorces in 2018 is 10 596 or 185 more than in 2017.

Figure 6. Marriages and divorces by districts in 2018  
(Per 1 000 of the population)





## 7. Marriages and divorces by statistical zone, statistical region and by district in 2018

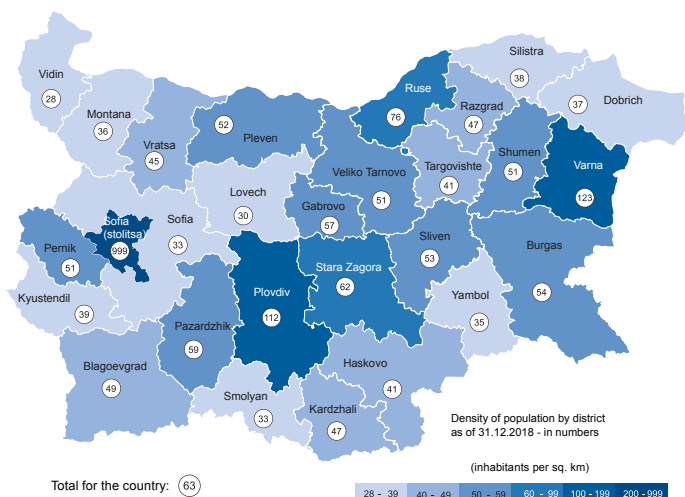
| Statistical zones,<br>statistical regions<br>and districts | Marriages    | Divorces     | Marriages                   | Divorces   |
|--|--------------|--------------|-----------------------------|------------|
|  | In numbers   |              | Per 1 000 of the population |            |
| <b>Total</b>   | <b>28961</b> | <b>10596</b> | <b>4.1</b>                  | <b>1.5</b> |
| <i>Severna i Yugoiztochna Bulgaria</i>                     |              |              |                             |            |
| <b>Severozapaden</b>                                       | <b>2539</b>  | <b>1148</b>  | <b>3.4</b>                  | <b>1.5</b> |
| Vidin  | 303          | 127          | 3.5                         | 1.5        |
| Vratsa   | 451          | 281          | 2.7                         | 1.7        |
| Lovech   | 332          | 180          | 2.6                         | 1.4        |
| Montana  | 574          | 202          | 4.4                         | 1.5        |
| Pleven   | 879          | 358          | 3.6                         | 1.5        |
| <b>Severen tsentralen</b>                                  | <b>3028</b>  | <b>1247</b>  | <b>3.8</b>                  | <b>1.6</b> |
| Veliko Tarnovo   | 807          | 338          | 3.4                         | 1.4        |
| Gabrovo  | 319          | 185          | 2.9                         | 1.7        |
| Razgrad  | 573          | 178          | 5.1                         | 1.6        |
| Ruse   | 870          | 387          | 4.0                         | 1.8        |
| Silistra   | 459          | 159          | 4.2                         | 1.4        |
| <b>Severoiztochen</b>                                      | <b>4481</b>  | <b>1355</b>  | <b>4.8</b>                  | <b>1.5</b> |
| Varna  | 2177         | 762          | 4.6                         | 1.6        |
| Dobrich  | 944          | 235          | 5.4                         | 1.3        |
| Targovishte  | 538          | 122          | 4.8                         | 1.1        |
| Shumen   | 822          | 236          | 4.8                         | 1.4        |
| <b>Yugoiztochen</b>  | <b>4381</b>  | <b>1545</b>  | <b>4.2</b>                  | <b>1.5</b> |
| Burgas   | 1967         | 672          | 4.8                         | 1.6        |
| Sliven   | 809          | 242          | 4.3                         | 1.3        |
| Stara Zagora   | 1157         | 463          | 3.6                         | 1.5        |
| Yambol   | 448          | 168          | 3.7                         | 1.4        |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>            |              |              |                             |            |
| <b>Yugozapaden</b>   | <b>8644</b>  | <b>3369</b>  | <b>4.1</b>                  | <b>1.6</b> |
| Blagoevgrad  | 1195         | 374          | 3.9                         | 1.2        |
| Kyustendil   | 360          | 187          | 3.0                         | 1.6        |
| Pernik   | 311          | 139          | 2.6                         | 1.1        |
| Sofia  | 714          | 329          | 3.1                         | 1.4        |
| Sofia (stolitsa)   | 6064         | 2340         | 4.6                         | 1.8        |
| <b>Yuzhen tsentralen</b>                                   | <b>5888</b>  | <b>1932</b>  | <b>4.2</b>                  | <b>1.4</b> |
| Kardzhali  | 758          | 154          | 5.0                         | 1.0        |
| Pazardzhik   | 1100         | 315          | 4.3                         | 1.2        |
| Plovdiv  | 2933         | 1072         | 4.4                         | 1.6        |
| Smolyan  | 328          | 87           | 3.1                         | 0.8        |
| Haskovo  | 769          | 304          | 3.3                         | 1.3        |

## Population by district

Data on the population number and demographic events at territorial level are provided in accordance with the administrative - territorial division of the country as of 31.12.2018.

The smallest district in terms of population is the district of Vidin where 1.2% of the country's population lives, and the biggest one - Sofia (stolitsa) - 19.0%. The population in 16 districts is under 200 thousand persons (amount 29.9%). Six districts with a population between 200 and 300 thousand persons cover 20.1% of the country's population. There are six districts with a population over 300 thousand persons and more than one third (35.3%) of the country's population lives in three of them - Sofia (stolitsa), Plovdiv and Varna.

Figure 7. Population density per sq. km by district in 2018





## 8. Population by sex, place of residence, statistical zone, statistical region and by district as of 31.12.2018

(Number)

| Statistical zones,<br>statistical regions<br>and districts | Total          |                |                | Of which: Urban |                |                |
|--|----------------|----------------|----------------|-----------------|----------------|----------------|
|  | Total          | Male           | Female         | Total           | Male           | Female         |
| <b>Total</b>   | <b>7000039</b> | <b>3395701</b> | <b>3604338</b> | <b>5159129</b>  | <b>2481128</b> | <b>2678001</b> |
| <i>Severna i Yugoiztochna Bulgaria</i>                     |                |                |                |                 |                |                |
| <b>Severozapaden</b>                                       | <b>742304</b>  | <b>362328</b>  | <b>379976</b>  | <b>473700</b>   | <b>229000</b>  | <b>244700</b>  |
| Vidin  | 84865          | 41349          | 43516          | 54999           | 26627          | 28372          |
| Vratsa   | 162549         | 79894          | 82655          | 95695           | 46284          | 49411          |
| Lovech   | 124873         | 60836          | 64037          | 78589           | 38111          | 40478          |
| Montana  | 129637         | 63334          | 66303          | 83412           | 40294          | 43118          |
| Pleven   | 240380         | 116915         | 123465         | 161005          | 77684          | 83321          |
| <b>Severen tsentralen</b>                                  | <b>784168</b>  | <b>380986</b>  | <b>403182</b>  | <b>527353</b>   | <b>254213</b>  | <b>273140</b>  |
| Veliko Tarnovo   | 235708         | 113916         | 121792         | 166535          | 79968          | 86567          |
| Gabrovo  | 108404         | 52213          | 56191          | 88800           | 42708          | 46092          |
| Razgrad  | 112229         | 54714          | 57515          | 53002           | 25277          | 27725          |
| Ruse   | 218556         | 106679         | 111877         | 170634          | 83113          | 87521          |
| Silistra   | 109271         | 53464          | 55807          | 48382           | 23147          | 25235          |
| <b>Severozitochen</b>                                      | <b>929035</b>  | <b>452747</b>  | <b>476288</b>  | <b>682177</b>   | <b>329318</b>  | <b>352859</b>  |
| Varna  | 471252         | 229614         | 241638         | 395596          | 191802         | 203794         |
| Dobrich  | 173831         | 84476          | 89355          | 120259          | 57723          | 62536          |
| Targovishte  | 111597         | 54512          | 57085          | 60414           | 28827          | 31587          |
| Shumen   | 172355         | 84145          | 88210          | 105908          | 50966          | 54942          |
| <b>Yugoiztochen</b>  | <b>1032079</b> | <b>500730</b>  | <b>531349</b>  | <b>749727</b>   | <b>360439</b>  | <b>389288</b>  |
| Burgas   | 410331         | 198630         | 211701         | 313566          | 150248         | 163318         |
| Sliven   | 186495         | 90636          | 95859          | 122910          | 59048          | 63862          |
| Stara Zagora   | 316356         | 153264         | 163092         | 229132          | 110311         | 118821         |
| Yambol   | 118897         | 58200          | 60697          | 84119           | 40832          | 43287          |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>            |                |                |                |                 |                |                |
| <b>Yugozapaden</b>   | <b>2102205</b> | <b>1014770</b> | <b>1087435</b> | <b>1772377</b>  | <b>850351</b>  | <b>922026</b>  |
| Blagoevgrad  | 305123         | 148542         | 156581         | 183143          | 87609          | 95534          |
| Kyustendil   | 119041         | 57944          | 61097          | 83230           | 40142          | 43088          |
| Pernik   | 120880         | 58824          | 62056          | 95860           | 46215          | 49645          |
| Sofia  | 229041         | 112497         | 116544         | 140760          | 68526          | 72234          |
| Sofia (stolitsa)   | 1328120        | 636963         | 691157         | 1269384         | 607859         | 661525         |
| <b>Yuzhen tsentralen</b>                                   | <b>1410248</b> | <b>684140</b>  | <b>726108</b>  | <b>953795</b>   | <b>457807</b>  | <b>495988</b>  |
| Kardzhali  | 152873         | 75525          | 77348          | 63016           | 30217          | 32799          |
| Pazardzhik   | 255479         | 125103         | 130376         | 160414          | 77790          | 82624          |
| Plovdiv  | 668334         | 321176         | 347158         | 505663          | 241110         | 264553         |
| Smolyan  | 105421         | 50959          | 54462          | 59242           | 28488          | 30754          |
| Haskovo  | 228141         | 111377         | 116764         | 165460          | 80202          | 85258          |

## Fertility and mortality by district

Highest is the crude birth rate in district Sliven, Sofia (stolitsa) and Iambol. Lowest is the crude birth rate in districts Smolyan, Gabrovo and Vidin.

Vidin, Montana and Kiustendil are the districts with the highest crude death rate, while the lowest one is registered in districts Sofia (stolitsa) and Kardzhali.

Figure 8. Crude birth rate by district in 2018  
(Per 1 000 of population)

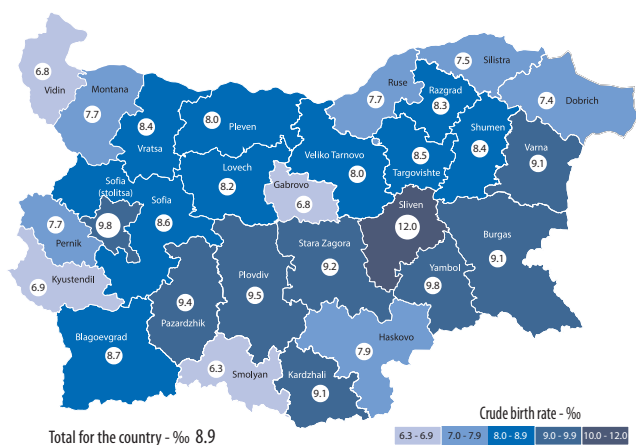
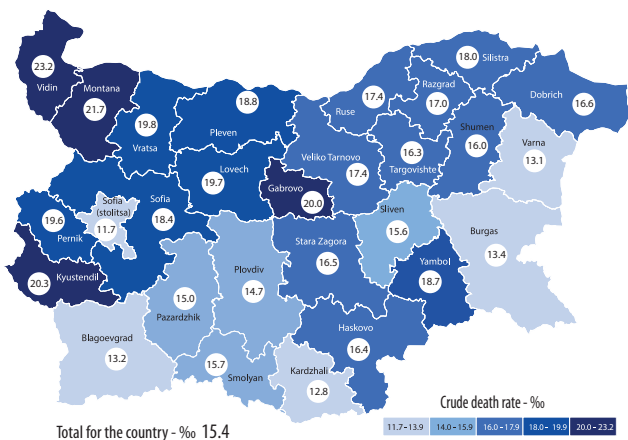


Figure 9. Crude death rate by district in 2018  
(Per 1 000 of population)





9. Live births, deaths and natural increase of the population by statistical zone, statistical region and by district in 2018

| Statistical zones,<br>statistical regions<br>and districts | Live<br>births | Deaths        | Natural<br>increase | Live<br>births              | Deaths      | Natural<br>increase |
|--|----------------|---------------|---------------------|-----------------------------|-------------|---------------------|
|  | In numbers     |               |                     | Per 1 000 of the population |             |                     |
| <b>Total</b>   | <b>62197</b>   | <b>108526</b> | <b>-46329</b>       | <b>8.9</b>                  | <b>15.4</b> | <b>-6.5</b>         |
| <i>Severna i Yugoiztochna<br/>Bulgaria</i>                 |                |               |                     |                             |             |                     |
| <b>Severozapaden</b>                                       | <b>5938</b>    | <b>15123</b>  | <b>-9185</b>        | <b>7.9</b>                  | <b>20.2</b> | <b>-12.3</b>        |
| Vidin  | 586            | 1992          | -1406               | 6.8                         | 23.2        | -16.4               |
| Vratsa   | 1375           | 3241          | -1866               | 8.4                         | 19.8        | -11.4               |
| Lovech   | 1028           | 2482          | -1454               | 8.2                         | 19.7        | -11.5               |
| Montana  | 1004           | 2841          | -1837               | 7.7                         | 21.7        | -14.0               |
| Pleven   | 1945           | 4567          | -2622               | 8.0                         | 18.8        | -10.8               |
| <b>Severen tsentralen</b>                                  | <b>6090</b>    | <b>14058</b>  | <b>-7968</b>        | <b>7.7</b>                  | <b>17.8</b> | <b>-10.1</b>        |
| Veliko Tarnovo   | 1901           | 4142          | -2241               | 8.0                         | 17.4        | -9.4                |
| Gabrovo  | 741            | 2184          | -1443               | 6.8                         | 20.0        | -13.2               |
| Razgrad  | 942            | 1922          | -980                | 8.3                         | 17.0        | -8.7                |
| Ruse   | 1687           | 3836          | -2149               | 7.7                         | 17.4        | -9.7                |
| Silistra   | 819            | 1974          | -1155               | 7.5                         | 18.0        | -10.5               |
| <b>Severoiztochen</b>                                      | <b>7966</b>    | <b>13700</b>  | <b>-5734</b>        | <b>8.6</b>                  | <b>14.7</b> | <b>-6.1</b>         |
| Varna  | 4275           | 6201          | -1926               | 9.1                         | 13.1        | -4.0                |
| Dobrich  | 1293           | 2908          | -1615               | 7.4                         | 16.6        | -9.2                |
| Targovishte  | 947            | 1823          | -876                | 8.5                         | 16.3        | -7.8                |
| Shumen   | 1451           | 2768          | -1317               | 8.4                         | 16.0        | -7.6                |
| <b>Yugoiztochen</b>  | <b>10094</b>   | <b>15910</b>  | <b>-5816</b>        | <b>9.7</b>                  | <b>15.4</b> | <b>-5.7</b>         |
| Burgas   | 3724           | 5503          | -1779               | 9.1                         | 13.4        | -4.3                |
| Sliven   | 2258           | 2917          | -659                | 12.0                        | 15.6        | -3.6                |
| Stara Zagora   | 2938           | 5257          | -2319               | 9.2                         | 16.5        | -7.3                |
| Yambol   | 1174           | 2233          | -1059               | 9.8                         | 18.7        | -8.9                |
| <i>Yugozapadna i Yuzhna<br/>tsentralna Bulgaria</i>        |                |               |                     |                             |             |                     |
| <b>Yugozapaden</b>   | <b>19488</b>   | <b>28654</b>  | <b>-9166</b>        | <b>9.3</b>                  | <b>13.6</b> | <b>-4.3</b>         |
| Blagoevgrad  | 2676           | 4056          | -1380               | 8.7                         | 13.2        | -4.5                |
| Kyustendil   | 831            | 2436          | -1605               | 6.9                         | 20.3        | -13.4               |
| Pernik   | 933            | 2384          | -1451               | 7.7                         | 19.6        | -11.9               |
| Sofia  | 1988           | 4246          | -2258               | 8.6                         | 18.4        | -9.8                |
| Sofia (stolitsa)   | 13060          | 15532         | -2472               | 9.8                         | 11.7        | -1.9                |
| <b>Yuzhen tsentralen</b>                                   | <b>12621</b>   | <b>21081</b>  | <b>-8460</b>        | <b>8.9</b>                  | <b>14.9</b> | <b>-6.0</b>         |
| Kardzhali  | 1380           | 1941          | -561                | 9.1                         | 12.8        | -3.7                |
| Pazardzhik   | 2414           | 3854          | -1440               | 9.4                         | 15.0        | -5.6                |
| Plovdiv  | 6337           | 9846          | -3509               | 9.5                         | 14.7        | -5.2                |
| Smolyan  | 671            | 1669          | -998                | 6.3                         | 15.7        | -9.4                |
| Haskovo  | 1819           | 3771          | -1952               | 7.9                         | 16.4        | -8.5                |

## Migration of the population

Migration of the population includes all persons who have declared change of their present address within the country, or change of address in the country with an address abroad or vice versa.

Kardzhali (15.3‰), Sofia (stolitsa) (3.9‰), Plovdiv (3.1‰), Varna (2.2‰) and Burgas (1.3‰) are the districts with highest migration growth in 2018.

Highest negative migration growth is registered in districts Smolyan (-8.1‰), Vidin (-7.6‰) and Vratsa (-7.5‰).

Figure 10. Migration of the population by statistical region in 2018

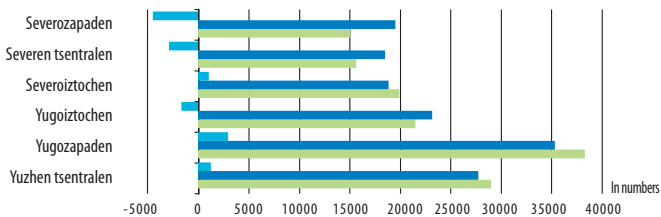
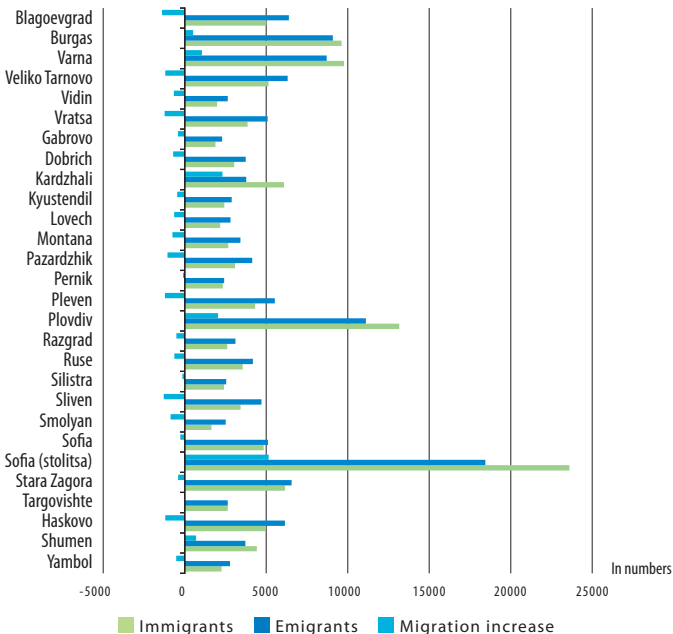


Figure 11. Migration of the population by district in 2018





10. Migration of the population by statistical zone, statistical region and by district in 2018<sup>1</sup>

(Number)

| Statistical zones,<br>statistical regions<br>and districts | Immigrants    | Emigrants     | Migration<br>increase |
|--|---------------|---------------|-----------------------|
| <b>Total</b>   | <b>139369</b> | <b>143035</b> | <b>-3666</b>          |
| <i>Severna i Yugoiztochna Bulgaria</i>                     |               |               |                       |
| <b>Severozapaden</b>                                       | <b>15052</b>  | <b>19519</b>  | <b>-4467</b>          |
| Vidin  | 1994          | 2650          | -656                  |
| Vratsa   | 3863          | 5093          | -1230                 |
| Lovech   | 2181          | 2815          | -634                  |
| Montana  | 2682          | 3422          | -740                  |
| Pleven   | 4332          | 5539          | -1207                 |
| <b>Severen tsentralen</b>                                  | <b>15634</b>  | <b>18496</b>  | <b>-2862</b>          |
| Veliko Tarnovo   | 5144          | 6327          | -1183                 |
| Gabrovo  | 1890          | 2297          | -407                  |
| Razgrad  | 2619          | 3124          | -505                  |
| Ruse   | 3565          | 4196          | -631                  |
| Silistra   | 2416          | 2552          | -136                  |
| <b>Severozitochen</b>                                      | <b>19913</b>  | <b>18849</b>  | <b>1064</b>           |
| Varna  | 9780          | 8722          | 1058                  |
| Dobrich  | 3049          | 3748          | -699                  |
| Targovishte  | 2650          | 2651          | -1                    |
| Shumen   | 4434          | 3728          | 706                   |
| <b>Yugoiztochen</b>  | <b>21503</b>  | <b>23157</b>  | <b>-1654</b>          |
| Burgas   | 9628          | 9097          | 531                   |
| Sliven   | 3438          | 4717          | -1279                 |
| Stara Zagora   | 6170          | 6562          | -392                  |
| Yambol   | 2267          | 2781          | -514                  |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>            |               |               |                       |
| <b>Yugozapaden</b>   | <b>38267</b>  | <b>35290</b>  | <b>2977</b>           |
| Blagoevgrad  | 5021          | 6400          | -1379                 |
| Kyustendil   | 2440          | 2893          | -453                  |
| Pernik   | 2342          | 2432          | -90                   |
| Sofia  | 4851          | 5115          | -264                  |
| Sofia (stolitsa)   | 23613         | 18450         | 5163                  |
| <b>Yuzhen tsentralen</b>                                   | <b>29000</b>  | <b>27724</b>  | <b>1276</b>           |
| Kardzhali  | 6107          | 3786          | 2321                  |
| Pazardzhik   | 3104          | 4150          | -1046                 |
| Plovdiv  | 13165         | 11118         | 2047                  |
| Smolyan  | 1655          | 2518          | -863                  |
| Haskovo  | 4969          | 6152          | -1183                 |

<sup>1</sup> Immigrants and emigrants in/to districts include also the movement to/from Bulgaria.



### **III. LABOUR MARKET**



## Labour force

The labour force (the economically active population) consists of the persons aged 15 and over, who furnish the supply of labour for the production of goods and services. The labour force comprises the employed and the unemployed persons.

The activity rate is the ratio between the economically active population and the total population of the same age.

The source of the data is the Labour Force Survey.

Figure 1. Structure of the labour force by age in 2018

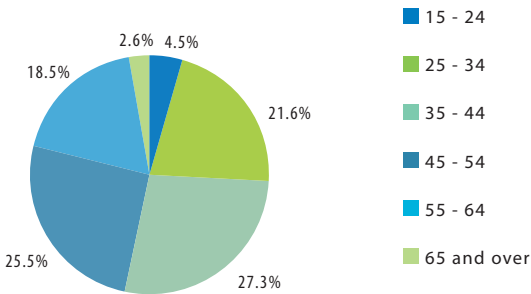
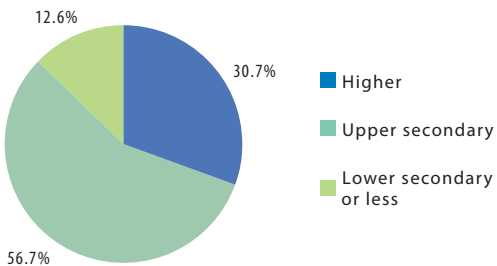


Figure 2. Structure of the labour force by level of education in 2018





## 1. Labour force

(Thousands)

|                              | 2014          | 2015          | 2016          | 2017          | 2018          |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Total</b>                 | <b>3365.9</b> | <b>3337.0</b> | <b>3264.0</b> | <b>3357.2</b> | <b>3326.0</b> |
| <b>By place of residence</b> |               |               |               |               |               |
| Urban                        | 2636.7        | 2613.2        | 2563.6        | 2618.6        | 2595.2        |
| Rural                        | 729.2         | 723.8         | 700.4         | 738.6         | 730.8         |
| <b>By sex</b>                |               |               |               |               |               |
| Male                         | 1798.6        | 1781.7        | 1749.3        | 1796.7        | 1787.0        |
| Female                       | 1567.3        | 1555.2        | 1514.7        | 1560.5        | 1539.0        |
| <b>By age</b>                |               |               |               |               |               |
| <b>15 - 64</b>               | <b>3308.7</b> | <b>3276.0</b> | <b>3199.6</b> | <b>3277.5</b> | <b>3239.6</b> |
| 15 - 24                      | 200.3         | 182.8         | 161.1         | 170.7         | 149.3         |
| 25 - 34                      | 767.7         | 758.2         | 732.2         | 740.9         | 719.9         |
| 35 - 44                      | 941.0         | 925.0         | 904.8         | 919.6         | 908.1         |
| 45 - 54                      | 821.0         | 829.4         | 822.5         | 842.1         | 847.8         |
| 55 - 64                      | 578.7         | 580.5         | 579.0         | 604.2         | 614.6         |
| 65 and over                  | 57.2          | 61.0          | 64.4          | 79.7          | 86.3          |
| <b>By level of education</b> |               |               |               |               |               |
| Higher                       | 997.1         | 1018.1        | 1013.5        | 1020.5        | 1020.9        |
| Upper secondary              | 1906.8        | 1889.6        | 1849.4        | 1920.7        | 1887.2        |
| of which: Vocational         | 1232.9        | 1197.3        | 1148.1        | 1151.2        | 1103.2        |
| Lower secondary or less      | 462.0         | 429.2         | 401.2         | 415.9         | 417.9         |

## 2. Activity rates (15 - 64 years of age)

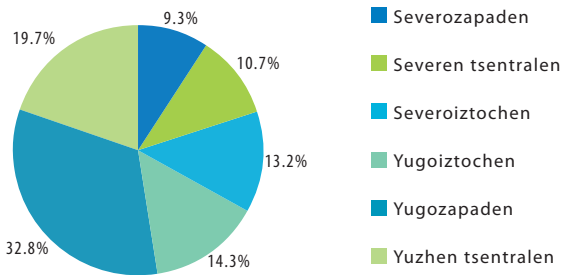
(Per cent)

|                              | 2014        | 2015        | 2016        | 2017        | 2018        |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Total</b>                 | <b>69.0</b> | <b>69.3</b> | <b>68.7</b> | <b>71.3</b> | <b>71.5</b> |
| <b>By place of residence</b> |             |             |             |             |             |
| Urban                        | 71.5        | 72.1        | 71.6        | 73.8        | 73.8        |
| Rural                        | 61.3        | 60.9        | 59.8        | 63.8        | 64.3        |
| <b>By sex</b>                |             |             |             |             |             |
| Male                         | 72.9        | 73.2        | 72.7        | 75.4        | 75.9        |
| Female                       | 65.0        | 65.4        | 64.6        | 67.1        | 67.0        |
| <b>By age</b>                |             |             |             |             |             |
| 15 - 24                      | 27.2        | 26.0        | 23.9        | 26.3        | 23.7        |
| 25 - 34                      | 78.3        | 78.3        | 76.5        | 79.1        | 78.8        |
| 35 - 44                      | 87.4        | 86.5        | 85.4        | 87.4        | 87.1        |
| 45 - 54                      | 83.7        | 84.3        | 83.7        | 86.0        | 86.5        |
| 55 - 64                      | 56.6        | 58.0        | 58.8        | 61.8        | 63.7        |

## Labour force by district

The labour force (the economically active population) aged 15 - 64 and the activity rates for the same age group are presented by statistical regions in accordance with the Classification of Territorial Units for Statistical Purposes in Bulgaria in force since 14 February 2009, harmonized with the European Classification of Territorial Units for Statistics (NUTS), and by districts.

Figure 3. Structure of the labour force (15 - 64 years of age) by statistical region in 2018





### 3. Labour force (15 - 64 years of age) and activity rates by statistical zone, statistical region and by district in 2018

| Statistical zones,<br>statistical regions<br>and districts | Labour force -<br>in thousands | Activity rates - % |
|--|--------------------------------|--------------------|
| <b>Total</b>   | <b>3239.6</b>                  | <b>71.5</b>        |
| <i>Severna i Yugoiztochna Bulgaria</i>                     |                                |                    |
| <b>Severozapaden</b>                                       | <b>300.7</b>                   | <b>66.4</b>        |
| Vidin  | 37.0                           | 73.4               |
| Vratsa   | 62.1                           | 60.7               |
| Lovech   | 50.8                           | 67.5               |
| Montana  | 48.7                           | 61.7               |
| Pleven   | 102.2                          | 70.1               |
| <b>Severen tsentralen</b>                                  | <b>347.1</b>                   | <b>69.3</b>        |
| Veliko Tarnovo   | 106.8                          | 70.4               |
| Gabrovo  | 46.3                           | 70.4               |
| Razgrad  | 46.4                           | 63.2               |
| Ruse   | 101.0                          | 71.4               |
| Silistra   | 46.5                           | 67.7               |
| <b>Severoiztochen</b>                                      | <b>428.8</b>                   | <b>70.6</b>        |
| Varna  | 215.8                          | 69.3               |
| Dobrich  | 80.2                           | 71.4               |
| Targovishte  | 50.8                           | 70.9               |
| Shumen   | 82.1                           | 73.4               |
| <b>Yugoiztochen</b>  | <b>463.9</b>                   | <b>70.7</b>        |
| Burgas   | 190.0                          | 71.1               |
| Sliven   | 78.8                           | 68.0               |
| Stara Zagora   | 145.2                          | 72.7               |
| Yambol   | 49.9                           | 68.0               |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>            |                                |                    |
| <b>Yugozapaden</b>   | <b>1062.7</b>                  | <b>75.8</b>        |
| Blagoevgrad  | 152.1                          | 74.6               |
| Kyustendil   | 51.1                           | 70.0               |
| Pernik   | 55.2                           | 72.1               |
| Sofia  | 107.3                          | 73.8               |
| Sofia (stolitsa)   | 697.0                          | 77.2               |
| <b>Yuzhen tsentralen</b>                                   | <b>636.4</b>                   | <b>69.7</b>        |
| Kardzhali  | 60.7                           | 60.7               |
| Pazardzhik   | 110.8                          | 67.0               |
| Plovdiv  | 313.2                          | 72.5               |
| Smolyan  | 52.6                           | 75.6               |
| Haskovo  | 99.1                           | 68.1               |

## Employment

Employed are the persons aged 15 and over, who during the reference period:

- performed some work for the production of goods or services for at least one hour, for pay in cash or in kind, or other income;
- did not work but had jobs from which they were temporarily absent due to annual leave, illness, full-paid maternity leave, parental leave, bad weather, strike or other labour dispute, and other reasons.

Persons on unpaid leave initiated by the employer are considered employed if the duration of this leave does not exceed three months.

Employers are the persons who by themselves or in co-operation with other people manage their own enterprise, business, farm, professional practice or perform independently other work, and employ at least one other person.

Self-employed are the persons who by themselves or in co-operation with other people work in their own enterprise, business, farm, professional practice or perform independently other work, and do not employ any other person.

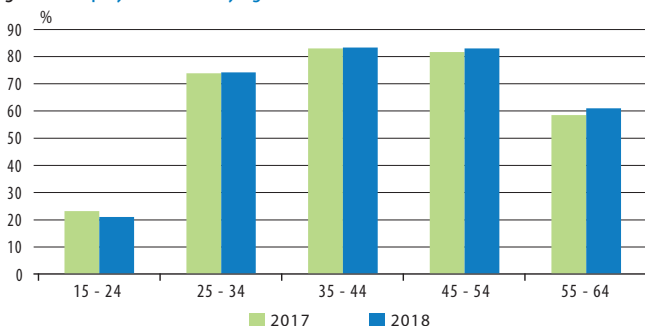
Employees are the persons who work for a public or private employer and who receive a consideration in cash or in kind in the form of wages, salaries, fees, remuneration by civil contract, etc.

Unpaid family workers are the persons who work without pay in a firm, enterprise or farm, owned and operated by a relative of the same household.

The employment rate is the ratio between the employed population and the total population of the same age.

The source of the data is the Labour Force Survey.

Figure 4. Employment rates by age







## 4. Employed persons

(Thousands)

|                                 | 2014          | 2015          | 2016          | 2017          | 2018          |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Total</b>                    | <b>2981.4</b> | <b>3031.9</b> | <b>3016.8</b> | <b>3150.3</b> | <b>3152.7</b> |
| <b>By place of residence</b>    |               |               |               |               |               |
| Urban                           | 2380.4        | 2417.5        | 2403.1        | 2485.2        | 2487.3        |
| Rural                           | 601.0         | 614.4         | 613.7         | 665.0         | 665.4         |
| <b>By sex</b>                   |               |               |               |               |               |
| Male                            | 1577.1        | 1607.5        | 1607.6        | 1682.6        | 1685.3        |
| Female                          | 1404.3        | 1424.3        | 1409.2        | 1467.7        | 1467.3        |
| <b>By age</b>                   |               |               |               |               |               |
| <b>15 - 64</b>                  | <b>2927.4</b> | <b>2973.5</b> | <b>2954.3</b> | <b>3073.4</b> | <b>3068.9</b> |
| 15 - 24                         | 152.7         | 143.2         | 133.4         | 148.6         | 130.3         |
| 25 - 34                         | 669.2         | 682.4         | 669.2         | 689.2         | 675.4         |
| 35 - 44                         | 850.9         | 853.4         | 846.9         | 869.6         | 866.5         |
| 45 - 54                         | 743.5         | 764.5         | 768.3         | 797.3         | 810.5         |
| 55 - 64                         | 511.2         | 530.1         | 536.5         | 568.7         | 586.1         |
| 65 and over                     | 53.9          | 58.4          | 62.5          | 76.9          | 83.8          |
| <b>By level of education</b>    |               |               |               |               |               |
| Higher                          | 946.3         | 977.8         | 979.3         | 989.6         | 997.3         |
| Upper secondary                 | 1703.8        | 1732.3        | 1725.1        | 1819.7        | 1802.2        |
| of which: Vocational            | 1107.7        | 1100.5        | 1073.5        | 1091.1        | 1052.4        |
| Lower secondary or less         | 331.3         | 321.7         | 312.3         | 340.9         | 353.2         |
| <b>By professional status</b>   |               |               |               |               |               |
| Employers                       | 113.5         | 108.3         | 107.3         | 114.8         | 117.2         |
| Self-employed without employees | 238.1         | 236.8         | 228.3         | 235.3         | 226.6         |
| Employees in private sector     | 1903.6        | 1968.2        | 1981.8        | 2101.8        | 2113.5        |
| Employees in public sector      | 705.5         | 699.0         | 681.1         | 673.6         | 671.9         |
| Unpaid family workers           | 20.6          | 19.5          | 18.4          | 24.7          | 23.5          |

## 5. Employment rates (15 - 64 years of age)

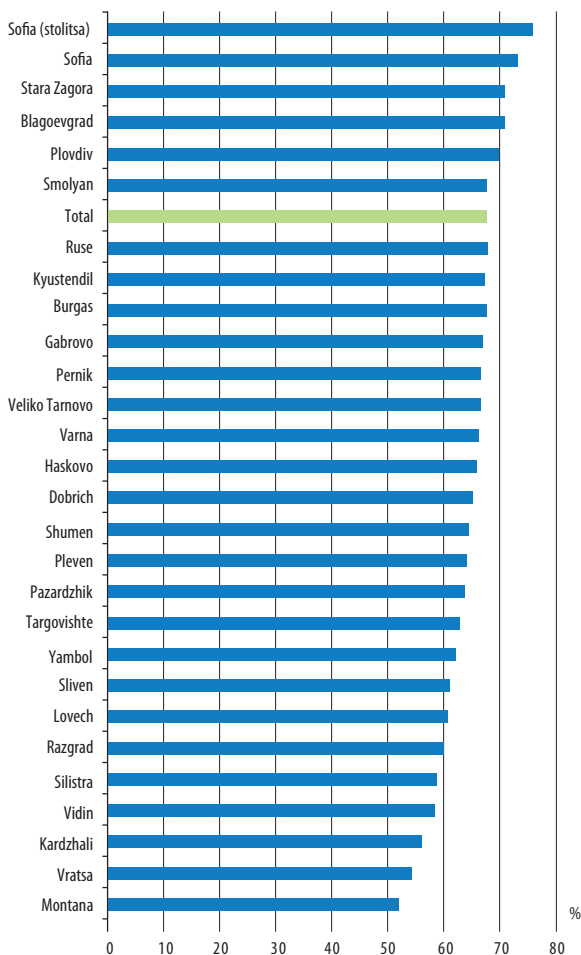
(Per cent)

|                              | 2014        | 2015        | 2016        | 2017        | 2018        |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Total</b>                 | <b>61.0</b> | <b>62.9</b> | <b>63.4</b> | <b>66.9</b> | <b>67.7</b> |
| <b>By place of residence</b> |             |             |             |             |             |
| Urban                        | 64.5        | 66.6        | 67.0        | 70.0        | 70.7        |
| Rural                        | 50.4        | 51.6        | 52.3        | 57.4        | 58.5        |
| <b>By sex</b>                |             |             |             |             |             |
| Male                         | 63.9        | 65.9        | 66.7        | 70.6        | 71.5        |
| Female                       | 58.2        | 59.8        | 60.0        | 63.1        | 63.9        |
| <b>By age</b>                |             |             |             |             |             |
| 15 - 24                      | 20.7        | 20.3        | 19.8        | 22.9        | 20.7        |
| 25 - 34                      | 68.3        | 70.4        | 69.9        | 73.6        | 73.9        |
| 35 - 44                      | 79.0        | 79.8        | 79.9        | 82.7        | 83.1        |
| 45 - 54                      | 75.8        | 77.7        | 78.2        | 81.4        | 82.7        |
| 55 - 64                      | 50.0        | 53.0        | 54.5        | 58.2        | 60.7        |

## Employment by district

The employed persons aged 15 - 64 and the employment rates for the same age group are presented by statistical regions in accordance with the Classification of Territorial Units for Statistical Purposes in Bulgaria in force since 14 February 2009, harmonized with the European Classification of Territorial Units for Statistics (NUTS), and by districts.

Figure 5. Employment rates (15 - 64 years of age) by district in 2018





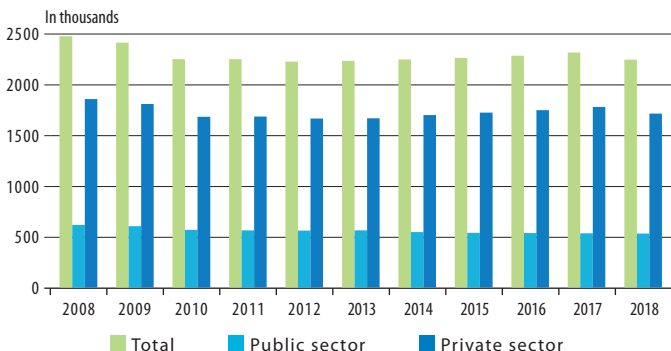
6. Employed persons (15 - 64 years of age) and employment rates by statistical zone, statistical region and by district in 2018

| Statistical zones, statistical regions and districts | Employed - in thousands | Employment rates - % |
|--|-------------------------|----------------------|
| <b>Total</b>   | <b>3068.9</b>           | <b>67.7</b>          |
| <i>Severna i Yugoiztochna Bulgaria</i>               |                         |                      |
| <b>Severozapaden</b>                                 | <b>266.3</b>            | <b>58.8</b>          |
| Vidin  | 29.6                    | 58.8                 |
| Vratsa   | 55.8                    | 54.5                 |
| Lovech   | 45.8                    | 60.9                 |
| Montana  | 41.2                    | 52.2                 |
| Pleven   | 93.8                    | 64.4                 |
| <b>Severen tsentralen</b>                            | <b>323.7</b>            | <b>64.6</b>          |
| Veliko Tarnovo                                       | 101.0                   | 66.6                 |
| Gabrovo  | 44.2                    | 67.2                 |
| Razgrad  | 41.3                    | 56.2                 |
| Ruse   | 95.7                    | 67.7                 |
| Silistra   | 41.4                    | 60.2                 |
| <b>Severoiztochen</b>                                | <b>397.0</b>            | <b>65.4</b>          |
| Varna  | 206.3                   | 66.3                 |
| Dobrich  | 73.3                    | 65.3                 |
| Targovishte  | 45.1                    | 63.0                 |
| Shumen   | 72.2                    | 64.6                 |
| <b>Yugoiztochen</b>                                  | <b>438.5</b>            | <b>66.8</b>          |
| Burgas   | 179.9                   | 67.4                 |
| Sliven   | 71.0                    | 61.2                 |
| Stara Zagora   | 141.8                   | 71.0                 |
| Yambol   | 45.8                    | 62.3                 |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>      |                         |                      |
| <b>Yugozapaden</b>                                   | <b>1034.3</b>           | <b>73.8</b>          |
| Blagoevgrad  | 144.8                   | 71.0                 |
| Kyustendil   | 49.2                    | 67.5                 |
| Pernik   | 51.0                    | 66.7                 |
| Sofia  | 106.6                   | 73.3                 |
| Sofia (stolitsa)                                     | 682.6                   | 75.6                 |
| <b>Yuzhen tsentralen</b>                             | <b>609.2</b>            | <b>66.8</b>          |
| Kardzhali  | 58.6                    | 58.6                 |
| Pazardzhik   | 105.6                   | 63.8                 |
| Plovdiv  | 301.8                   | 69.9                 |
| Smolyan  | 47.1                    | 67.7                 |
| Haskovo  | 96.0                    | 66.0                 |

## Employees

Employees are all persons who have a labour contract with their employer by virtue of the Labour Code or the Civil Servants Act and who receive remuneration in cash or in kind for certain quality and quantity of work done. The average annual number of employees under labour contract is the arithmetic mean value of the average monthly number of employees. The average monthly number of employees is the arithmetic mean value of the daily number of employees (sum of the daily number of employees divided by the number of days of the reference month).

Figure 6. Average annual number of employees under labour contract by kind of ownership



## 7. Employees under labour contract by economic activity groupings

(Average annual number)

| Economic activity groupings  | Total          |                | Public sector |               | Private sector |                |
|--|----------------|----------------|---------------|---------------|----------------|----------------|
|  | 2017           | 2018           | 2017          | 2018          | 2017           | 2018           |
| <b>Total</b>   | <b>2308129</b> | <b>2238402</b> | <b>533420</b> | <b>529341</b> | <b>1774709</b> | <b>1709061</b> |
| Agriculture, forestry and fishing                                      | 71340          | 69932          | 12044         | 11770         | 59296          | 58162          |
| Mining and quarrying   | 21624          | 21399          | 7297          | 7350          | 14327          | 14049          |
| Manufacture of food products, beverages and tobacco products           | 90141          | 86041          | ..            | ..            | ..             | ..             |
| Manufacture of textiles, wearing apparel, leather and related products | 111167         | 102452         | 232           | 277           | 110935         | 102175         |
| Manufacture of wood and paper products, and printing                   | 33063          | 31515          | 170           | 161           | 32893          | 31354          |
| Manufacture of coke, and refined petroleum products                    | 2405           | 1902           | -             | -             | 2405           | 1902           |



## 7. Employees under labour contract by economic activity groupings

(Continued and end)

(Average annual number)

| Economic activity groupings  | Total  |        | Public sector |        | Private sector |        |
|--|--------|--------|---------------|--------|----------------|--------|
|  | 2017   | 2018   | 2017          | 2018   | 2017           | 2018   |
| Manufacture of chemicals and chemical products                                       | 13768  | 13609  | -             | -      | 13768          | 13609  |
| Manufacture of pharmaceuticals, medicinal chemical and botanical products            | 8600   | 8697   | ..            | ..     | ..             | ..     |
| Manufacture of rubber and plastics products, and other non-metallic mineral products | 50206  | 49722  | 14            | 13     | 50192          | 49709  |
| Manufacture of basic metals and fabricated metal products, except machinery          | 71363  | 68776  | ..            | ..     | ..             | ..     |
| Manufacture of computer, electronic and optical products                             | 9751   | 10199  | ..            | ..     | ..             | ..     |
| Manufacture of electrical equipment  | 24514  | 26739  | -             | -      | 24514          | 26739  |
| Manufacture of machinery and equipment n.e.c.  | 32271  | 31575  | -             | -      | 32271          | 31575  |
| Manufacture of transport equipment   | 28902  | 29151  | -             | -      | 28902          | 29151  |
| Other manufacturing, and repair and installation of machinery and equipment          | 45293  | 43541  | 1390          | 1267   | 43903          | 42274  |
| Electricity, gas, steam and air-conditioning supply                                  | 30205  | 29980  | 14649         | 14721  | 15556          | 15259  |
| Water supply, sewerage, waste management and remediation                             | 36732  | 36316  | 22674         | 22221  | 14058          | 14095  |
| Construction   | 127493 | 119979 | 2257          | 2100   | 125236         | 117879 |
| Wholesale and retail trade, repair of motor vehicles and motorcycles                 | 379830 | 380508 | 472           | 399    | 379358         | 380109 |
| Transportation and storage   | 148623 | 139207 | 48197         | 47469  | 100426         | 91738  |
| Accommodation and food service activities  | 119137 | 110075 | 4350          | 4402   | 114787         | 105673 |
| Publishing, audiovisual and broadcasting activities                                  | 12736  | 12011  | 2995          | 2926   | 9741           | 9085   |
| Telecommunications   | 20392  | 19310  | ..            | ..     | ..             | ..     |
| IT and other information services  | 57726  | 56236  | 816           | 720    | 56910          | 55516  |
| Financial and insurance activities   | 56997  | 55740  | 2102          | 1996   | 54895          | 53744  |
| Real estate activities   | 24035  | 20723  | 2622          | 2438   | 21413          | 18285  |
| Legal, accounting, management, architecture and engineering and similar activities   | 44207  | 43369  | 1377          | 1249   | 42830          | 42120  |
| Scientific research and development  | 11244  | 11757  | 8419          | 8598   | 2825           | 3159   |
| Other professional, scientific and technical activities                              | 24082  | 22558  | 100           | 93     | 23982          | 22465  |
| Administrative and support service activities  | 112810 | 109466 | 14335         | 16258  | 98475          | 93208  |
| Public administration and defence, compulsory social security                        | 111624 | 111595 | 111624        | 111595 | x              | x      |
| Education  | 162697 | 161567 | 152988        | 151949 | 9709           | 9618   |
| Human health services  | 108705 | 105174 | 74230         | 72213  | 34475          | 32961  |
| Residential care and social work activities  | 29931  | 29366  | 26781         | 26616  | 3150           | 2750   |
| Arts, entertainment and recreation   | 36911  | 33593  | 13943         | 13728  | 22968          | 19865  |
| Other services   | 37604  | 34622  | 1438          | 1374   | 36166          | 33248  |

## Unemployment

Unemployed are the persons aged from 15 to 74, who were:

- without work during the reference period;
- actively seeking work in the four week period ending with the reference week;
- available to start working before the end of the two weeks following the reference week.

As unemployed are regarded also the persons who are not actively looking for work but have found a new job or business that is expected to start within 3 months following the reference period.

The duration of unemployment is defined by the shorter of the following two periods:

- the duration of looking for a job; or
- the length of time passed since last employment.

The source of the data (excluding data on registered unemployment) is the Labour Force Survey.

The source of the data on the unemployed persons registered at the Labour Offices is the National Employment Agency.

Figure 7. Structure of unemployed persons by age

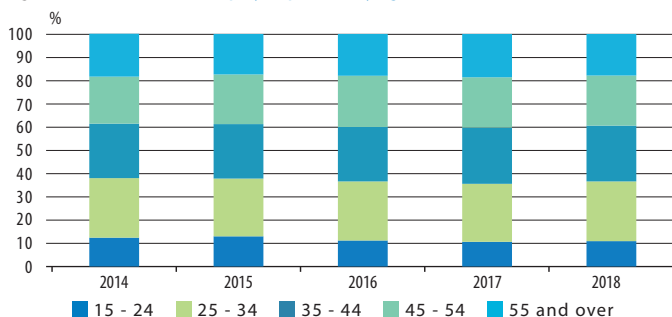
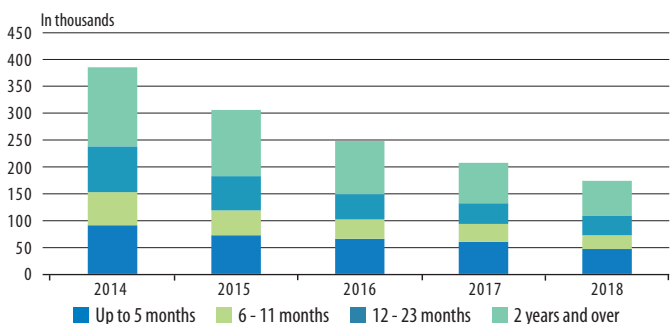


Figure 8. Unemployed persons by duration of unemployment





## 8. Unemployed persons

(Thousands)

|   | 2014         | 2015         | 2016         | 2017         | 2018         |
|---|--------------|--------------|--------------|--------------|--------------|
| <b>Total</b>  | <b>384.5</b> | <b>305.1</b> | <b>247.2</b> | <b>206.9</b> | <b>173.3</b> |
| <b>By place of residence</b>                                    |              |              |              |              |              |
| Urban   | 256.3        | 195.7        | 160.5        | 133.3        | 107.9        |
| Rural   | 128.2        | 109.4        | 86.8         | 73.6         | 65.4         |
| <b>By sex</b>   |              |              |              |              |              |
| Male  | 221.4        | 174.2        | 141.7        | 114.2        | 101.7        |
| Female  | 163.1        | 130.9        | 105.6        | 92.8         | 71.6         |
| <b>By age</b>   |              |              |              |              |              |
| <b>15 - 64</b>  | <b>381.3</b> | <b>302.5</b> | <b>245.3</b> | <b>204.1</b> | <b>170.8</b> |
| 15 - 24   | 47.6         | 39.6         | 27.7         | 22.1         | 18.9         |
| 25 - 34   | 98.5         | 75.8         | 62.9         | 51.6         | 44.5         |
| 35 - 44   | 90.2         | 71.7         | 57.9         | 50.0         | 41.6         |
| 45 - 54   | 77.5         | 65.0         | 54.3         | 44.8         | 37.3         |
| 55 and over   | 70.7         | 53.1         | 44.4         | 38.4         | 31.1         |
| <b>By level of education</b>                                    |              |              |              |              |              |
| Higher  | 50.8         | 40.3         | 34.1         | 30.9         | 23.6         |
| Upper secondary   | 203.0        | 157.3        | 124.2        | 101.0        | 85.0         |
| of which: Vocational  | 125.2        | 96.8         | 74.6         | 60.1         | 50.8         |
| Lower secondary or less   | 130.7        | 107.5        | 88.9         | 75.0         | 64.7         |
| <b>By duration of unemployment</b>                              |              |              |              |              |              |
| Up to 5 months  | 90.5         | 72.1         | 65.2         | 59.6         | 46.1         |
| 6 - 11 months   | 61.6         | 46.0         | 35.9         | 33.5         | 25.7         |
| 12 - 23 months  | 85.2         | 63.9         | 47.4         | 38.3         | 36.9         |
| 2 years and over  | 147.3        | 123.1        | 98.8         | 75.5         | 64.7         |
| <b>Unemployed registered at the Labour offices as of 31.12.</b> | <b>351.1</b> | <b>328.9</b> | <b>261.0</b> | <b>232.1</b> | <b>201.5</b> |

## Unemployment

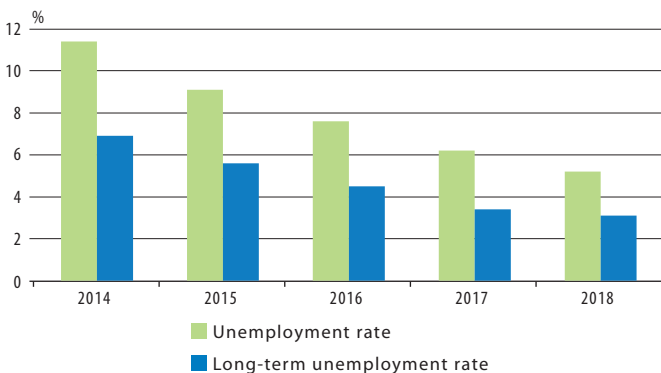
The unemployment rate is the ratio between the unemployed persons and the economically active population (the labour force).

The long-term unemployment rate is the ratio between the number of the long-term unemployed persons (unemployed for one or more years) and the economically active population.

Discouraged persons are the persons, who are not in the labour force (economically inactive population) and who want to work, but who do not actively look for a job, because they do not believe they will find one.

In 2018 the unemployment rate decreased by 1.0 percentage points in comparison with the previous year and stood at 5.2%. The long-term unemployed (unemployed for one or more years) represented 58.6% of all unemployed persons.

Figure 9. Unemployment rates and long-term unemployment rates







## 9. Unemployment rates

|                                    | (Per cent)  |            |            |            |            |
|------------------------------------|-------------|------------|------------|------------|------------|
|                                    | 2014        | 2015       | 2016       | 2017       | 2018       |
| <b>Total</b>                       | <b>11.4</b> | <b>9.1</b> | <b>7.6</b> | <b>6.2</b> | <b>5.2</b> |
| <b>By place of residence</b>       |             |            |            |            |            |
| Urban                              | 9.7         | 7.5        | 6.3        | 5.1        | 4.2        |
| Rural                              | 17.6        | 15.1       | 12.4       | 10.0       | 8.9        |
| <b>By sex</b>                      |             |            |            |            |            |
| Male                               | 12.3        | 9.8        | 8.1        | 6.4        | 5.7        |
| Female                             | 10.4        | 8.4        | 7.0        | 5.9        | 4.7        |
| <b>By age</b>                      |             |            |            |            |            |
| <b>15 - 64</b>                     | <b>11.5</b> | <b>9.2</b> | <b>7.7</b> | <b>6.2</b> | <b>5.3</b> |
| 15 - 24                            | 23.8        | 21.6       | 17.2       | 12.9       | 12.7       |
| 25 - 34                            | 12.8        | 10.0       | 8.6        | 7.0        | 6.2        |
| 35 - 44                            | 9.6         | 7.7        | 6.4        | 5.4        | 4.6        |
| 45 - 54                            | 9.4         | 7.8        | 6.6        | 5.3        | 4.4        |
| 55 and over                        | 11.1        | 8.3        | 6.9        | 5.6        | 4.4        |
| <b>Long-term unemployment rate</b> | <b>6.9</b>  | <b>5.6</b> | <b>4.5</b> | <b>3.4</b> | <b>3.1</b> |

## 10. Discouraged persons

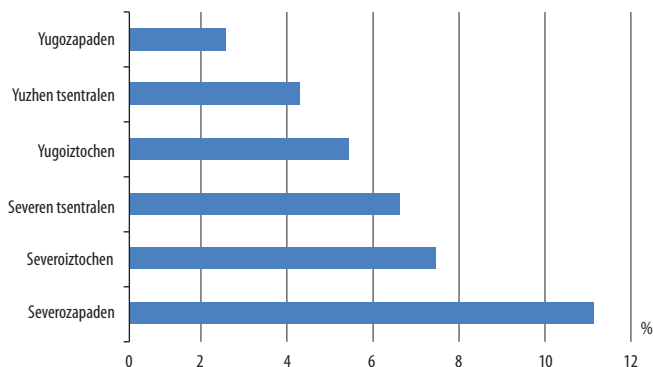
|                              | (Thousands)  |              |              |              |             |
|------------------------------|--------------|--------------|--------------|--------------|-------------|
|                              | 2014         | 2015         | 2016         | 2017         | 2018        |
| <b>Total</b>                 | <b>192.1</b> | <b>172.9</b> | <b>165.8</b> | <b>115.8</b> | <b>85.4</b> |
| <b>By place of residence</b> |              |              |              |              |             |
| Urban                        | 100.1        | 81.2         | 76.1         | 56.4         | 44.4        |
| Rural                        | 92.0         | 91.6         | 89.7         | 59.4         | 41.0        |
| <b>By sex</b>                |              |              |              |              |             |
| Male                         | 107.8        | 93.7         | 91.5         | 60.7         | 44.3        |
| Female                       | 84.3         | 79.1         | 74.3         | 55.2         | 41.0        |
| <b>By age</b>                |              |              |              |              |             |
| <b>15 - 64</b>               | <b>188.7</b> | <b>170.0</b> | <b>163.4</b> | <b>112.2</b> | <b>81.4</b> |
| 15 - 24                      | 33.0         | 29.6         | 23.4         | 13.5         | 12.7        |
| 25 - 34                      | 45.5         | 39.0         | 36.5         | 26.5         | 16.3        |
| 35 - 44                      | 33.2         | 32.3         | 35.9         | 24.5         | 19.3        |
| 45 - 54                      | 39.7         | 36.3         | 35.9         | 23.4         | 14.8        |
| 55 and over                  | 40.6         | 35.6         | 34.1         | 27.8         | 22.3        |
| <b>By level of education</b> |              |              |              |              |             |
| Higher                       | 13.5         | 10.6         | 8.5          | 5.4          | (3.2)       |
| Upper secondary              | 85.8         | 72.6         | 69.4         | 41.4         | 27.6        |
| of which: Vocational         | 49.8         | 40.3         | 35.5         | 22.5         | 14.8        |
| Lower secondary or less      | 92.8         | 89.7         | 87.9         | 69.0         | 54.6        |

## Unemployment by district

The unemployed persons and the unemployment rates are presented by statistical regions in accordance with the Classification of Territorial Units for Statistical Purposes in Bulgaria, in force since 14 February 2009, harmonized with the European Classification of Territorial Units for Statistics (NUTS), and by districts.

The source of the data on the unemployed persons registered at the Labour Offices is the National Employment Agency.

Figure 10. Unemployment rates by statistical regions in 2018





## 11. Unemployment by statistical zone, statistical region and by district in 2018

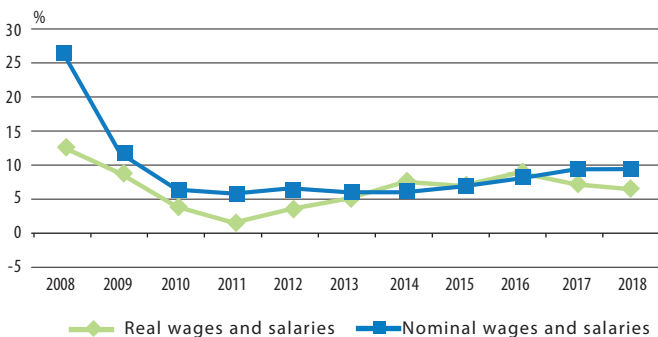
| Statistical zones,<br>statistical regions<br>and districts | Unemployed -<br>in thousands | Unemployment<br>rates - % | Unemployed registered<br>at the Labour offices<br>as of 31.12. -<br>in thousands |
|--|------------------------------|---------------------------|--|
| <b>Total</b>   | <b>173.3</b>                 | <b>5.2</b>                | <b>201.5</b>   |
| <i>Severna i Yugoiztochna<br/>Bulgaria</i>                 |                              |                           |  |
| <b>Severozapaden</b>                                       | <b>34.7</b>                  | <b>11.2</b>               | <b>37.6</b>  |
| Vidin  | 7.4                          | 19.7                      | 5.7  |
| Vratsa   | 6.3                          | 9.9                       | 9.1  |
| Lovech   | 5.0                          | 9.6                       | 5.3  |
| Montana  | 7.5                          | 15.1                      | 7.4  |
| Pleven   | 8.5                          | 8.0                       | 10.3   |
| <b>Severen tsentralen</b>                                  | <b>24.1</b>                  | <b>6.7</b>                | <b>25.0</b>  |
| Veliko Tarnovo   | 5.9                          | 5.4                       | 6.2  |
| Gabrovo  | (2.1)                        | (4.4)                     | 2.1  |
| Razgrad  | 5.4                          | 11.2                      | 5.4  |
| Ruse   | 5.3                          | 5.1                       | 5.9  |
| Silistra   | 5.3                          | 11.1                      | 5.6  |
| <b>Severoiztochen</b>                                      | <b>32.4</b>                  | <b>7.4</b>                | <b>27.3</b>  |
| Varna  | 9.7                          | 4.4                       | 9.2  |
| Dobrich  | 7.0                          | 8.5                       | 5.2  |
| Targovishte  | 5.8                          | 11.1                      | 5.3  |
| Shumen   | 9.9                          | 11.7                      | 7.6  |
| <b>Yugoiztochen</b>  | <b>25.8</b>                  | <b>5.4</b>                | <b>27.8</b>  |
| Burgas   | 10.3                         | 5.3                       | 10.7   |
| Sliven   | 7.8                          | 9.7                       | 7.6  |
| Stara Zagora   | (3.4)                        | (2.3)                     | 6.1  |
| Yambol   | 4.2                          | 8.2                       | 3.5  |
| <i>Yugozapadna i Yuzhna<br/>tsentralna Bulgaria</i>        |                              |                           |  |
| <b>Yugozapaden</b>   | <b>28.7</b>                  | <b>2.6</b>                | <b>41.2</b>  |
| Blagoevgrad  | 7.3                          | 4.7                       | 15.2   |
| Kyustendil   | (1.9)                        | (3.6)                     | 4.6  |
| Pernik   | 4.3                          | 7.5                       | 2.8  |
| Sofia  | (0.7)                        | (0.7)                     | 6.5  |
| Sofia (stolitsa)   | 14.5                         | 2.0                       | 12.1   |
| <b>Yuzhen tsentralen</b>                                   | <b>27.6</b>                  | <b>4.2</b>                | <b>42.5</b>  |
| Kardzhali  | (2.1)                        | (3.3)                     | 5.7  |
| Pazardzhik   | 5.3                          | 4.6                       | 10.5   |
| Plovdiv  | 11.6                         | 3.6                       | 13.8   |
| Smolyan  | 5.6                          | 10.3                      | 5.7  |
| Haskovo  | (3.0)                        | (3.0)                     | 6.8  |

## Average annual wages and salaries

Gross annual wages and salaries are the remunerations paid regularly to the employees by the employers before the deduction of any tax and social security contributions payable by the employees and withheld by the employers.

The average annual gross wages and salaries are calculated through dividing the total amount of wage and salary costs accrued during the reference year by the average annual number of employees under labour contract excluding those on maternity leave.

Figure 11. Nominal and real wages and salaries  
(Percentage change to preceding year)



## 12. Average annual wages and salaries by economic activity groupings

(BGN)

| Economic activity groupings  | Total        |              | Public sector |              | Private sector |              |
|--|--------------|--------------|---------------|--------------|----------------|--------------|
|  | 2017         | 2018         | 2017          | 2018         | 2017           | 2018         |
| <b>Total</b>   | <b>12448</b> | <b>13621</b> | <b>12789</b>  | <b>13979</b> | <b>12344</b>   | <b>13508</b> |
| Agriculture, forestry and fishing                                      | 9983         | 10883        | 12335         | 13802        | 9500           | 10284        |
| Mining and quarrying   | 18461        | 20318        | 21981         | 23860        | 16661          | 18459        |
| Manufacture of food products, beverages and tobacco products           | 10274        | 11224        | ..            | ..           | 10276          | 11224        |
| Manufacture of textiles, wearing apparel, leather and related products | 7641         | 8347         | 8813          | 11159        | 7638           | 8339         |
| Manufacture of wood and paper products, and printing                   | 9657         | 10699        | 9297          | 9902         | 9658           | 10703        |
| Manufacture of coke, and refined petroleum products                    | 29598        | 34232        | -             | -            | 29598          | 34232        |



## 12. Average annual wages and salaries by economic activity groupings

(Continued and end)

(BGN)

| Economic activity groupings  | Total |       | Public sector |       | Private sector |       |
|--|-------|-------|---------------|-------|----------------|-------|
|  | 2017  | 2018  | 2017          | 2018  | 2017           | 2018  |
| Manufacture of chemicals and chemical products                                       | 14960 | 15866 | -             | -     | 14960          | 15866 |
| Manufacture of pharmaceuticals, medicinal chemical and botanical products            | 14167 | 15054 | ..            | ..    | 13849          | 14716 |
| Manufacture of rubber and plastics products, and other non-metallic mineral products | 11410 | 12599 | 9100          | 9743  | 11411          | 12599 |
| Manufacture of basic metals and fabricated metal products, except machinery          | 12674 | 13443 | ..            | ..    | 12745          | 13711 |
| Manufacture of computer, electronic and optical products                             | 16967 | 17632 | ..            | ..    | 16994          | 17652 |
| Manufacture of electrical equipment  | 14766 | 16191 | -             | -     | 14766          | 16191 |
| Manufacture of machinery and equipment n.e.c.  | 13982 | 14999 | -             | -     | 13982          | 14999 |
| Manufacture of transport equipment   | 11399 | 13032 | -             | -     | 11399          | 13032 |
| Other manufacturing, and repair and installation of machinery and equipment          | 11769 | 12815 | 12067         | 14009 | 11760          | 12779 |
| Electricity, gas, steam and air-conditioning supply                                  | 21411 | 22171 | 24773         | 25942 | 18229          | 18531 |
| Water supply, sewerage, waste management and remediation                             | 10551 | 11200 | 9964          | 10773 | 11501          | 11879 |
| Construction   | 10044 | 10634 | 10515         | 11078 | 10035          | 10626 |
| Wholesale and retail trade, repair of motor vehicles and motorcycles                 | 11211 | 12020 | 13620         | 16828 | 11208          | 12015 |
| Transportation and storage   | 11181 | 12411 | 14032         | 15279 | 9803           | 10911 |
| Accommodation and food service activities  | 7328  | 8401  | 9069          | 10153 | 7261           | 8327  |
| Publishing, audiovisual and broadcasting activities                                  | 17311 | 18064 | 13855         | 14715 | 18383          | 19160 |
| Telecommunications   | 21181 | 22410 | ..            | ..    | 21182          | 22409 |
| IT and other information services  | 35754 | 39181 | 18961         | 21694 | 35994          | 39406 |
| Financial and insurance activities   | 21525 | 22843 | 25263         | 26827 | 21377          | 22692 |
| Real estate activities   | 12058 | 11761 | 9948          | 10834 | 12320          | 11886 |
| Legal, accounting, management, architecture and engineering and similar activities   | 16325 | 19445 | 13596         | 15409 | 16415          | 19571 |
| Scientific research and development  | 17234 | 19367 | 10102         | 11923 | 38998          | 40294 |
| Other professional, scientific and technical activities                              | 19957 | 21663 | 11327         | 12568 | 19994          | 21702 |
| Administrative and support service activities  | 9996  | 10843 | 6605          | 7251  | 10492          | 11478 |
| Public administration and defence, compulsory social security                        | 13881 | 15232 | 13881         | 15232 | x              | x     |
| Education  | 12104 | 13450 | 12068         | 13389 | 12690          | 14441 |
| Human health services  | 14051 | 15390 | 13500         | 14625 | 15251          | 17105 |
| Residential care and social work activities  | 7926  | 8795  | 7583          | 8532  | 10847          | 11380 |
| Arts, entertainment and recreation   | 10437 | 12200 | 9737          | 10943 | 10867          | 13093 |
| Other services   | 8244  | 9593  | 8641          | 9404  | 8228           | 9601  |



## **IV. EDUCATION**



## Types of educational institutions

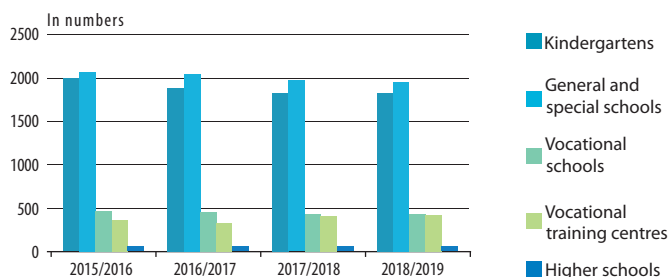
Educational institutions are those institutions, which directly perform training according to educational programmes with students in organized classes (groups) locally or through distance learning. Educational programs in those institutions include all educational stages and/or attainment of professional qualification level. Non-formal education and informal learning do not come into the scope of the educational system, according to used definitions of ISCED 2011.

Types of educational institutions:

- Kindergartens;
- Schools<sup>1</sup> (I - XII grade): primary (I - IV grade), basic (I - VII grade), integrated (I - X grade), gymnasiums (VIII - XII grade), secondary (I - XII grade), vocational (art schools, sport schools, vocational gymnasiums providing training on programs for attainment of third and second level of professional qualification, including religious schools);
- Vocational training centres provide training to persons aged 16 and over in vocational programmes against payment for acquisition of professional qualification, according to the Law on Vocational Education and Training;
- Vocational colleges and vocational gymnasiums carrying out training on programs with admission after completed secondary education;
- Higher schools - colleges, universities and equivalent higher schools. The statistical survey of tertiary education covers all higher schools accredited according to the Law on Higher Education and the private spiritual higher schools, opened by virtue of the Law on Religion.

<sup>1</sup> According to the Pre-school and School Education Act (promulgated SG No. 79 of 13 October 2015).

Figure 1. Educational institutions by type







## 1. Educational institutions by type and form of ownership

(Number)

|  | 2015/2016   |                   | 2016/2017   |                   | 2017/2018 <sup>1</sup> |                   | 2018/2019   |                   |
|--|-------------|-------------------|-------------|-------------------|------------------------|-------------------|-------------|-------------------|
|  | Total       | Of which: Private | Total       | Of which: Private | Total                  | Of which: Private | Total       | Of which: Private |
| <b>Total</b>                               | <b>4964</b> | <b>581</b>        | <b>4778</b> | <b>547</b>        | <b>4711</b>            | <b>633</b>        | <b>4699</b> | <b>639</b>        |
| <b>Kindergartens</b>                       | <b>2002</b> | <b>92</b>         | <b>1894</b> | <b>93</b>         | <b>1834</b>            | <b>98</b>         | <b>1834</b> | <b>101</b>        |
| <b>General and special schools</b>         | <b>2078</b> | <b>70</b>         | <b>2051</b> | <b>75</b>         | <b>1979</b>            | <b>76</b>         | <b>1964</b> | <b>78</b>         |
| Primary (I - IV grade)                     | 152         | 7                 | 146         | 8                 | 137                    | 6                 | 131         | 4                 |
| Basic (I - VIII grade)                     | 1381        | 31                | 1345        | 31                | x                      | x                 | x           | x                 |
| Basic (I - VII grade)                      | x           | x                 | x           | x                 | 1203                   | 27                | 1177        | 31                |
| Lower secondary (V - VIII grade)           | 7           | 1                 | 4           | -                 | x                      | x                 | x           | x                 |
| Integrated (I - X grade)                   | x           | x                 | x           | x                 | 59                     | -                 | 68          | -                 |
| Upper secondary (IX - XII grade)           | 133         | 23                | 128         | 22                | x                      | x                 | x           | x                 |
| Upper secondary (VIII - XII grade)         | x           | x                 | x           | x                 | 117                    | 18                | 115         | 18                |
| Secondary (I - XII grade)                  | 405         | 8                 | 428         | 14                | 463                    | 25                | 473         | 25                |
| <b>Vocational schools</b>                  | <b>469</b>  | <b>50</b>         | <b>454</b>  | <b>46</b>         | <b>434</b>             | <b>38</b>         | <b>430</b>  | <b>33</b>         |
| Art schools                                | 22          | 1                 | 22          | 1                 | 22                     | 1                 | 21          | -                 |
| Sport schools                              | 24          | -                 | 24          | -                 | 24                     | -                 | 25          | -                 |
| Vocational gymnasiums                      | 387         | 15                | 373         | 12                | 359                    | 10                | 359         | 10                |
| Vocational colleges                        | 36          | 34                | 35          | 33                | 29                     | 27                | 25          | 23                |
| <b>Vocational Training Centres</b>         | <b>361</b>  | <b>352</b>        | <b>325</b>  | <b>316</b>        | <b>410</b>             | <b>404</b>        | <b>417</b>  | <b>410</b>        |
| <b>Higher schools<sup>2</sup></b>          | <b>54</b>   | <b>17</b>         | <b>54</b>   | <b>17</b>         | <b>54</b>              | <b>17</b>         | <b>54</b>   | <b>17</b>         |
| Universities and equivalent higher schools | 50          | 13                | 50          | 13                | 50                     | 13                | 50          | 13                |
| Colleges, at the universities              | 18          | -                 | 17          | -                 | 17                     | -                 | 17          | -                 |
| Independent colleges                       | 4           | 4                 | 4           | 4                 | 4                      | 4                 | 4           | 4                 |

<sup>1</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

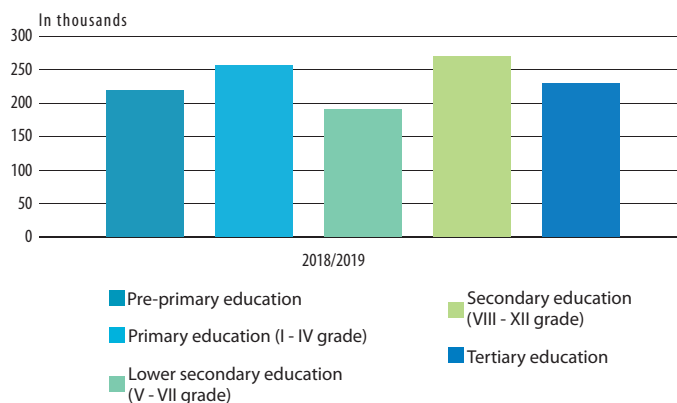
<sup>2</sup> Includes universities and equivalent higher schools and independent colleges.

## Enrolled students

The methodology of educational statistics is built on the basis of the International Standard Classification of Education (ISCED), revision 2011, and the concomitant methodological guidelines:

- Pre-primary education in kindergartens (educational level ISCED - 0);
- Primary and lower secondary education, secondary education in all types of schools and vocational education after secondary education in vocational colleges (educational levels ISCED - 1, 2, 3 and 4). The data after the school year 2017/2018 are not comparable to the previous school years due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015);
- Vocational training against payment for acquisition of professional qualification in centres for vocational training, vocational gymnasiums and vocational colleges (educational levels ISCED - 2, 3 and 4);
- Tertiary education for acquiring the educational qualification degrees 'Professional bachelor', 'Bachelor' and 'Master' in colleges, universities and equivalent higher schools (educational level ISCED - 6 and 7);
- Tertiary education for acquiring the educational and scientific degree 'Doctor' in universities, equivalent higher schools and scientific organizations (educational level ISCED - 8).

Figure 2. Enrolments by level of education





## 2. Pupils and students by level of International Standard Classification of Education (ISCED 2011)

(Number)

|   | 2015/2016      |                   | 2016/2017      |                   | 2017/2018 <sup>1</sup> |                   | 2018/2019      |                   |
|---|----------------|-------------------|----------------|-------------------|------------------------|-------------------|----------------|-------------------|
|   | Total          | Of which: Private | Total          | Of which: Private | Total                  | Of which: Private | Total          | Of which: Private |
| <b>Total</b>  | <b>1249109</b> | <b>57388</b>      | <b>1225703</b> | <b>56056</b>      | <b>1210704</b>         | <b>64117</b>      | <b>1186933</b> | <b>62888</b>      |
| Pre-primary education (ISCED - 0)   | 232025         | 3333              | 224380         | 3838              | 220877                 | 4007              | 218767         | 4606              |
| Primary education (I - IV grade, ISCED - 1)   | 261969         | 2860              | 264503         | 3432              | 262735                 | 3885              | 256857         | 4292              |
| Lower secondary and secondary education (V - VII grade and VIII - XII grade, ISCED - 2, 3) <sup>2</sup> | 477958         | 5213              | 474598         | 5480              | 466794                 | 5901              | 460499         | 6260              |
| Vocational training for adults - first level professional qualification (ISCED - 2)                     | 4593           | 3357              | 5851           | 5018              | 10369                  | 8513              | 9144           | 8586              |
| Vocational training for adults - second level professional qualification (ISCED - 3)                    | 2109           | 1462              | 2834           | 2090              | 6313                   | 5598              | 6170           | 5543              |
| Vocational training for adults - third level professional qualification (ISCED - 3)                     | 2427           | 1814              | 2303           | 1341              | 6189                   | 5181              | 5144           | 4336              |
| Post secondary non-tertiary education (ISCED - 4)   | 1308           | 1161              | 1261           | 846               | 1047                   | 611               | 830            | 634               |
| Vocational training for adults - fourth level professional qualification (ISCED - 4)                    | 13             | -                 | 36             | 33                | 45                     | 45                | 58             | 58                |
| Tertiary education (ISCED - 6, 7, 8)  | 266707         | 38188             | 249937         | 33978             | 236335                 | 30376             | 229464         | 28573             |
| Educational-qualification degree 'Professional bachelor' (ISCED - 6)                                    | 11619          | 3354              | 10335          | 2375              | 8527                   | 1622              | 8181           | 1501              |
| Educational-qualification degree 'Bachelor' (ISCED - 6)   | 166746         | 24794             | 155237         | 22303             | 146564                 | 20335             | 141505         | 19422             |
| Educational-qualification degree 'Master' (ISCED - 7)   | 81592          | 9844              | 77627          | 9036              | 74680                  | 8126              | 73311          | 7395              |
| Educational and scientific degree 'Doctor' (ISCED - 8)  | 6750           | 196               | 6738           | 264               | 6564                   | 293               | 6467           | 255               |

<sup>1</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

<sup>2</sup> The data on secondary education are presented combined, because additional classification of educational programmes to levels of ISCED 2011 is needed.

## Teachers by teaching levels

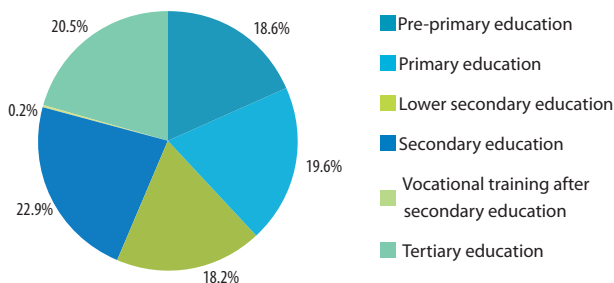
The teachers (academic staff) are official persons who directly conduct the training sessions according to the curricula irrespective of whether they are full-time or part-time employees.

The management personnel include officials performing managerial functions at the level of the educational institution - principals, assistant principals with teaching responsibilities, rectors, deans and their assistants, head of departments.

The number of the teaching staff includes teachers and management personnel with teaching activity.

Teachers in primary and secondary education are grouped by levels of teaching and by programme orientation (general education or vocational). In the cases when a teacher teaches at different levels, he/she is classified at the level where he/she has more school hours. The data after the school year 2017/2018 are not comparable to the previous school years due to changes in the national education system.

Figure 3. Structure of the teachers by teaching levels in 2018/2019





### 3. Teaching staff by level of International Standard Classification of Education (ISCED 2011)

|   | (Number)      |               |                        |               |
|---|---------------|---------------|------------------------|---------------|
|   | 2015/2016     | 2016/2017     | 2017/2018 <sup>1</sup> | 2018/2019     |
| <b>Total</b>  | <b>101294</b> | <b>102335</b> | <b>104374</b>          | <b>106244</b> |
| Pre-primary education (ISCED - 0)   | 20420         | 19909         | 19617                  | 19799         |
| Primary education (I - IV grade, ISCED -1)  | 15050         | 17564         | 19412                  | 20854         |
| Lower secondary and upper secondary education (V - VII grade and VIII-XII grade, ISCED - 2, 3) <sup>2</sup> | 42860         | 42334         | 43205                  | 43626         |
| Post secondary non-tertiary (ISCED - 4)   | 360           | 305           | 226                    | 209           |
| Tertiary education (ISCED - 6, 7)   | 22604         | 22223         | 21914                  | 21756         |
| Educational-qualification degree 'Professional bachelor' (ISCED - 6)  | 725           | 768           | 707                    | 692           |
| Education in universities and equivalent higher schools (ISCED - 6, 7)                                      | 21879         | 21455         | 21207                  | 21064         |

<sup>1</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

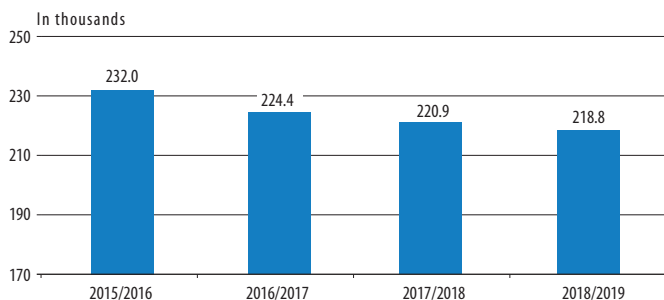
<sup>2</sup> The data on secondary education are presented combined, because additional classification of educational programmes to levels of ISCED 2011 is needed.

## Kindergartens

The kindergartens are: all-day, half-day, as well as groups for children with special educational needs. The age of the children covered in kindergartens is 3 - 6 years. Pre-primary education in preparatory groups or in a preparatory grade before I grade is compulsory.

The average number of children per one teacher for the country is 12 and per one group - 24 for the school year 2018/2019.

Figure 4. Children in kindergartens





## 4. Kindergartens

(Number)

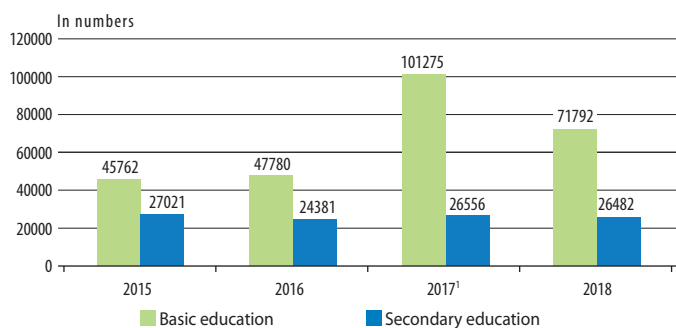
|                                     | 2015/2016         | 2016/2017     | 2017/2018     | 2018/2019     |
|-------------------------------------|-------------------|---------------|---------------|---------------|
|                                     | Kindergartens     |               |               |               |
| <b>Total</b>                        | <b>2002</b>       | <b>1894</b>   | <b>1834</b>   | <b>1834</b>   |
| Permanent                           | 2002              | 1894          | 1834          | 1834          |
| All-day                             | 1998              | 1890          | 1831          | 1831          |
| Half-day                            | 4                 | 4             | 3             | 3             |
| Seasonal                            | -                 | -             | -             | -             |
|                                     | Teaching staff    |               |               |               |
| <b>Total</b>                        | <b>20420</b>      | <b>19909</b>  | <b>19617</b>  | <b>19799</b>  |
| of which: Teachers in kindergartens | 19115             | 18666         | 18370         | 18544         |
| Permanent                           | 20418             | 19907         | 19615         | 19796         |
| All-day                             | 19323             | 18853         | 18672         | 18889         |
| Half-day                            | 1095              | 1054          | 943           | 907           |
| Seasonal                            | 2                 | 2             | 2             | 3             |
|                                     | Children enrolled |               |               |               |
| <b>Total</b>                        | <b>232025</b>     | <b>224380</b> | <b>220877</b> | <b>218767</b> |
| Permanent                           | 231996            | 224356        | 220830        | 218740        |
| All-day                             | 212647            | 207000        | 205301        | 204147        |
| Half-day                            | 19349             | 17356         | 15529         | 14593         |
| Seasonal                            | 29                | 24            | 47            | 27            |

## General schools

General schools are non-profiled and profiled (foreign languages, natural sciences and mathematics, humanitarian and arts). The data about the number of students is provided by grade groups.

Graduates are those students who have received a document for a completed level from a legitimate educational institution, containing all the necessary records and stamps according to the law.

Figure 5. General education school graduates



<sup>1</sup> In 2017 lower secondary education attained all VII grade graduates, VIII grade graduates in unprofiled classes and IX grade graduates in profiled classes with admission after VII grade. The data are not comparable to the previous school years.





## 5. Students in general schools by groups of grades and mode of attendance

(Number)

|  | 2015/2016     | 2016/2017     | 2017/2018 <sup>1</sup> | 2018/2019     |
|--|---------------|---------------|------------------------|---------------|
| <b>Total</b>                                       | <b>602277</b> | <b>605729</b> | <b>587836</b>          | <b>581267</b> |
| I - IV grade                                       | 260557        | 263218        | 262476                 | 256618        |
| of which: Evening courses and extra-mural training | 705           | 364           | 673                    | 361           |
| V - VIII grade                                     | 212366        | 213488        | x                      | x             |
| of which: Evening courses and extra-mural training | 4836          | 4410          | x                      | x             |
| V - VII grade                                      | x             | x             | 189459                 | 190033        |
| of which: Evening courses and extra-mural training | x             | x             | 2877                   | 2104          |
| IX - XII grade <sup>2</sup>                        | 129354        | 129023        | x                      | x             |
| of which: Evening courses and extra-mural training | 4466          | 4307          | x                      | x             |
| VIII - XII grade                                   | x             | x             | 135901                 | 134616        |
| of which: Evening courses and extra-mural training | x             | x             | 4054                   | 3127          |

<sup>1</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

<sup>2</sup> Incl. VIII grade of foreign languages secondary schools and other specialized secondary schools with selection after VII grade.

## 6. Graduates from general schools

(Number)

|                 | 2015  | 2016  | 2017 <sup>1</sup> | 2018  |
|-----------------|-------|-------|-------------------|-------|
| Basic           | 45762 | 47780 | 101275            | 71792 |
| Upper secondary | 27021 | 24381 | 26556             | 26482 |

<sup>1</sup> In 2017 lower secondary education attained all VII grade graduates, VIII grade graduates in unprofiled classes and IX grade graduates in profiled classes with admission after VII grade. The data are not comparable to the previous school years.

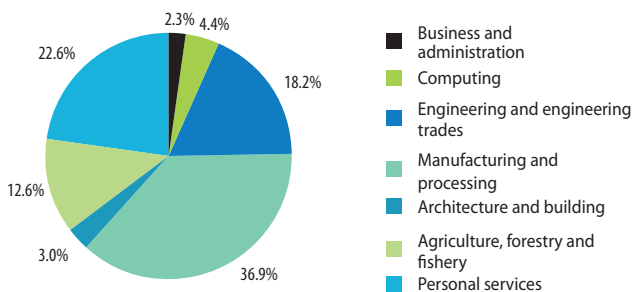
## Vocational training - I level

The training for attainment of first level professional qualification is conducted in vocational classes with duration up to three years.

The number of graduates includes students who successfully passed the exams and received certificates for the first level of professional qualification.

The distribution of students and graduates in programmes for acquiring all the levels of professional qualification by narrow fields of education is presented according to the **Classification of the Fields of Education and Training**, approved by the president of NSI and published in State Gazette, No. 91/09.11.2007.

Figure 6. Structure of the students by narrow fields of education in programmes for the attainment of a first level of professional qualification for the school year 2018/2019





## 7. Students in programmes for attainment of a first level professional qualification by narrow fields

(Number)

| Narrow fields                      | 2015/2016   | 2016/2017   | 2017/2018   | 2018/2019   |
|------------------------------------|-------------|-------------|-------------|-------------|
| <b>Total</b>                       | <b>3259</b> | <b>3416</b> | <b>2436</b> | <b>2493</b> |
| Business and administration        | -           | 15          | 18          | 57          |
| Computing                          | 58          | 86          | 88          | 110         |
| Engineering and engineering trades | 652         | 725         | 456         | 453         |
| Manufacturing and processing       | 1521        | 1382        | 828         | 921         |
| Architecture and building          | 116         | 115         | 58          | 75          |
| Agriculture, forestry and fishery  | 417         | 543         | 317         | 313         |
| Personal services                  | 495         | 550         | 671         | 564         |

## 8. Graduates of first level professional qualification by narrow fields

(Number)

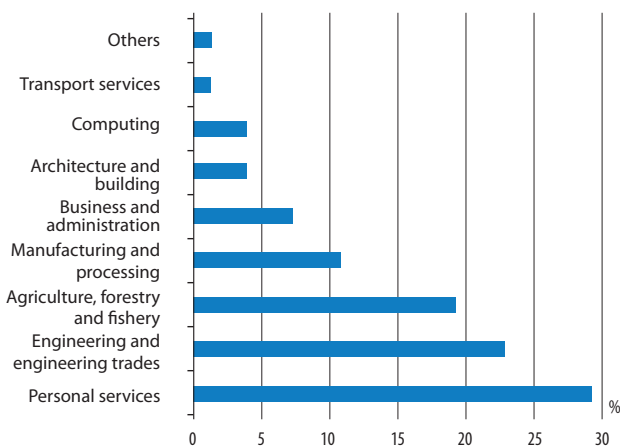
| Narrow fields                      | 2015       | 2016        | 2017       | 2018       |
|------------------------------------|------------|-------------|------------|------------|
| <b>Total</b>                       | <b>378</b> | <b>1011</b> | <b>413</b> | <b>530</b> |
| Business and administration        | -          | -           | 10         | -          |
| Computing                          | 5          | 71          | 13         | 14         |
| Engineering and engineering trades | 54         | 171         | 101        | 132        |
| Manufacturing and processing       | 222        | 381         | 147        | 177        |
| Architecture and building          | 6          | 39          | -          | 17         |
| Agriculture, forestry and fishery  | 30         | 162         | 62         | 80         |
| Personal services                  | 61         | 187         | 80         | 110        |

## Vocational training - II level

Training for acquiring second level of professional qualification is carried out in vocational gymnasiums and vocational classes in general schools and has duration of 4 years.

Secondary education graduates and students having attained the second level of professional qualification in vocational gymnasiums are eligible to continue their education in tertiary schools or to start work in acquired occupation (specialty).

Figure 7. Structure of the students by narrow fields of education in programmes for the attainment of a second level of professional qualification for the school year 2018/2019





## 9. Students in programmes for attainment of second level professional qualification by narrow fields

(Number)

| Narrow fields                      | 2015/2016    | 2016/2017    | 2017/2018 <sup>1</sup> | 2018/2019    |
|------------------------------------|--------------|--------------|------------------------|--------------|
| <b>Общо</b>                        | <b>30081</b> | <b>28404</b> | <b>28875</b>           | <b>25364</b> |
| Arts                               | 128          | 195          | 247                    | 150          |
| Business and administration        | 2245         | 2193         | 2146                   | 1857         |
| Computing                          | 1016         | 975          | 968                    | 988          |
| Engineering and engineering trades | 8476         | 7206         | 6968                   | 5805         |
| Manufacturing and processing       | 3508         | 3290         | 3138                   | 2742         |
| Architecture and building          | 1445         | 1594         | 1459                   | 989          |
| Agriculture, forestry and fishery  | 6076         | 5809         | 5965                   | 4887         |
| Health                             | 33           | 51           | 115                    | 181          |
| Social services                    | -            | -            | 33                     | 19           |
| Personal services                  | 7006         | 6886         | 7598                   | 7424         |
| Transport services                 | 148          | 205          | 238                    | 322          |

<sup>1</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

## 10. Graduates from programmes for attainment of second level professional qualification by narrow fields

(Number)

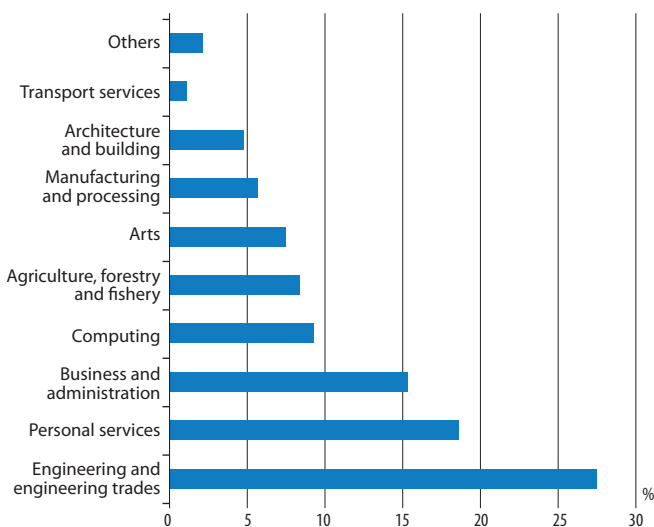
| Narrow fields                                  | 2015        | 2016        | 2017        | 2018        |
|--|-------------|-------------|-------------|-------------|
| <b>Graduates in secondary education</b>        | <b>4014</b> | <b>3376</b> | <b>3566</b> | <b>3560</b> |
| <b>Attainments in vocational qualification</b> | <b>3725</b> | <b>2938</b> | <b>2946</b> | <b>2518</b> |
| Arts   | 13          | 21          | 11          | 10          |
| Business and administration                    | 410         | 344         | 314         | 234         |
| Computing                                      | 122         | 139         | 153         | 147         |
| Engineering and engineering trades             | 981         | 656         | 708         | 554         |
| Manufacturing and processing                   | 470         | 343         | 256         | 244         |
| Architecture and building                      | 102         | 85          | 97          | 62          |
| Agriculture, forestry and fishery              | 690         | 465         | 577         | 325         |
| Personal services                              | 937         | 885         | 812         | 900         |
| Transport services                             | -           | -           | 18          | 42          |

## Vocational training - III level

Vocational gymnasiums, art schools, sport schools and vocational classes in general schools provide vocational training for acquisition of third level of professional qualification with duration of four or five years. They enrol students with completed VII grade/VIII grade.

Secondary education graduates and students having attained third level of professional qualification in vocational gymnasiums, art schools and sport schools are eligible to continue their education in tertiary schools or to start work in the acquired occupation (specialty).

Figure 8. Structure of the students by narrow fields of education in programmes for the attainment of a third level of professional qualification for the school year 2018/2019





## 11. Students in programmes for attainment of third level professional qualification by narrow fields

(Number)

| Narrow fields                                  | 2015/2016     | 2016/2017    | 2017/2018 <sup>1</sup> | 2018/2019     |
|--|---------------|--------------|------------------------|---------------|
| <b>Total</b>                                   | <b>100930</b> | <b>98355</b> | <b>109663</b>          | <b>107542</b> |
| Arts   | 6559          | 6770         | 7440                   | 8015          |
| Humanities                                     | 404           | 381          | 420                    | 411           |
| Journalism, mass communication and information | 53            | 60           | 56                     | 62            |
| Business and administration                    | 17732         | 17257        | 17418                  | 16439         |
| Physical sciences                              | -             | -            | -                      | 8             |
| Computing                                      | 7540          | 7960         | 9224                   | 9950          |
| Engineering and engineering trades             | 28791         | 28002        | 30438                  | 29508         |
| Manufacturing and processing                   | 5996          | 5523         | 6563                   | 6088          |
| Architecture and building                      | 5606          | 5071         | 5223                   | 5085          |
| Agriculture, forestry and fishery              | 7656          | 7358         | 9258                   | 8987          |
| Veterinary                                     | 885           | 864          | 936                    | 868           |
| Health   | 55            | 125          | 199                    | 238           |
| Social services                                | 275           | 246          | 357                    | 284           |
| Personal services                              | 17922         | 17423        | 20603                  | 20013         |
| Transport services                             | 901           | 882          | 1093                   | 1172          |
| Environmental protection                       | 542           | 430          | 395                    | 342           |
| Security services                              | 13            | 3            | 40                     | 72            |

<sup>1</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

## 12. Graduates from programmes for attainment of third level professional qualification by narrow fields

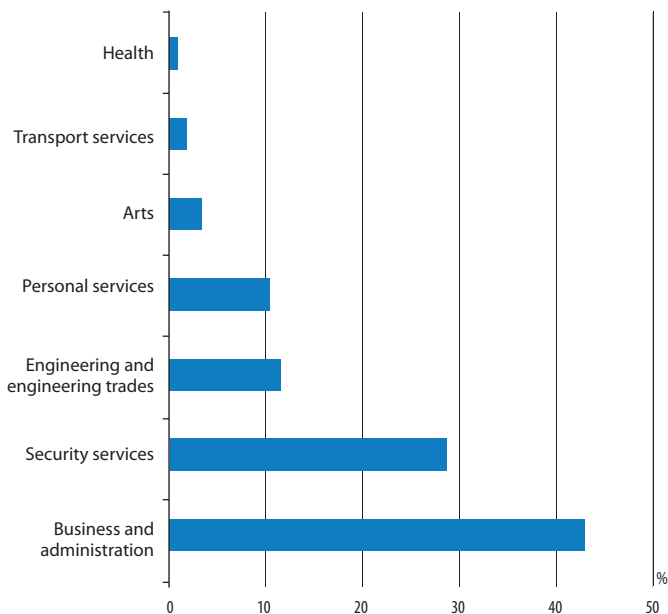
(Number)

| Narrow fields                                  | 2015         | 2016         | 2017         | 2018         |
|--|--------------|--------------|--------------|--------------|
| <b>Graduates in secondary education</b>        | <b>19291</b> | <b>17202</b> | <b>18148</b> | <b>19445</b> |
| <b>Attainments in vocational qualification</b> | <b>14742</b> | <b>13076</b> | <b>13192</b> | <b>13364</b> |
| Arts   | 921          | 856          | 990          | 975          |
| Humanities                                     | 33           | 58           | 70           | 32           |
| Journalism, mass communication and information | -            | 5            | 10           | 10           |
| Business and administration                    | 3205         | 2820         | 2697         | 2845         |
| Computing                                      | 1145         | 1051         | 1154         | 1222         |
| Engineering and engineering trades             | 4149         | 3629         | 3289         | 3338         |
| Manufacturing and processing                   | 654          | 583          | 690          | 539          |
| Architecture and building                      | 800          | 700          | 611          | 575          |
| Agriculture, forestry and fishery              | 952          | 732          | 822          | 921          |
| Veterinary                                     | 139          | 129          | 167          | 137          |
| Social services                                | 39           | 48           | 65           | 71           |
| Personal services                              | 2347         | 2285         | 2454         | 2552         |
| Transport services                             | 203          | 113          | 106          | 88           |
| Environmental protection                       | 155          | 61           | 64           | 58           |
| Security services                              | -            | 6            | 3            | 1            |

## Vocational training - IV level

The vocational colleges and vocational gymnasiums provide vocational training for acquisition of fourth level of professional qualification with duration of up to two years. They enrol students with completed secondary education.

Figure 9. Structure of the students by narrow fields of education in programmes for the attainment of a fourth level of professional qualification giving in the school year 2018/2019







### 13. Students in programmes for attainment of fourth level professional

(Number)

| Narrow fields                      | 2015/2016   | 2016/2017   | 2017/2018   | 2018/2019  |
|------------------------------------|-------------|-------------|-------------|------------|
| <b>Total</b>                       | <b>1308</b> | <b>1261</b> | <b>1047</b> | <b>830</b> |
| Arts                               | 32          | 49          | 30          | 29         |
| Humanities                         | 48          | -           | -           | -          |
| Business and administration        | 623         | 482         | 312         | 356        |
| Engineering and engineering trades | 125         | 104         | 101         | 96         |
| Health                             | 5           | 13          | 13          | 8          |
| Personal services                  | 244         | 130         | 82          | 87         |
| Transport services                 | 1           | 5           | 5           | 16         |
| Security services                  | 230         | 478         | 504         | 238        |

### 14. Graduates from programmes for attainment of fourth level professional qualification by narrow fields

(Number)

| Narrow fields                      | 2015       | 2016       | 2017       | 2018       |
|------------------------------------|------------|------------|------------|------------|
| <b>Total</b>                       | <b>661</b> | <b>711</b> | <b>691</b> | <b>783</b> |
| Arts                               | 16         | 17         | 8          | 16         |
| Humanities                         | 30         | -          | -          | -          |
| Business and administration        | 304        | 262        | 291        | 123        |
| Engineering and engineering trades | 49         | 52         | 48         | 31         |
| Health                             | 4          | 3          | 4          | 4          |
| Personal services                  | 140        | 102        | 79         | 35         |
| Security services                  | 118        | 275        | 261        | 574        |

## Tertiary education

Students are persons enrolled in an educational program of formal tertiary education according to ISCED irrespective of the mode of attendance. Formal education includes the educational programmes implemented in the legitimate educational institutions created in compliance with the existing legal order.

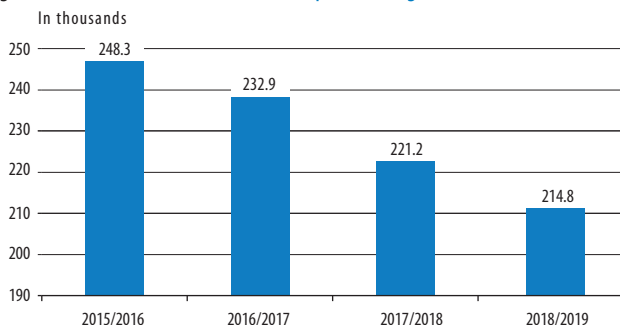
The NSI obtains annually the number of enrolled students by counting the students themselves and not by counting the number of enrolments. For example, according to the current national methodology, students are counted only once in the cases of simultaneous enrolment in two specialties within one university (or college). Double counting is not allowed except in the cases of illicit simultaneous study in two universities.

Graduates with minimal duration of studies of 4 years according to the curriculum are awarded qualification degree 'Bachelor'; the 'Master' qualification degree is awarded to graduates with minimal duration of studies of 5 years or at least one year of studies after the acquisition of 'Bachelor' degree.

The qualification degree 'Professional Bachelor' is a degree of tertiary professional education. It is awarded after the completion of vocational training at college with minimal duration of studies of 3 years.

The 'Doctor' educational and scientific degree is awarded by the Scientific Jury, according to the Law on Development of Academic Staff in the Republic of Bulgaria after minimum 3 years of studies and the successful defence of a doctoral dissertation.

Figure 10. Students in universities and equivalent higher schools





## 15. Students in higher schools

(Number)

|   | 2015/2016     | 2016/2017     | 2017/2018     | 2018/2019     |
|---|---------------|---------------|---------------|---------------|
| <b>Total</b>                                  | <b>259957</b> | <b>243199</b> | <b>229771</b> | <b>222997</b> |
| In universities and equivalent higher schools | 248338        | 232864        | 221244        | 214816        |
| In colleges                                   | 11619         | 10335         | 8527          | 8181          |

16. Graduates from higher education<sup>1</sup>

(Number)

|  | 2015         | 2016         | 2017         | 2018         |
|--|--------------|--------------|--------------|--------------|
| <b>Total</b>   | <b>61276</b> | <b>58919</b> | <b>55428</b> | <b>53115</b> |
| Educational-qualification degree 'Professional bachelor' | 2535         | 2418         | 2175         | 1869         |
| Educational-qualification degree 'Bachelor'              | 31623        | 30895        | 28926        | 27831        |
| Educational-qualification degree 'Master'                | 27118        | 25606        | 24327        | 23415        |

<sup>1</sup> Excl. graduates in educational and scientific degree 'Doctor'.

## 17. PhD students in higher schools and scientific organisations

(Number)

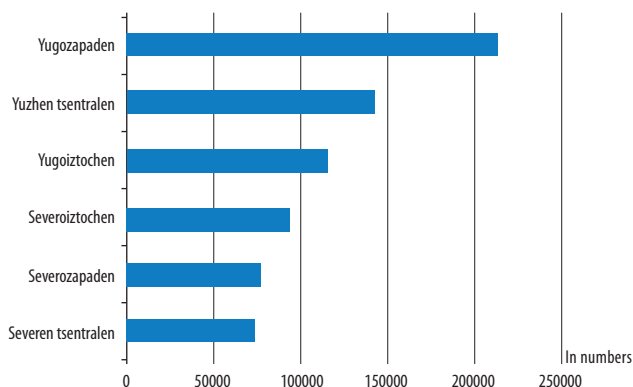
|   | 2015/2016   | 2016/2017   | 2017/2018   | 2018/2019   |
|---|-------------|-------------|-------------|-------------|
| <b>Students</b>   | <b>6750</b> | <b>6738</b> | <b>6564</b> | <b>6467</b> |
| of which: Regular training                              | 3488        | 3421        | 3359        | 3481        |
| Graduates in educational and scientific degree 'Doctor' | 1442        | 1464        | 1423        | 1365        |
| of which: Regular training                              | 548         | 614         | 613         | 594         |

## Schools, teaching staff and students by district

The 'district' administrative and territorial units are presented in accordance with the Territorial Organization Act of the Republic of Bulgaria, which entered into force on 5 February 1999 (28 districts), while the territorial units for statistical purposes 'statistical zones' and 'statistical regions' are presented according to the Classification of Territorial Units for Statistical Purposes in Bulgaria. This classification complies with the NUTS classification of Eurostat and is approved with an Ordinance of the President of the NSI on the basis of Regulation (EC) No. 31/2011 of the Commission of 17 January 2011 on the amendment of Regulation 1059/2003, as well as on art. 9, p. 9 in conjunction with art. 7 (1), p. 6 and p. 15, art. 10 of the Law on Statistics (promulgated State Gazette, No. 13/8 February 2013, into force 12 February 2013).

In a territorial aspect, the highest numbers of students are found in the Yugozapaden and the Yuzhen tsentralen regions, while the Severen tsentralen region has the smallest number of students.

Figure 11. Students by statistical region in the school year 2018/2019





18. Schools, teaching staff and students by statistical zone, statistical region and by district in the school year 2018/2019<sup>1</sup>

| Statistical zones,<br>statistical regions<br>and districts | (Number)    |                   |               |
|--|-------------|-------------------|---------------|
|  | Schools     | Teaching<br>staff | Students      |
| <b>Total</b>   | <b>2394</b> | <b>64689</b>      | <b>718186</b> |
| <i>Severna i Yugoiztochna Bulgaria</i>                     | 1294        | 32662             | 362022        |
| <b>Severozapaden</b>                                       | <b>320</b>  | <b>7236</b>       | <b>77617</b>  |
| Vidin  | 32          | 721               | 8343          |
| Vratsa   | 69          | 1594              | 17264         |
| Lovech   | 54          | 1157              | 13490         |
| Montana  | 60          | 1202              | 13119         |
| Pleven   | 105         | 2562              | 25401         |
| <b>Severen tsentralen</b>                                  | <b>290</b>  | <b>7148</b>       | <b>74292</b>  |
| Veliko Tarnovo   | 85          | 2197              | 21780         |
| Gabrovo  | 31          | 847               | 9892          |
| Razgrad  | 59          | 1150              | 11898         |
| Ruse   | 70          | 1980              | 20124         |
| Silistra   | 45          | 974               | 10598         |
| <b>Severoiztochen</b>                                      | <b>311</b>  | <b>8857</b>       | <b>94248</b>  |
| Varna  | 127         | 4376              | 49514         |
| Dobrich  | 69          | 1560              | 15992         |
| Targovishte  | 50          | 1092              | 11029         |
| Shumen   | 65          | 1829              | 17713         |
| <b>Yugoiztochen</b>  | <b>373</b>  | <b>9421</b>       | <b>115865</b> |
| Burgas   | 137         | 3624              | 45920         |
| Sliven   | 71          | 1731              | 21567         |
| Stara Zagora   | 121         | 3016              | 34678         |
| Yambol   | 44          | 1050              | 13700         |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>            | 1100        | 32027             | 356164        |
| <b>Yugozapaden</b>   | <b>585</b>  | <b>18965</b>      | <b>213500</b> |
| Blagoevgrad  | 126         | 3080              | 34626         |
| Kyustendil   | 41          | 978               | 10990         |
| Pernik   | 40          | 1082              | 11125         |
| Sofia  | 97          | 2155              | 24134         |
| Sofia (stolitsa) <sup>2</sup>                              | 281         | 11670             | 132625        |
| <b>Yuzhen tsentralen</b>                                   | <b>515</b>  | <b>13062</b>      | <b>142664</b> |
| Kardzhali  | 72          | 1526              | 15085         |
| Pazardzhik   | 111         | 2573              | 26158         |
| Plovdiv  | 193         | 5715              | 67854         |
| Smolyan  | 62          | 1268              | 9951          |
| Haskovo  | 77          | 1980              | 23616         |

<sup>1</sup> Excl. higher schools.

<sup>2</sup> Incl. the Bulgarian schools abroad financed by state.



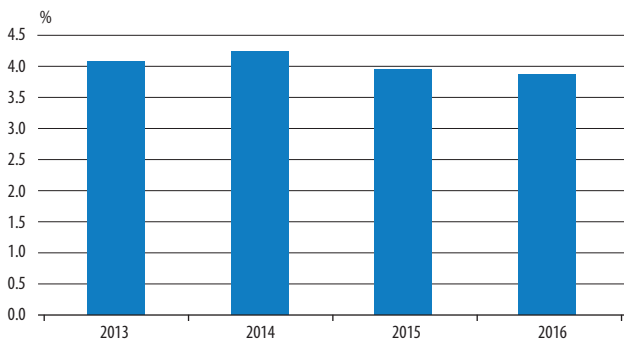
### Coverage rate of educational system and educational expenditure

The 'group net enrolment ratio' indicator aims to show the extent of coverage of the educational system among children and youths belonging to a specific age group corresponding to a given educational level.

The drop-out indicator for the educational system is calculated as a ratio between persons aged 18-24 having attained lower secondary education as a highest and not received any education and training in the four weeks preceding the survey and the total population of the same age group.

Public expenditures on education are calculated according to a common methodology of UNESCO, OECD and Eurostat.

Figure 12. Ratio of public expenditure on education to GDP<sup>1</sup>



<sup>1</sup> The calculations are on the basis of the Eurostat methodology (UOE - finance tables).



## 19. Group net enrolment rates<sup>1</sup> of the population by educational levels of ISCED 2011

(Per cent)

|   | 2015/2016 | 2016/2017 | 2017/2018 <sup>2</sup> | 2018/2019 |
|---|-----------|-----------|------------------------|-----------|
| Pre-primary education (ISCED - 0)   | 81.0      | 79.4      | 78.4                   | 78.4      |
| Primary education (I - IV grade, ISCED-1)   | 93.2      | 92.1      | 90.8                   | 88.4      |
| Lower and upper secondary education (V - VII grade and VIII-XII grade, ISCED - 2, 3) <sup>3</sup> | 79.9      | 79.3      | 82.6                   | 82.5      |
| Post secondary non-tertiary (ISCED - 4)   | 0.2       | 0.1       | 0.1                    | 0.1       |
| Tertiary education (ISCED - 6, 7)   | 41.4      | 41.4      | 41.7                   | 42.0      |

<sup>1</sup> Group rates are calculated in per cents of number of enrolments by levels in age groups 3 - 6, 7 - 10, 11 - 18, 19 - 20, 19 - 21 and 19 - 23 years to number of population in the same age groups.

<sup>2</sup> Break in the time series due to changes in the national education system (Pre-school and School Education Act, promulgated SG No. 79 of 13 October 2015). The data are not comparable to the previous school years.

<sup>3</sup> The data on secondary education are presented combined, because additional classification of educational programmes to levels of ISCED 2011 is needed.

## 20. Early leavers from education and training by sex<sup>1</sup>

(Per cent)

|              | 2015        | 2016        | 2017        | 2018        |
|--------------|-------------|-------------|-------------|-------------|
| <b>Total</b> | <b>13.4</b> | <b>13.8</b> | <b>12.7</b> | <b>12.7</b> |
| Male         | 13.3        | 13.7        | 12.0        | 12.6        |
| Female       | 13.4        | 13.9        | 13.5        | 12.8        |

<sup>1</sup> Source: NSI, Labour Force Survey - annual data.





## **V. CULTURE AND ART**



## Publishing

The national written cultural heritage is expressed in the books, pamphlets, newspapers, magazines, bulletins and periodical collections issued in the country. The statistical reporting for the issued products gives the public an idea of the number of titles and their circulation by different classification groups.

Figure 1. Published titles

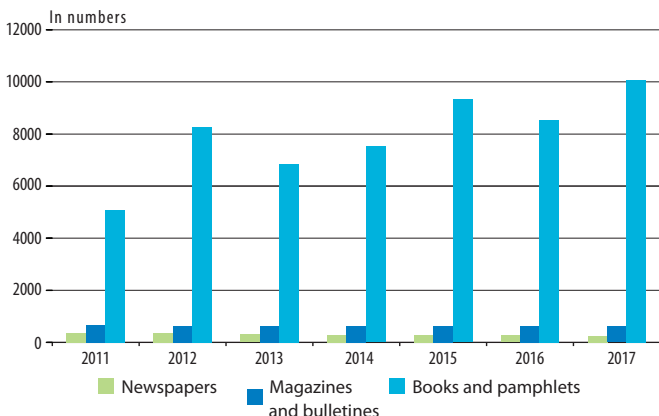
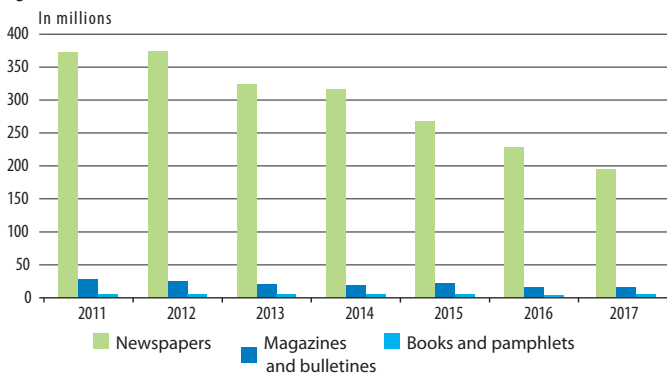


Figure 2. Circulation





## 1. Publishing

|                                  | 2013                    | 2014  | 2015  | 2016  | 2017  |
|----------------------------------|-------------------------|-------|-------|-------|-------|
|                                  | Books and pamphlets     |       |       |       |       |
| Titles - in numbers              | 6853                    | 7515  | 9320  | 8530  | 10068 |
| Circulation - in millions        | 4.4                     | 4.0   | 4.9   | 4.5   | 6.7   |
|                                  | Magazines and bulletins |       |       |       |       |
| Titles - in numbers              | 622                     | 635   | 635   | 634   | 603   |
| Annual circulation - in millions | 20.1                    | 18.4  | 21.4  | 17.3  | 17.0  |
|                                  | Newspapers              |       |       |       |       |
| Titles - in numbers              | 307                     | 295   | 283   | 262   | 245   |
| Annual circulation - in millions | 324.3                   | 315.7 | 267.3 | 229.0 | 196.3 |

## 2. Book and pamphlet production by target group in 2017

| Target group  | Total               |                            | Books               |                            | Pamphlets           |                            |
|---|---------------------|----------------------------|---------------------|----------------------------|---------------------|----------------------------|
|   | Titles - in numbers | Circulation - in thousands | Titles - in numbers | Circulation - in thousands | Titles - in numbers | Circulation - in thousands |
| <b>Total</b>  | <b>10068</b>        | <b>6710</b>                | <b>8640</b>         | <b>4974</b>                | <b>1428</b>         | <b>1735</b>                |
| Socio-political                                       | 136                 | 67                         | 120                 | 64                         | 16                  | 4                          |
| Scientific literature                                 | 1912                | 415                        | 1865                | 408                        | 47                  | 7                          |
| Popular literature for adults                         | 1613                | 928                        | 1487                | 863                        | 126                 | 64                         |
| Scientific-popular for adults                         | 1613                | 928                        | 1487                | 863                        | 126                 | 64                         |
| Professional literature                               | 68                  | 32                         | 64                  | 30                         | 4                   | 3                          |
| Professional production                               | 68                  | 32                         | 64                  | 30                         | 4                   | 3                          |
| Educational literature                                | 1461                | 2030                       | 1322                | 1533                       | 139                 | 497                        |
| High schools, Colleges                                | 794                 | 128                        | 776                 | 125                        | 18                  | 3                          |
| Professional schools and schools of arts              | 2                   | 1                          | 2                   | 1                          | -                   | -                          |
| General and special schools                           | 387                 | 1617                       | 291                 | 1144                       | 96                  | 472                        |
| Educational methodic                                  | 278                 | 285                        | 253                 | 263                        | 25                  | 22                         |
| Fiction for adults                                    | 3292                | 1540                       | 3093                | 1499                       | 199                 | 42                         |
| Children's and juvenile literature                    | 1262                | 1564                       | 404                 | 456                        | 858                 | 1109                       |
| Children's and juvenile fiction                       | 639                 | 636                        | 280                 | 283                        | 359                 | 353                        |
| Children's and juvenile popular scientific literature | 623                 | 928                        | 124                 | 173                        | 499                 | 755                        |
| Official documents                                    | 139                 | 51                         | 137                 | 51                         | 2                   | 0                          |
| Reference literature                                  | 185                 | 83                         | 148                 | 72                         | 37                  | 10                         |



### Performing arts and cinemas

The NSI observes the activities of the theatres, operas, operettas and musical theatres, and of the music and dance formations (philharmonic orchestras, ensembles for folk songs and dances and orchestras), their audience capacity, attendance and number of performances. The number of visits in theatres in the last four years remains relatively constant.

The number of ordinary cinemas in the country has increased from 55 in 2015 to 69 in 2018. In 2018, the number of screens was 226 and remained the same as the previous year.

Figure 3. **Attendances in the theatres**

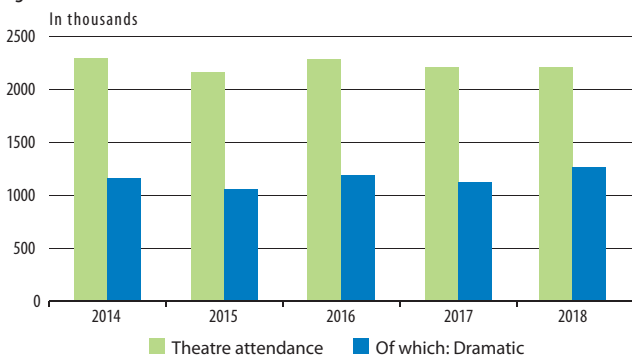
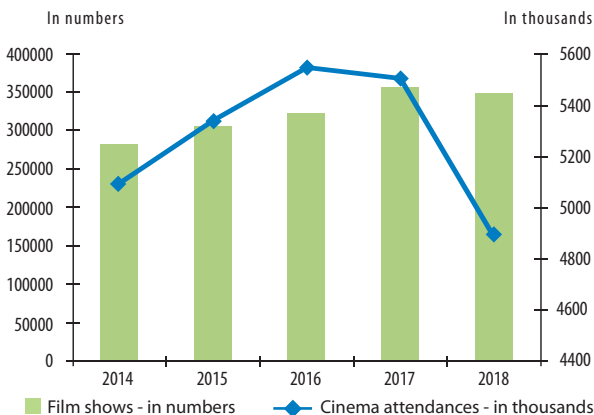


Figure 4. **Cinema attendances and film shows**





### 3. Theatres

|                                     | 2015 | 2016 | 2017 | 2018 |
|-------------------------------------|------|------|------|------|
| Theatres - in numbers               | 75   | 75   | 74   | 75   |
| Capacity - in thousands             | 30.0 | 29.1 | 29.4 | 29.9 |
| Theatre performances - in thousands | 14.2 | 15.2 | 15.3 | 15.2 |
| Theatre attendance - in millions    | 2.2  | 2.3  | 2.2  | 2.4  |

### 4. Cinemas

|                                   | 2015   | 2016   | 2017   | 2018   |
|-----------------------------------|--------|--------|--------|--------|
| Cinemas - in numbers              | 55     | 59     | 68     | 69     |
| Film shows - in numbers           | 305989 | 321842 | 356385 | 348959 |
| Cinema attendances - in thousands | 5341   | 5548   | 5506   | 4885   |

### 5. Film production

(Number)

| Films by kind                         | 2015       | 2016       | 2017       | 2018      |
|---------------------------------------|------------|------------|------------|-----------|
| <b>Films produced</b>                 | <b>116</b> | <b>106</b> | <b>106</b> | <b>77</b> |
| of which: Television                  | 71         | 45         | 51         | 30        |
| <b>Full-length films</b>              | <b>26</b>  | <b>35</b>  | <b>25</b>  | <b>30</b> |
| Feature films                         | 16         | 22         | 16         | 19        |
| Documentary films                     | 9          | 12         | 8          | 10        |
| Others                                | 1          | 1          | 1          | 1         |
| <b>Short- and medium length films</b> | <b>90</b>  | <b>71</b>  | <b>81</b>  | <b>47</b> |
| Feature films                         | 10         | 8          | 13         | 13        |
| Documentary films                     | 71         | 46         | 56         | 28        |
| Cartoon films                         | 9          | 17         | 12         | 6         |
| Others                                | -          | -          | -          | -         |

## Museums and community clubs

The museum is a cultural and scientific organisation which searches, examines, conserves and makes available for public viewing cultural and natural evidential material with cognitive, educational and aesthetical purposes. The NSI observes all museums open to visits: historical, natural, archaeological, ethnographic museums, art galleries and other exhibitions. For the last year the museum collections (movable cultural property) (incl. those in the main storage fund, as well as in the research and ancillary materials fund, and in the exchange fund) increased by 0.2%, and the number of visitors decreased by 0.5% compared to 2017.

The Community clubs are 'traditional self-governing Bulgarian cultural and educational associations in urban and village areas, which perform public cultural and educational tasks' (Art. 2 (1) of the Act on the community clubs). NSI conducts the survey on the activities of the community clubs every five years.

Figure 5. Museums

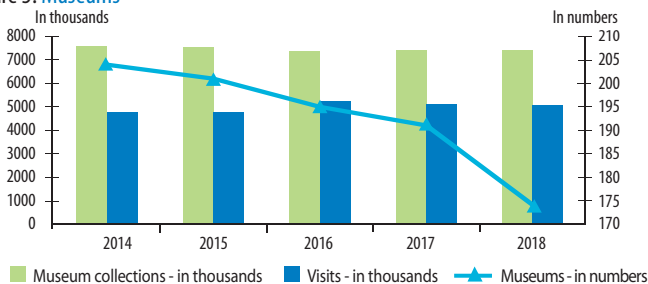
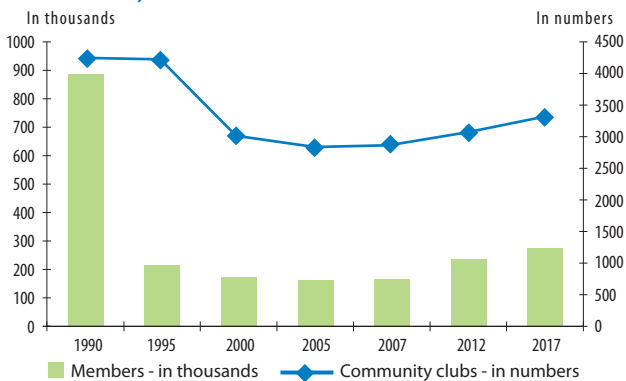


Figure 6. Community clubs and members





## 6. Museums

|  | 2015 | 2016 | 2017 | 2018 |
|--|------|------|------|------|
| Museums - in numbers   | 201  | 195  | 191  | 174  |
| Stocks units - in thousands  | 7540 | 7360 | 7406 | 7419 |
| Electronic units - in thousands  | 328  | 334  | 343  | 368  |
| Visits - in thousands  | 4763 | 5230 | 5109 | 5084 |
| Visits in the day for free entrance - in thousands                             | 1247 | 1223 | 1221 | 1025 |
| Personnel - in numbers   | 3021 | 3150 | 3224 | 3296 |
| of which: Professionals with an academic degree or academic title and curators | 1003 | 1037 | 1009 | 1058 |

## 7. Museums by statistical zone and statistical region in 2018

| Statistical zones and statistical regions       | Income - thousand BGN | Expenditure - thousand BGN | Personnel - in numbers |   |
|---|-----------------------|----------------------------|------------------------|---|
|   |                       |                            | Total                  | Of which: Staff pay roll schemes - in numbers |
| <b>Total</b>                                    | <b>68879</b>          | <b>63275</b>               | <b>3296</b>            | <b>2859</b>                                   |
| <i>Severna i Yugoiztochna Bulgaria</i>          |                       |                            |                        |   |
| Severozapaden                                   | 5013                  | 4608                       | 265                    | 253   |
| Severen tsentralen                              | 10888                 | 10531                      | 585                    | 541   |
| Severoiztochen                                  | 8281                  | 7236                       | 506                    | 334   |
| Yugoiztochen                                    | 9310                  | 8486                       | 390                    | 367   |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i> |                       |                            |                        |   |
| Yugozapaden                                     | 26401                 | 23805                      | 1096                   | 946   |
| Yuzhen tsentralen                               | 8987                  | 8608                       | 454                    | 418   |

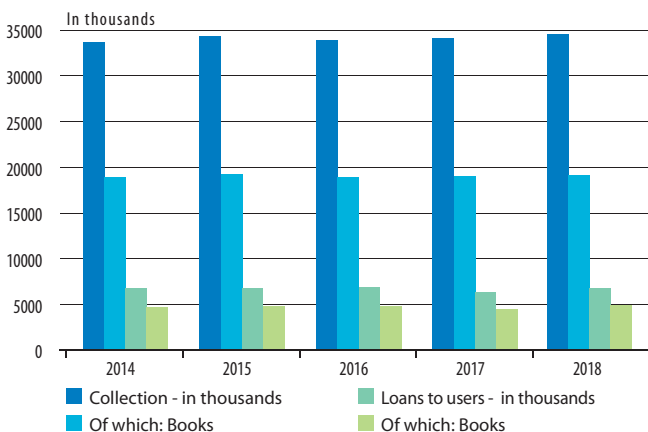
## 8. Community clubs

|                         | 2005 | 2007 | 2012 | 2017 |
|-------------------------|------|------|------|------|
| Community clubs - units | 2838 | 2895 | 3075 | 3321 |
| In towns                | 539  | 548  | 587  | 663  |
| In villages             | 2299 | 2347 | 2488 | 2658 |
| Members - in thousands  | 164  | 168  | 238  | 273  |
| In towns                | 68   | 67   | 96   | 111  |
| In villages             | 96   | 101  | 142  | 162  |

## Libraries

Since 2002 the NSI has observed libraries with collection sizes above 200 thousand books. These are the biggest libraries in the country: the ‘St. St. Cyril and Methodius’ National Library, the regional libraries, some larger community club libraries, specialized libraries and libraries at institutions of higher education. At the end of 2018, the 47 libraries had 34 320 thousand library collections. The readers were 239 thousand. The books in libraries increased by 0.4% compared to the previous year. During the period 2015 - 2018, an increase of the visits to these libraries is observed with 9.1% (2015 – 4 184 thousand, 2018 – 4 563 thousand).

Figure 7. Libraries with collection above 200 thousands







## 9. Libraries with collection above 200 thousands

|                               | 2015  | 2016  | 2017  | 2018  |
|-------------------------------|-------|-------|-------|-------|
| Libraries - in numbers        | 48    | 47    | 47    | 47    |
| Collection - in thousands     | 34224 | 33823 | 34054 | 34320 |
| of which: Books               | 19145 | 18823 | 18895 | 18971 |
| Loans to users - in thousands | 6739  | 6816  | 6233  | 6676  |
| of which: Books               | 4733  | 4713  | 4349  | 4978  |
| Users - in thousands          | 235   | 239   | 248   | 239   |

## 10. Libraries by category with collection over 200 thousands in 2018

| Type of libraries                              | Libraries - in numbers | Collections - in thousands |                 | Users - in thousands | Loans to users - in thousands |                 |
|--|------------------------|----------------------------|-----------------|----------------------|-------------------------------|-----------------|
|  |                        | Total                      | Of which: Books |                      | Total                         | Of which: Books |
| <b>Total</b>                                   | <b>47</b>              | <b>34320</b>               | <b>18971</b>    | <b>239</b>           | <b>6676</b>                   | <b>4978</b>     |
| National Library 'St. St. Cyril and Methodius' | 1                      | 8193                       | 1840            | 13                   | 428                           | 128             |
| Non-specialized                                | 26                     | 11899                      | 10083           | 131                  | 3587                          | 2866            |
| Public libraries                               | 4                      | 1017                       | 952             | 9                    | 247                           | 176             |
| Libraries at institutions of higher education  | 12                     | 6697                       | 4668            | 77                   | 2268                          | 1747            |
| Special libraries                              | 4                      | 6514                       | 1429            | 9                    | 146                           | 60              |

## 11. Libraries with collection over 200 thousands by statistical zone and statistical region in 2018

| Statistical zones and statistical regions       | Libraries - in numbers | Collections - in thousands | Users - in thousands | Visitors - in thousands | Loans to users - in thousands |
|---|------------------------|----------------------------|----------------------|-------------------------|-------------------------------|
| <b>Total</b>                                    | <b>47</b>              | <b>34320</b>               | <b>239</b>           | <b>4563</b>             | <b>6676</b>                   |
| <i>Severna i Yugoiztochna Bulgaria</i>          |                        |                            |                      |                         |                               |
| Severozapaden                                   | 5                      | 1471                       | 13                   | 260                     | 474                           |
| Severen tsentralen                              | 9                      | 3397                       | 43                   | 903                     | 1522                          |
| Severoiztochen                                  | 6                      | 2889                       | 35                   | 566                     | 725                           |
| Yugoiztochen                                    | 7                      | 2565                       | 27                   | 395                     | 829                           |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i> |                        |                            |                      |                         |                               |
| Yugozapaden                                     | 13                     | 20706                      | 80                   | 2048                    | 2393                          |
| Yuzhen tsentralen                               | 7                      | 3292                       | 42                   | 392                     | 733                           |

## Radio and television activities

During the period 2015 - 2018 the number of radio stations in Bulgaria decreased with one number (84 in 2015 and respectively 83 in 2018). In 2018 the share of broadcast advertisements was 5.0% of all broadcasts.

The total duration of the broadcasts in 2018 decreased by 0.9% compared to 2017. In 2018 the share of television advertising was 7.8% of all broadcasts.

Figure 8. Structure of radio broadcasts

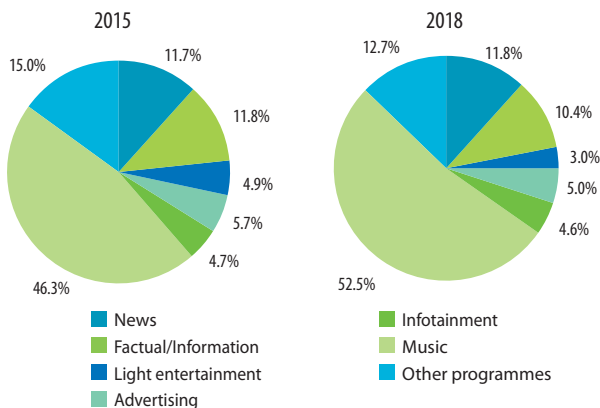
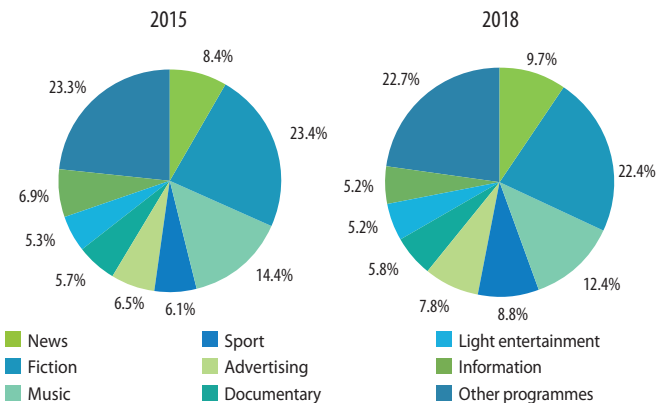


Figure 9. Structure of television broadcasts





## 12. Radio and television operators

|  | 2015       | 2016       | 2017       | 2018       |
|--|------------|------------|------------|------------|
| <b>Radio operators - in numbers</b>      | <b>84</b>  | <b>84</b>  | <b>85</b>  | <b>83</b>  |
| Programmes - in hours                    | 704584     | 676002     | 723559     | 727001     |
| <b>Television operators - in numbers</b> | <b>116</b> | <b>120</b> | <b>117</b> | <b>116</b> |
| Programmes - in hours                    | 731207     | 806938     | 749598     | 742841     |

## 13. Radio programmes by genre

(Hours)

|  | 2015          | 2016          | 2017          | 2018          |
|--|---------------|---------------|---------------|---------------|
| <b>Total</b>                               | <b>704584</b> | <b>676002</b> | <b>723559</b> | <b>727001</b> |
| News                                       | 82507         | 79160         | 87180         | 86040         |
| Factual/Information                        | 82822         | 79462         | 79643         | 75512         |
| Infotainment                               | 33000         | 31661         | 29761         | 33502         |
| Light entertainment                        | 34577         | 33174         | 23250         | 21772         |
| Art and culture                            | 15374         | 14750         | 15670         | 14277         |
| Education                                  | 9340          | 8961          | 9882          | 9025          |
| Science                                    | 2702          | 2592          | 2074          | 2204          |
| Religion                                   | 1239          | 1189          | 1387          | 1467          |
| Dramatic                                   | 425           | 408           | 611           | 577           |
| Sport                                      | 15345         | 14723         | 11115         | 10867         |
| Entertainment                              | 21460         | 20589         | 20866         | 19447         |
| Music                                      | 326414        | 313173        | 360929        | 381613        |
| Serious music programmes (classical music) | 27732         | 26607         | 22015         | 20850         |
| Light music programmes                     | 196211        | 188252        | 254066        | 269550        |
| Other music programmes                     | 102471        | 98314         | 84848         | 91213         |
| Children's-youth's                         | 6096          | 5849          | 5929          | 6538          |
| Regional                                   | 12201         | 11706         | 14854         | 13997         |
| Advertising                                | 39872         | 38255         | 38800         | 36005         |
| Presentation/Promotion                     | 5430          | 5210          | 5369          | 4374          |
| Not classified elsewhere                   | 15780         | 15140         | 16239         | 9784          |

**14. Television programmes by genre**

(Hours)

|                                | 2015          | 2016          | 2017          | 2018          |
|--------------------------------|---------------|---------------|---------------|---------------|
| <b>Total</b>                   | <b>731207</b> | <b>806938</b> | <b>749598</b> | <b>742841</b> |
| News                           | 61696         | 68086         | 68786         | 72091         |
| Information                    | 50280         | 55487         | 40859         | 38713         |
| Live broadcast from Parliament | 2997          | 3307          | 4488          | 4304          |
| Information/Entertainment      | 38912         | 42942         | 41812         | 38589         |
| Topical                        | 22572         | 24910         | 26203         | 25352         |
| Human interest                 | 5015          | 5534          | 3586          | 5939          |
| Art/Humanities/Sciences        | 13508         | 14907         | 12045         | 13177         |
| Education                      | 9232          | 10188         | 9580          | 11996         |
| Religion                       | 6027          | 6651          | 5908          | 5683          |
| Sport                          | 44296         | 48884         | 67767         | 65522         |
| Fiction                        | 171203        | 188934        | 186761        | 166177        |
| Cinematographic films          | 81973         | 90463         | 82506         | 71253         |
| Television or video works      | 89230         | 98471         | 104255        | 94924         |
| Entertainment                  | 14544         | 16050         | 19413         | 23026         |
| Music                          | 105331        | 116240        | 102321        | 92184         |
| Children's                     | 14724         | 16249         | 10852         | 10740         |
| Youth's                        | 3613          | 3987          | 5069          | 4969          |
| Documentary                    | 41758         | 46083         | 44784         | 43040         |
| Regional                       | 7520          | 8299          | 4179          | 4598          |
| Advertising                    | 47355         | 52260         | 47865         | 57589         |
| Teleshopping                   | 11596         | 12797         | 11074         | 14689         |
| Not classified elsewhere       | 59028         | 65141         | 36246         | 44463         |

## **VI. HEALTH**



## Health establishments and medical personnel

The health network includes in-patient and out-patient health establishments as well as other health establishments. Data are presented according to the status at the end of the year. Data on hospital beds include all de facto operating hospital beds as well as hospital beds temporary out of use for a period of less than six months. Hospital beds for temporary use are excluded.

When analyzing the health network data the following has to be taken into account: the number of health establishments and hospital beds has changed not only as a result of the opening or closure of establishments, but also because of the reorganization or merging of establishments.

At the end of 2018 there are 56 408 beds in all types of health establishments available in the country. Health establishments for hospital aid are hospitals, dermato-venereological centres, complex oncological centres, mental health centres. At the end of 2018 the number of health establishments for hospital aid is 346 with 53 103 beds.

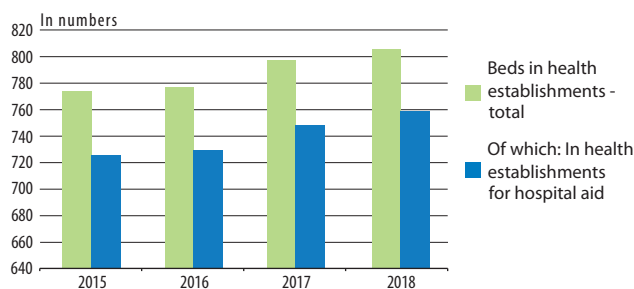
There are 806 beds available per 100 thousand of population in 2018 and 759 hospital beds per 100 thousand inhabitants.

The number of medical personnel (individuals working under basic labour contract) includes persons practicing at healthcare establishments regardless of their ownership and subordination. Data on medical specialists working outside of the country as well as on medical specialists practicing outside of the health establishments (for example, doctors working for the pharmaceutical industry) are excluded.

The indicators on the coverage of the population are calculated based on the population numbers at the end of year.

At the end of 2018, there are 29 965 practicing physicians and 8 396 dentists. The number of physicians and dentists per 10 thousand of the population at the end of 2018 is 42.8 physicians and 12.0 dentists.

Figure 1. Beds per 100 000 of the population





## 1. Health establishments as of 31.12.

(Number)

|   | 2016           |       | 2017           |       | 2018           |       |
|---|----------------|-------|----------------|-------|----------------|-------|
|   | Establishments | Beds  | Establishments | Beds  | Establishments | Beds  |
| Health establishments for hospital aid  | 345            | 51816 | 346            | 52744 | 346            | 53103 |
| Hospitals   | 321            | 49589 | 322            | 50519 | 322            | 50857 |
| Multi profile hospitals   | 181            | 36083 | 184            | 37051 | 185            | 37506 |
| Specialized hospitals   | 140            | 13506 | 138            | 13468 | 137            | 13351 |
| Dermato-venereological centres  | 5              | 50    | 5              | 50    | 5              | 50    |
| Complex oncological centres   | 7              | 1145  | 7              | 1153  | 7              | 1174  |
| Mental health centres   | 12             | 1032  | 12             | 1022  | 12             | 1022  |
| Out-patient health establishments   | 2029           | 1163  | 2043           | 1263  | 2062           | 1231  |
| Diagnostic and consulting centres   | 112            | 272   | 112            | 297   | 114            | 311   |
| Medical centres   | 702            | 825   | 716            | 905   | 733            | 858   |
| Dental centres  | 50             | 13    | 55             | 18    | 52             | 4     |
| Medical-dental centres  | 50             | 53    | 50             | 43    | 50             | 58    |
| Independent medical-diagnosical laboratories and medical-technical laboratories | 1115           | -     | 1110           | -     | 1113           | -     |
| Other health establishments   | 140            | 2193  | 144            | 2179  | 145            | 2074  |
| of which:   |                |       |                |       |                |       |
| Centres for urgent medical aid  | 27             | -     | 27             | -     | 27             | -     |
| Haematological transfusion centres  | 4              | -     | 4              | -     | 4              | -     |
| Hospices  | 45             | 1079  | 47             | 1143  | 47             | 1163  |
| Homes for medical and social care for children                                  | 17             | 1114  | 16             | 1034  | 13             | 909   |

## 2. Medical specialists in health establishments as of 31.12.<sup>1</sup>

(Number)

|                                       | 2015  | 2016  | 2017  | 2018  |
|---------------------------------------|-------|-------|-------|-------|
| Physicians                            | 29073 | 29539 | 30078 | 29965 |
| Per 10 000 population                 | 40.6  | 41.6  | 42.7  | 42.8  |
| Dentists                              | 7512  | 8011  | 8355  | 8396  |
| Per 10 000 population                 | 10.5  | 11.3  | 11.9  | 12.0  |
| Medical specialists on 'Health cares' | 47428 | 46930 | 46702 | 46330 |
| Per 10 000 population                 | 66.3  | 66.1  | 66.2  | 66.2  |
| of which: Nurses                      | 31397 | 30976 | 30955 | 30587 |
| Per 10 000 population                 | 43.9  | 43.6  | 43.9  | 43.7  |

<sup>1</sup> Under basic labour contract.

## Medical personnel by district

The peculiarities of healthcare services from a territorial point of view have to be taken into account during the analysis of data on health establishments and medical personnel. Depending on the specialization of medical activities, the health establishments serve the population of one or more municipalities, districts or of the entire country.

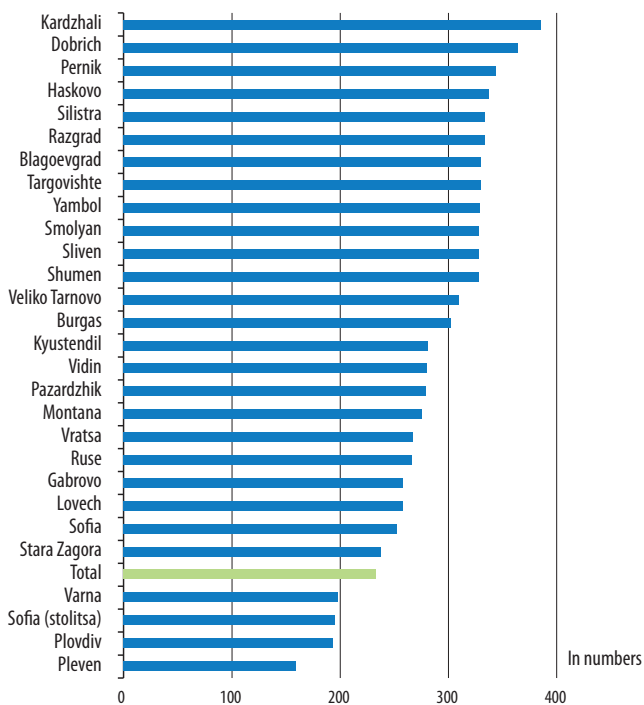
Indicators on the number of population per one physician and per one dentist are calculated based on the number of population at the end of the year.

Totally for the country, there are 234 persons per one physician in 2018.

Compared to the country's average, this indicator is more favourable for the districts Pleven, Sofia (stolitsa), Plovdiv, Varna and Stara Zagora.

The highest number of population served by one physician is registered for the districts of Kardzhali (386 persons) and Dobrich (364).

Figure 2. Population per physician by district at the end of 2018







### 3. Medical care of the population by statistical zone, statistical region and by district as of 31.12.

(Number)

| Statistical zones,<br>statistical regions<br>and districts | Population per |            |            |             |             |             |
|--|----------------|------------|------------|-------------|-------------|-------------|
|  | Physician      |            |            | Dentist     |             |             |
|  | 2016           | 2017       | 2018       | 2016        | 2017        | 2018        |
| <b>Total<sup>1</sup></b>                                   | <b>240</b>     | <b>234</b> | <b>234</b> | <b>887</b>  | <b>844</b>  | <b>834</b>  |
| <i>Severna i Yugoiztochna Bulgaria</i>                     | 268            | 261        | 261        | 1105        | 1069        | 1056        |
| <b>Severozapaden</b>                                       | <b>230</b>     | <b>221</b> | <b>220</b> | <b>1197</b> | <b>1151</b> | <b>1106</b> |
| Vidin  | 286            | 280        | 280        | 838         | 805         | 779         |
| Vratsa   | 262            | 250        | 268        | 1232        | 1158        | 1098        |
| Lovech   | 248            | 250        | 258        | 1154        | 1114        | 1058        |
| Montana  | 283            | 278        | 275        | 1403        | 1363        | 1296        |
| Pleven   | 178            | 167        | 159        | 1292        | 1252        | 1226        |
| <b>Severen tsentralen</b>                                  | <b>307</b>     | <b>298</b> | <b>294</b> | <b>1176</b> | <b>1124</b> | <b>1130</b> |
| Veliko Tarnovo   | 323            | 317        | 310        | 1154        | 1117        | 1122        |
| Gabrovo  | 254            | 263        | 258        | 1031        | 984         | 995         |
| Razgrad  | 381            | 355        | 334        | 1443        | 1404        | 1336        |
| Ruse   | 279            | 268        | 267        | 1054        | 993         | 1007        |
| Silistra   | 342            | 321        | 334        | 1513        | 1436        | 1477        |
| <b>Severoishtochan</b>                                     | <b>259</b>     | <b>248</b> | <b>250</b> | <b>964</b>  | <b>936</b>  | <b>925</b>  |
| Varna  | 207            | 201        | 198        | 767         | 741         | 748         |
| Dobrich  | 370            | 368        | 364        | 1231        | 1167        | 1144        |
| Targovishte  | 351            | 326        | 330        | 1579        | 1679        | 1550        |
| Shumen   | 324            | 292        | 328        | 1237        | 1210        | 1149        |
| <b>Yugoiztochen</b>  | <b>286</b>     | <b>286</b> | <b>285</b> | <b>1138</b> | <b>1111</b> | <b>1106</b> |
| Burgas   | 314            | 313        | 302        | 1221        | 1166        | 1172        |
| Sliven   | 308            | 328        | 328        | 1385        | 1417        | 1392        |
| Stara Zagora   | 234            | 230        | 238        | 968         | 944         | 930         |
| Yambol   | 345            | 336        | 329        | 1092        | 1076        | 1091        |
| <i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>            | 237            | 232        | 232        | 742         | 700         | 693         |
| <b>Yugozapaden</b>   | <b>228</b>     | <b>224</b> | <b>224</b> | <b>753</b>  | <b>701</b>  | <b>687</b>  |
| Blagoevgrad  | 330            | 325        | 331        | 991         | 933         | 925         |
| Kyustendil   | 282            | 272        | 281        | 1029        | 985         | 960         |
| Pernik   | 366            | 367        | 344        | 759         | 737         | 720         |
| Sofia  | 261            | 252        | 252        | 1446        | 1387        | 1309        |
| Sofia (stolitsa)   | 199            | 196        | 195        | 646         | 597         | 587         |
| <b>Yuzhen tsentralen</b>                                   | <b>252</b>     | <b>245</b> | <b>245</b> | <b>727</b>  | <b>700</b>  | <b>702</b>  |
| Kardzhali  | 365            | 379        | 386        | 1143        | 1057        | 1012        |
| Pazardzhik   | 286            | 276        | 280        | 970         | 959         | 994         |
| Plovdiv  | 202            | 195        | 194        | 562         | 543         | 553         |
| Smolyan  | 340            | 322        | 328        | 793         | 766         | 722         |
| Haskovo  | 343            | 342        | 338        | 1019        | 964         | 927         |

<sup>1</sup> Population per physician and per dentist generally for the country is calculated by taking the total number of physicians and dentists incl. those attached to other offices.

## Registered cases of malignant neoplasms and active tuberculosis

The data on the registered cases of malignant neoplasms and active tuberculosis are collected on the basis of the annual statistical reports. The latter are produced according to the notifications issued by the specialized health establishments with respect to such cases. Two indicators are calculated - the prevalence rate and the incidence rate.

The prevalence rate is the ratio between the total number of registered cases (incl. cases registered during previous years) and the average population for the respective year.

The incidence rate is the ratio between the newly registered cases and the average population for the same period.

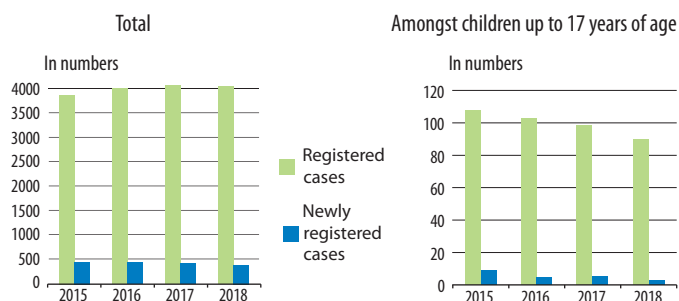
The number of registered cases increases from 3 961 in 2015 to 4 060 in 2018 per 100 thousand of the population. The number of the newly registered cases is 345 per 100 thousand of the population.

The prevalence rate for the malignant neoplasms for children up to 17 years of age is 89 registered cases per 100 thousand children. The incidence rate per 100 thousand children of the respective age group is 3.

In 2018 the prevalence rate for active tuberculosis is 53 per 100 thousand of the population. The incidence rate is 18 per 100 thousand of the population.

The prevalence rate for the children up to 17 and incidence rate is 25 and 2 per 100 thousand children.

Figure 3. Registered and newly registered cases of malignant neoplasms (Per 100 000 population)





#### 4. Registered cases of diseases<sup>1</sup>

|   | 2015                              | 2016          | 2017          | 2018          |
|---|-----------------------------------|---------------|---------------|---------------|
|   | Malignant neoplasms<br>In numbers |               |               |               |
| <b>Total</b>  | <b>284355</b>                     | <b>287682</b> | <b>292721</b> | <b>285251</b> |
| Of which: New registered cases                      | 32097                             | 31041         | 30057         | 24266         |
| Of which: Children 0 - 17 years of age              |                                   |               |               |               |
| Total   | 1283                              | 1227          | 1177          | 1065          |
| Of which: Newly registered                          | 94                                | 61            | 69            | 31            |
|   | Per 100 000 population            |               |               |               |
| <b>Total</b>  | <b>3961</b>                       | <b>4036</b>   | <b>4137</b>   | <b>4060</b>   |
| Of which: New registered cases                      | 447                               | 435           | 425           | 345           |
| Of which: Children 0 - 17 years of age <sup>2</sup> |                                   |               |               |               |
| Total   | 108                               | 103           | 99            | 89            |
| Of which: Newly registered                          | 9                                 | 5             | 6             | 3             |
|   | Active tuberculosis<br>In numbers |               |               |               |
| <b>Total</b>  | <b>4509</b>                       | <b>4306</b>   | <b>3988</b>   | <b>3753</b>   |
| Of which: New registered cases <sup>3</sup>         | 1572                              | 1544          | 1415          | 1293          |
| Of which: Children 0 - 17 years of age              |                                   |               |               |               |
| Total   | 375                               | 371           | 351           | 298           |
| Of which: Newly registered <sup>3</sup>             | 146                               | 160           | 135           | 94            |
|   | Per 100 000 population            |               |               |               |
| <b>Total</b>  | <b>63</b>                         | <b>60</b>     | <b>56</b>     | <b>53</b>     |
| Of which: New registered cases <sup>3</sup>         | 22                                | 22            | 20            | 18            |
| Of which: Children 0 - 17 years of age <sup>2</sup> |                                   |               |               |               |
| Total   | 32                                | 31            | 29            | 25            |
| Of which: Newly registered <sup>3</sup>             | 12                                | 13            | 11            | 2             |

<sup>1</sup> Source: National Centre for Public Health and Analyses at the Ministry of Health.

<sup>2</sup> Calculated with the number of the population in the corresponding age group.

<sup>3</sup> incl. recurrence.



**VII. HOUSEHOLD INCOME,  
EXPENDITURE AND CONSUMPTION**



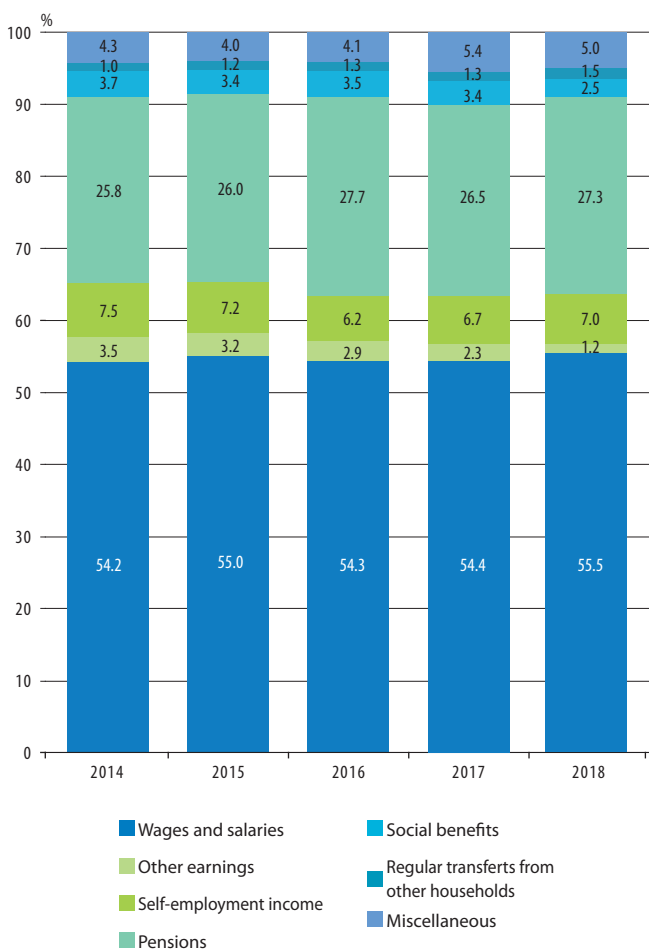


## Total household income

Total income, total expenditure, consumption of basic foods and purchasing power of the households are calculated on the basis a quarterly representative survey of a random (stochastic) sample of 3 060 households held by NSI.

Total income includes all monetary income as well as income in kind with a known value, irrespective of their source.

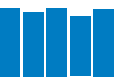
Figure 1. Structure of total household income by source





## 1. Total household income by source

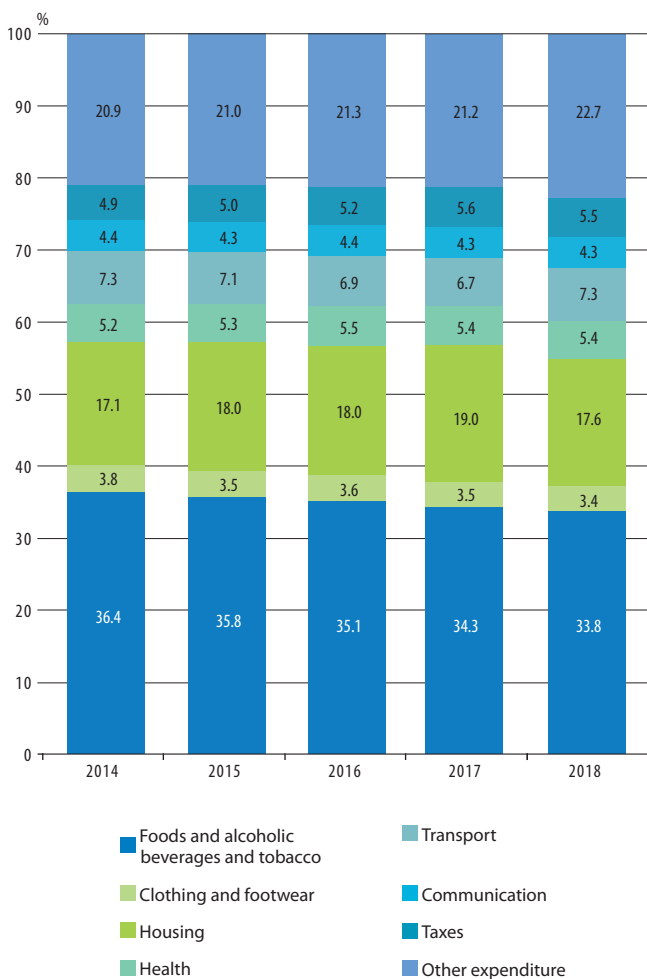
| Source                                  | 2014                     | 2015         | 2016         | 2017         | 2018         |
|---|--------------------------|--------------|--------------|--------------|--------------|
|   | Average per capita - BGN |              |              |              |              |
| <b>Total</b>                            | <b>5018</b>              | <b>5147</b>  | <b>5404</b>  | <b>5861</b>  | <b>6363</b>  |
| <b>Total income</b>                     | <b>4813</b>              | <b>4953</b>  | <b>5167</b>  | <b>5586</b>  | <b>6013</b>  |
| Total gross income                      | 4643                     | 4788         | 4989         | 5336         | 5747         |
| Wages and salaries                      | 2610                     | 2726         | 2807         | 3038         | 3336         |
| Other earnings                          | 166                      | 158          | 150          | 129          | 70           |
| Self-employment income                  | 360                      | 358          | 319          | 377          | 420          |
| Property income                         | 39                       | 27           | 36           | 51           | 30           |
| Pensions                                | 1242                     | 1286         | 1432         | 1479         | 1645         |
| Unemployment benefits                   | 26                       | 20           | 20           | 20           | 20           |
| Family allowances                       | 42                       | 46           | 40           | 39           | 79           |
| Other social benefits                   | 109                      | 105          | 119          | 128          | 57           |
| Regular transfers from other households | 50                       | 60           | 65           | 74           | 89           |
| Receipt sale                            | 32                       | 30           | 31           | 41           | 23           |
| Miscellaneous                           | 137                      | 135          | 147          | 209          | 244          |
| Drawn savings                           | 144                      | 147          | 179          | 210          | 241          |
| Loans and credits                       | 61                       | 47           | 57           | 65           | 109          |
|   | Structure - %            |              |              |              |              |
| <b>Total income</b>                     | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Total gross income                      | 96.5                     | 96.7         | 96.6         | 95.5         | 95.6         |
| Wages and salaries                      | 54.2                     | 55.0         | 54.3         | 54.4         | 55.5         |
| Other earnings                          | 3.5                      | 3.2          | 2.9          | 2.3          | 1.2          |
| Self-employment income                  | 7.5                      | 7.2          | 6.2          | 6.7          | 7.0          |
| Property income                         | 0.8                      | 0.5          | 0.7          | 0.9          | 0.5          |
| Pensions                                | 25.8                     | 26.0         | 27.7         | 26.5         | 27.3         |
| Unemployment benefits                   | 0.5                      | 0.4          | 0.4          | 0.4          | 0.3          |
| Family allowances                       | 0.9                      | 0.9          | 0.8          | 0.7          | 1.3          |
| Other social benefits                   | 2.3                      | 2.1          | 2.3          | 2.3          | 0.9          |
| Regular transfers from other households | 1.0                      | 1.2          | 1.3          | 1.3          | 1.5          |
| Receipt sale                            | 0.7                      | 0.6          | 0.6          | 0.7          | 0.4          |
| Miscellaneous                           | 2.9                      | 2.7          | 2.9          | 3.7          | 4.1          |



## Total household expenditure

Total household expenditure includes all monetary expenditure on food and non-food goods and services as well as valued expenditure in kind according to the international Classification of Individual Consumption by Purpose (COICOP) adopted by Eurostat.

Figure 2. Structure of total household expenditure

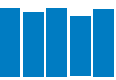






## 2. Total household expenditure by group

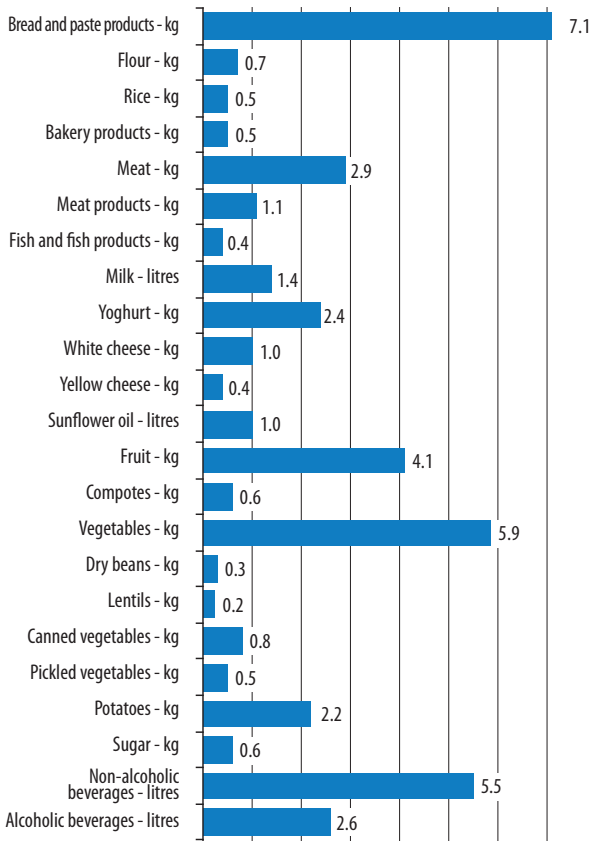
| Expenditure groups                               | 2014                     | 2015         | 2016         | 2017         | 2018         |
|--|--------------------------|--------------|--------------|--------------|--------------|
|  | Average per capita - BGN |              |              |              |              |
| <b>Total</b>                                     | <b>4803</b>              | <b>4965</b>  | <b>5106</b>  | <b>5653</b>  | <b>6211</b>  |
| <b>Total expenditure</b>                         | <b>4509</b>              | <b>4666</b>  | <b>4755</b>  | <b>5217</b>  | <b>5772</b>  |
| Consumer total expenditure                       | 3760                     | 3888         | 3926         | 4280         | 4692         |
| Foods and non-alcoholic beverages                | 1458                     | 1463         | 1464         | 1573         | 1714         |
| Alcoholic beverages and tobacco                  | 186                      | 204          | 206          | 219          | 236          |
| Clothing and footwear                            | 171                      | 165          | 172          | 183          | 196          |
| Housing, water, electricity, gas and other fuels | 606                      | 666          | 681          | 770          | 787          |
| Furnishing and maintenance of the house          | 166                      | 173          | 175          | 217          | 230          |
| Health   | 235                      | 248          | 263          | 280          | 313          |
| Transport  | 331                      | 331          | 326          | 352          | 419          |
| Communication                                    | 198                      | 202          | 211          | 224          | 248          |
| Recreation, culture and education                | 211                      | 227          | 226          | 230          | 279          |
| Miscellaneous goods and services                 | 198                      | 209          | 202          | 232          | 270          |
| Taxes  | 219                      | 231          | 247          | 290          | 318          |
| Social insurance contributions                   | 284                      | 297          | 310          | 358          | 420          |
| Regular transfers to other households            | 56                       | 57           | 55           | 63           | 58           |
| Other expenditure                                | 190                      | 193          | 216          | 227          | 284          |
| Saving deposits                                  | 110                      | 131          | 195          | 282          | 305          |
| Debt paid out and loan granted                   | 184                      | 168          | 156          | 154          | 134          |
|  | Structure - %            |              |              |              |              |
| <b>Total expenditure</b>                         | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Consumer total expenditure                       | 83.4                     | 83.3         | 82.6         | 82.0         | 81.3         |
| Foods and non-alcoholic beverages                | 32.3                     | 31.4         | 30.8         | 30.1         | 29.7         |
| Alcoholic beverages and tobacco                  | 4.1                      | 4.4          | 4.3          | 4.2          | 4.1          |
| Clothing and footwear                            | 3.8                      | 3.5          | 3.6          | 3.5          | 3.4          |
| Housing, water, electricity, gas and other fuels | 13.4                     | 14.3         | 14.3         | 14.8         | 13.6         |
| Furnishing and maintenance of the house          | 3.7                      | 3.7          | 3.7          | 4.2          | 4.0          |
| Health   | 5.2                      | 5.3          | 5.5          | 5.4          | 5.4          |
| Transport  | 7.3                      | 7.1          | 6.9          | 6.7          | 7.3          |
| Communication                                    | 4.4                      | 4.3          | 4.4          | 4.3          | 4.3          |
| Recreation, culture and education                | 4.7                      | 4.9          | 4.8          | 4.4          | 4.8          |
| Miscellaneous goods and services                 | 4.4                      | 4.5          | 4.2          | 4.5          | 4.7          |
| Taxes  | 4.9                      | 5.0          | 5.2          | 5.6          | 5.5          |
| Social insurance contributions                   | 6.3                      | 6.4          | 6.5          | 6.9          | 7.3          |
| Regular transfers to other households            | 1.2                      | 1.2          | 1.2          | 1.2          | 1.0          |
| Other expenditure                                | 4.2                      | 4.1          | 4.5          | 4.4          | 4.9          |



## Consumption of main foods

The consumption of main food products covers foods consumed at home. Catering data are excluded.

Figure 3. Average monthly consumption of main foods and beverages per capita in 2018





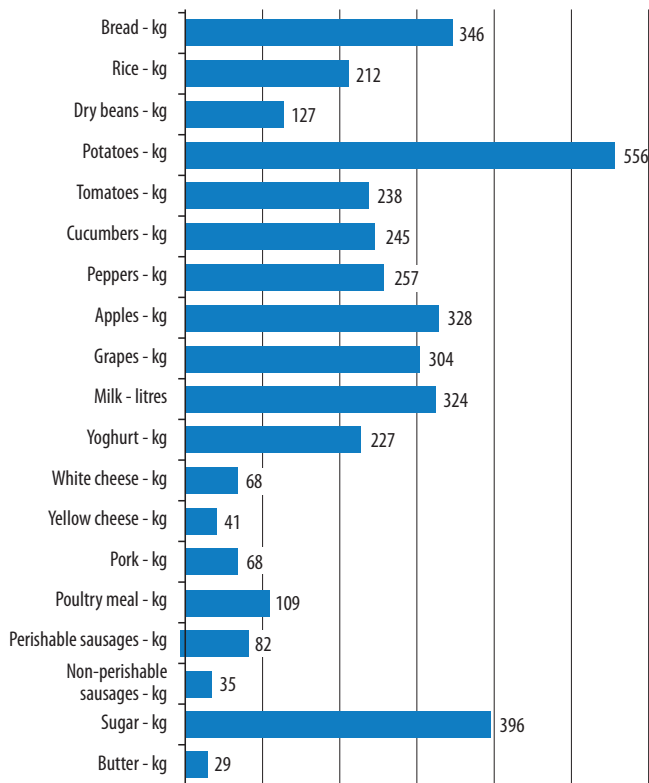
## 3. Household consumption of main foods and beverages average per capita

| Foods and beverages                   | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------------------------------------|------|------|------|------|------|
| Bread and paste products - kg         | 93.2 | 89.5 | 88.0 | 87.1 | 85.3 |
| Flour - kg                            | 8.9  | 8.7  | 8.9  | 8.7  | 8.6  |
| Rice - kg                             | 6.4  | 6.0  | 6.1  | 5.9  | 5.8  |
| Other cereals - kg                    | 0.5  | 0.6  | 0.5  | 0.6  | 0.6  |
| Other bakery products - kg            | 6.1  | 6.0  | 5.9  | 6.1  | 6.0  |
| Meat - kg                             | 32.5 | 32.6 | 32.5 | 32.8 | 34.3 |
| Meat products - kg                    | 14.0 | 13.7 | 13.1 | 13.4 | 13.6 |
| Fish and fish products - kg           | 5.7  | 5.2  | 5.0  | 4.9  | 5.2  |
| Milk - litres                         | 18.8 | 18.5 | 17.3 | 17.2 | 16.8 |
| Yoghurt - kg                          | 26.9 | 25.8 | 27.5 | 27.6 | 29.3 |
| White cheese - kg                     | 12.1 | 11.7 | 11.8 | 11.5 | 11.8 |
| Yellow cheese - kg                    | 3.7  | 3.9  | 3.9  | 4.0  | 4.2  |
| Eggs - in numbers                     | 140  | 135  | 140  | 143  | 146  |
| Sunflower oil - litres                | 12.8 | 12.3 | 12.4 | 12.1 | 12.0 |
| Margarine - kg                        | 1.5  | 1.3  | 1.1  | 1.0  | 0.9  |
| Butter - kg                           | 0.9  | 1.0  | 1.0  | 1.0  | 1.0  |
| Fresh and frozen fruit - kg           | 50.5 | 47.6 | 49.0 | 50.7 | 49.5 |
| Compotes - kg                         | 10.1 | 8.7  | 8.3  | 7.7  | 7.3  |
| Fresh and frozen vegetables - kg      | 70.9 | 68.4 | 70.0 | 68.0 | 70.7 |
| Dry beans - kg                        | 4.2  | 4.1  | 4.2  | 4.1  | 4.0  |
| Lentils - kg                          | 2.8  | 2.6  | 2.6  | 2.7  | 2.6  |
| Canned vegetables - kg                | 12.4 | 11.2 | 10.6 | 10.5 | 9.8  |
| Vegetable juices and nectars - litres | 1.0  | 0.8  | 0.6  | 0.5  | 0.6  |
| Pickled vegetables - kg               | 6.9  | 6.3  | 5.6  | 5.9  | 5.8  |
| Potatoes - kg                         | 28.5 | 28.1 | 27.5 | 26.6 | 26.6 |
| Sugar - kg                            | 7.5  | 7.0  | 7.2  | 6.9  | 6.9  |
| Sugar products - kg                   | 1.9  | 1.8  | 1.7  | 1.7  | 1.7  |
| Chocolate products - kg               | 1.5  | 1.4  | 1.4  | 1.4  | 1.5  |
| Salt - kg                             | 1.8  | 1.8  | 1.8  | 1.8  | 1.8  |
| Vinegar - kg                          | 1.6  | 1.6  | 1.6  | 1.5  | 1.3  |
| Non-alcoholic beverages - litres      | 61.1 | 59.5 | 58.8 | 65.3 | 66.5 |
| Alcoholic beverages - litres          | 28.4 | 29.2 | 27.3 | 28.9 | 31.0 |
| Cigarettes - in numbers               | 603  | 647  | 639  | 656  | 674  |

## Purchasing power of household

The purchasing power is the quantity of a given kind of goods, which can be bought with the monetary annual household income average per capita if this income is used to buy only this kind of good.

Figure 4. Average monthly household purchasing power per capita in 2018





## 4. Household purchasing power average per capita

| Goods                        | 2014      | 2015  | 2016  | 2017  | 2018  |
|------------------------------|-----------|-------|-------|-------|-------|
|                              | Foods     |       |       |       |       |
| White bread - kg             | 3646      | 3817  | 3988  | 4218  | 4155  |
| Rice - kg                    | 2061      | 2070  | 2163  | 2382  | 2550  |
| Dry beans - kg               | 1060      | 1172  | 1358  | 1421  | 1527  |
| Potatoes - kg                | 5386      | 5959  | 5736  | 6209  | 6675  |
| Tomatoes - kg                | 2693      | 2699  | 2745  | 2834  | 2856  |
| Cucumbers - kg               | 2756      | 2627  | 2820  | 3003  | 2941  |
| Peppers - kg                 | 3078      | 2926  | 3272  | 3329  | 3078  |
| Apples - kg                  | 3618      | 3674  | 3867  | 4004  | 3934  |
| Grapes - kg                  | 3338      | 3817  | 3521  | 4004  | 3645  |
| Milk - litres                | 3362      | 3417  | 3595  | 3785  | 3883  |
| Yoghurt - kg                 | 2347      | 2407  | 2515  | 2657  | 2725  |
| White cheese - kg            | 787       | 808   | 806   | 810   | 817   |
| Yellow cheese - kg           | 412       | 440   | 458   | 468   | 489   |
| Pork - kg                    | 631       | 699   | 741   | 756   | 819   |
| Poultry meal - kg            | 985       | 1040  | 1115  | 1217  | 1311  |
| Perishable sausages - kg     | 810       | 856   | 892   | 932   | 989   |
| Non-perishable sausages - kg | 374       | 388   | 397   | 410   | 425   |
| Eggs - in numbers            | 22571     | 22209 | 24310 | 23025 | 23764 |
| Sugar - kg                   | 3139      | 3541  | 3191  | 3454  | 4753  |
| Butter - kg                  | 409       | 421   | 432   | 385   | 346   |
|                              | Non-foods |       |       |       |       |
| Men's shoes - pair           | 113       | 112   | 109   | 116   | 119   |
| Women's shoes - pair         | 125       | 131   | 130   | 134   | 144   |
| Children's shoes - pair      | 175       | 191   | 189   | 197   | 207   |
| Men's suits - in numbers     | 36        | 29    | 30    | 34    | 33    |
| Women's suits - in numbers   | 52        | 57    | 63    | 72    | 72    |
| Coal - ton                   | 19        | 18    | 19    | 20    | 19    |
| Television sets - in numbers | 9         | 8     | 9     | 12    | 12    |

## Poverty indicators

The survey on income and living conditions is considered as the main source of statistical data on incomes and social inclusion along with the common indicators. To calculate indicators of poverty and social inclusion total disposable net income per equivalent unit is used. Equivalent scales are used because of the different composition and number of persons in the households. The modified OECD scale is used according to which the first adult aged 14 and more receives weight 1.0, the second adult aged 14 and more receives weight 0.5 and every child aged less than 14 receives weight 0.3. The weights are assigned to every household member and then are summed up so that an equivalent size of the household is obtained. Total disposable net income for every household is divided by its equivalent size and thus a net total disposable income per equivalent unit is formed. Data on poverty level show the share of poor people under the poverty line. The last is defined as 60% of the median equivalent disposable income.

Figure 5. At-risk-of-poverty rate by age

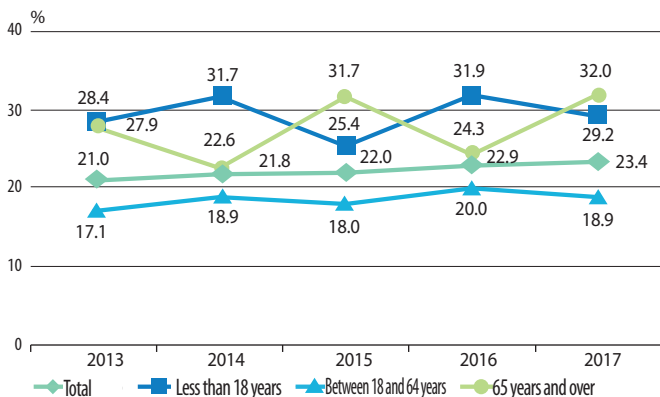
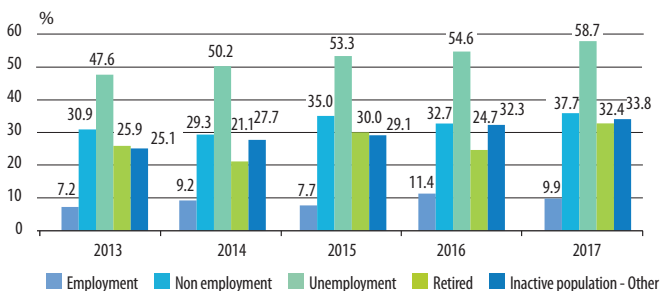


Figure 6. At-risk-of-poverty rate by most frequent activity status





## 5. At-risk-of-poverty rate by age

| Age          | 2014        | 2015        | 2016        | 2017        |
|--------------|-------------|-------------|-------------|-------------|
| <b>Total</b> | <b>21.8</b> | <b>22.0</b> | <b>22.9</b> | <b>23.4</b> |
| 0 - 17       | 31.7        | 25.4        | 31.9        | 29.2        |
| 18 - 64      | 18.9        | 18.0        | 20.0        | 18.9        |
| 65 and over  | 22.6        | 31.7        | 24.3        | 32.0        |

## 6. At-risk-of-poverty rate by household type

| Households type                                  | 2014        | 2015        | 2016        | 2017        |
|--|-------------|-------------|-------------|-------------|
| <b>Total</b>                                     | <b>21.8</b> | <b>22.0</b> | <b>22.9</b> | <b>23.4</b> |
| Households without dependent children            | 16.7        | 21.7        | 19.1        | 22.0        |
| One adult younger than 64 years                  | 19.2        | 23.9        | 28.8        | 25.7        |
| One adult older than 65 years                    | 39.8        | 53.4        | 44.2        | 55.0        |
| Single female                                    | 36.6        | 50.4        | 44.1        | 51.4        |
| Single male                                      | 22.8        | 25.8        | 28.9        | 31.2        |
| Two adults younger than 65 years                 | 13.2        | 15.1        | 16.0        | 12.6        |
| Two adults, at least one aged 65 years and over  | 16.3        | 21.8        | 12.7        | 20.0        |
| Three or more adults                             | 12.0        | 12.7        | 10.8        | 12.2        |
| Households with dependent children               | 26.5        | 22.3        | 26.7        | 24.8        |
| Single parent with dependent children            | 42.9        | 35.2        | 47.4        | 35.7        |
| Two adults with one dependent child              | 16.2        | 12.9        | 12.4        | 12.0        |
| Two adults with two dependent children           | 24.1        | 14.5        | 22.7        | 21.7        |
| Two adults with three or more dependent children | 78.9        | 66.1        | 70.5        | 65.0        |
| Three or more adults with dependent children     | 26.0        | 24.8        | 28.8        | 28.2        |

## 7. At-risk-of-poverty rate by most frequent activity status

| Activity status           | 2014 | 2015 | 2016 | 2017 |
|---------------------------|------|------|------|------|
| Employment                | 9.2  | 7.7  | 11.4 | 9.9  |
| Non employment            | 29.3 | 35.0 | 32.7 | 37.7 |
| Unemployment              | 50.2 | 53.3 | 54.6 | 58.7 |
| Retired                   | 21.1 | 30.0 | 24.7 | 32.4 |
| Other inactive population | 27.7 | 29.1 | 32.3 | 33.8 |

## 8. Inequality of income distribution

|                      | 2014 | 2015 | 2016 | 2017 |
|----------------------|------|------|------|------|
| S80/S20 <sup>1</sup> | 6.8  | 7.1  | 7.7  | 8.2  |
| Gini coefficient     | 35.4 | 37.0 | 37.7 | 40.1 |

<sup>1</sup> Inequality of income distribution S80/S20 income quintile share ratio.

Figure 7. At-risk-of-poverty rate, before social transfers by age

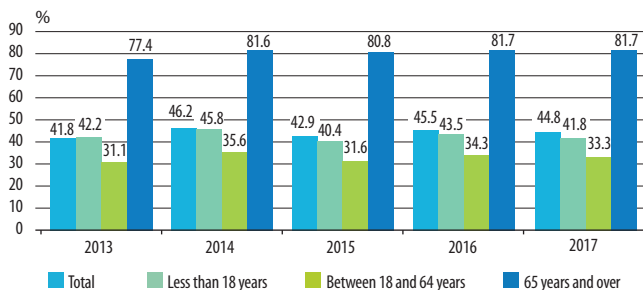
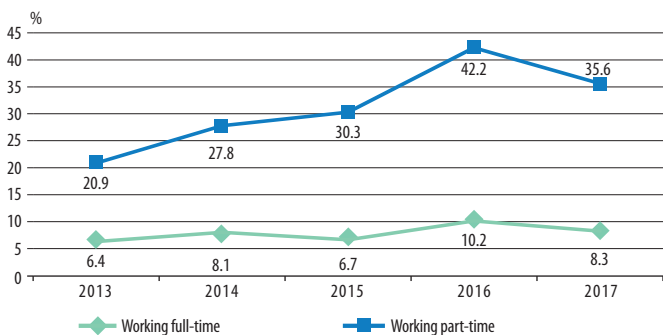


Figure 8. In-work at-risk-of-poverty rate (By full-time/part-time work)





## **VIII. CRIMINALITY AND JUSTICE**





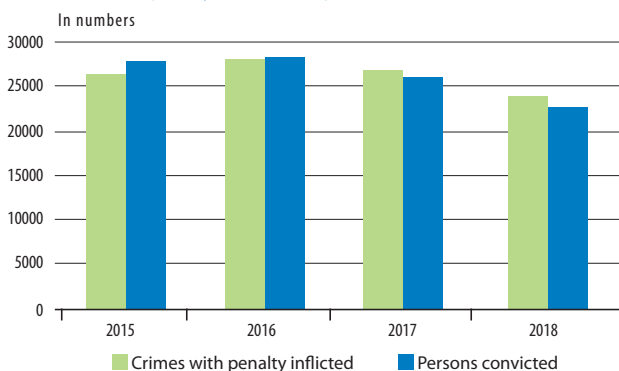
### Crimes with penalty inflicted

Statistical data on punished criminality are based on the annual data received from the regional, district and martial courts. The number of crimes during a given reporting year includes those for which the sentences have come into force during the same year. Crimes with penalty inflicted include all crimes having led to convictions, regardless of whether they had been committed by one or more persons. In case of complicity, a crime is considered to have led to conviction even when only one of the defendants has been convicted or given a suspended sentence. When a number of persons commit one crime, data on the crime itself are reported only once. Crimes committed by Bulgarian citizens abroad are subject to the jurisdiction of the courts in the Republic of Bulgaria.

According to the NSI's data the number of convicted crimes in 2018 is 24 119.

Sources of the data on crimes with penalty inflicted are the regular NSI statistical survey and Prosecutor's Office of the Republic of Bulgaria (National Investigative Services). Since 2012 data from Special Criminal Court have been included.

Figure 1. Crimes with penalty inflicted and persons convicted



1. Crimes with penalty inflicted and persons convicted<sup>1</sup>

(Number)

|  | 2015         |                   | 2016         |                   | 2017         |                   | 2018         |                   |
|--|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
|  | Crimes       | Persons convicted | Crimes       | Persons convicted | Crimes       | Persons convicted | Crimes       | Persons convicted |
| <b>Total</b>   | <b>26423</b> | <b>27787</b>      | <b>28119</b> | <b>28301</b>      | <b>26753</b> | <b>25800</b>      | <b>24119</b> | <b>23285</b>      |
| of which:  |              |                   |              |                   |              |                   |              |                   |
| Crimes against the person  | 1757         | 1477              | 1770         | 1464              | 1745         | 1509              | 1592         | 1389              |
| of which:  |              |                   |              |                   |              |                   |              |                   |
| Homicide (committed and attempted)   | 120          | 132               | 97           | 101               | 90           | 102               | 76           | 83                |
| Bodily harm  | 758          | 701               | 766          | 739               | 836          | 789               | 789          | 772               |
| Depravity  | 251          | 208               | 260          | 220               | 247          | 211               | 328          | 226               |
| of which: Rape (committed and attempted)   | 55           | 51                | 66           | 61                | 44           | 47                | 56           | 58                |
| Crimes against marriage, family and youth  | 857          | 817               | 826          | 785               | 749          | 699               | 634          | 602               |
| Crimes against the property  | 6523         | 8041              | 6345         | 7431              | 5692         | 6427              | 4757         | 5330              |
| of which:  |              |                   |              |                   |              |                   |              |                   |
| Theft  | 4593         | 6054              | 4281         | 5346              | 3752         | 4443              | 3075         | 3630              |
| Robbery  | 576          | 706               | 574          | 668               | 605          | 703               | 581          | 662               |
| Misappropriation   | 115          | 116               | 133          | 126               | 134          | 138               | 109          | 110               |
| Crimes against the economy   | 2133         | 2154              | 2349         | 2410              | 2009         | 2023              | 1813         | 1875              |
| Crimes against the financial, tax and insurance system   | 180          | 151               | 135          | 121               | 141          | 136               | 89           | 83                |
| Crimes against the activity of state bodies, public organisations and persons performing public duties | 2699         | 3577              | 2401         | 2689              | 1681         | 1732              | 1301         | 1273              |
| Documentary crimes   | 957          | 644               | 1276         | 868               | 1035         | 830               | 853          | 724               |
| Crimes against the order and the public peace  | 524          | 567               | 566          | 561               | 597          | 595               | 507          | 515               |
| of which:  |              |                   |              |                   |              |                   |              |                   |
| Hooliganism  | 383          | 402               | 414          | 401               | 421          | 355               | 365          | 327               |
| Generally dangerous crimes   | 10490        | 10093             | 12201        | 11737             | 12837        | 11582             | 12516        | 11432             |
| of which:  |              |                   |              |                   |              |                   |              |                   |
| Crimes against the transport and communications  | 8116         | 7960              | 9473         | 9273              | 9731         | 8979              | 9015         | 8689              |
| Theft of motor vehicle   | 180          | 182               | 177          | 172               | 181          | 190               | 149          | 153               |
| Drug - related crimes  | 1739         | 1570              | 2079         | 1906              | 2402         | 1991              | 2220         | 1870              |
| Military crimes  | 1            | -                 | 8            | 5                 | 4            | 5                 | 3            | 3                 |

<sup>1</sup> According to the sentences into force.

## Persons convicted

The number of persons convicted during a certain year includes those with sentence that have come into force during the same year. In case of conviction of a person for a number of crimes, data on the penalty inflicted on the person are provided for the most serious punishable offence, while the data concerning each individual crime are provided according to the respective type of crime. The number of convictions does not coincide with the number of convicted individuals, since during the reporting year a person may appear several times in the quality of a convicted person. The age of persons convicted is given in completed years. Persons, who have completed 14 years of age, but not 18 years, are considered juveniles. Persons who have completed 14 years of age are considered to be penalty responsible.

In accordance with the NSI's regular annual survey the number of persons convicted in 2018 is 23 285.

Data on persons convicted are obtained on the basis of NSI statistical survey and from administrative source (Prosecutor's Office of the Republic of Bulgaria - National Investigative Services). Since 2012 data from Special Criminal Court have been included.

Figure 2. Persons convicted by sex

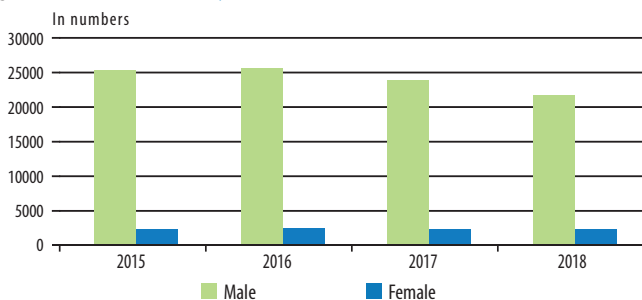
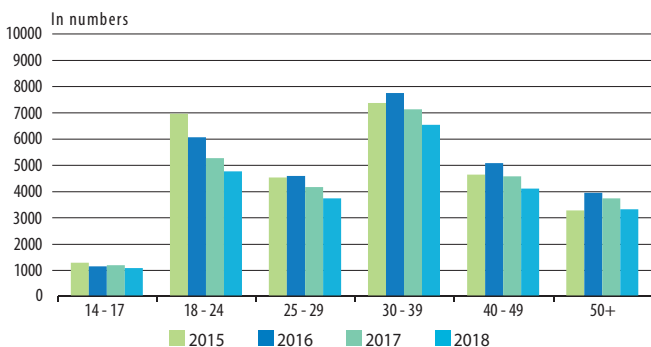


Figure 3. Persons convicted by age



2. Persons convicted by sex<sup>1</sup>

| Sex          | 2015          | 2016         | 2017         | 2018         |
|--------------|---------------|--------------|--------------|--------------|
|              | In numbers    |              |              |              |
| <b>Total</b> | <b>27787</b>  | <b>28301</b> | <b>25800</b> | <b>23285</b> |
| Male         | 25446         | 25778        | 23662        | 21329        |
| Female       | 2341          | 2523         | 2138         | 1956         |
|              | Structure - % |              |              |              |
| <b>Total</b> | <b>100.0</b>  | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Male         | 91.6          | 91.1         | 91.7         | 91.6         |
| Female       | 8.4           | 8.9          | 8.3          | 8.4          |

3. Persons convicted by age<sup>1</sup>

| Age          | 2015          | 2016         | 2017         | 2018         |
|--------------|---------------|--------------|--------------|--------------|
|              | In numbers    |              |              |              |
| <b>Total</b> | <b>27787</b>  | <b>28301</b> | <b>25800</b> | <b>23285</b> |
| 14 - 17      | 1243          | 1108         | 1152         | 1045         |
| 18 - 24      | 6909          | 6014         | 5224         | 4721         |
| 25 - 29      | 4486          | 4546         | 4125         | 3695         |
| 30 - 39      | 7317          | 7697         | 7076         | 6486         |
| 40 - 49      | 4595          | 5030         | 4527         | 4061         |
| 50 +         | 3237          | 3906         | 3696         | 3277         |
|              | Structure - % |              |              |              |
| <b>Total</b> | <b>100.0</b>  | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| 14 - 17      | 4.5           | 3.9          | 4.5          | 4.5          |
| 18 - 24      | 24.9          | 21.2         | 20.2         | 20.3         |
| 25 - 29      | 16.1          | 16.1         | 16.0         | 15.9         |
| 30 - 39      | 26.3          | 27.2         | 27.4         | 27.9         |
| 40 - 49      | 16.5          | 17.8         | 17.5         | 17.4         |
| 50 +         | 11.6          | 13.8         | 14.3         | 14.1         |

<sup>1</sup> According to the sentences into force.



## **IX. NATIONAL ACCOUNTS**



## Gross domestic product

The national accounts of Bulgaria are compiled in accordance with the main methodological recommendations of the documents 'European System of Accounts, 2010 (ESA 2010)' issued by Eurostat and the 'System of National Accounts, 2008' (SNA 2008), a joint issue of the UN, OECD, Eurostat, IMF and the World Bank. The main macroeconomic indicator of the System of National Accounts is Gross Domestic Product (GDP).

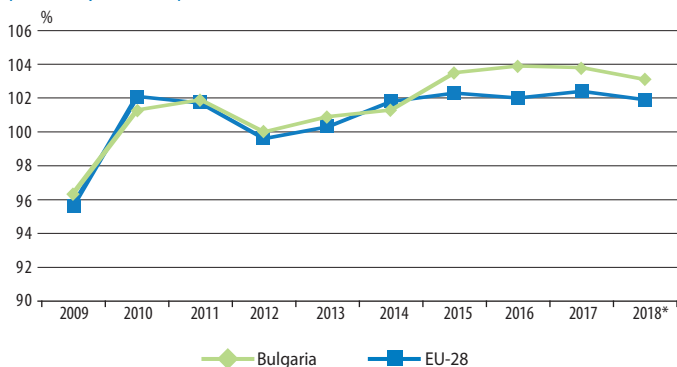
GDP estimates are an indicator for the trends in the development of the respective economy and they can be treated as an indicator for the economic policies at the macroeconomic level.

Gross domestic product represents a balanced estimate of the data performed by using the following three approaches:

- Production approach (output approach);
- Final expenditures approach;
- Income approach.

Every approach is based on different economic aggregates, which, put together, represent a generalization of the logical interrelations within the system of national accounts. A fundamental requirement of the system is the independence of the three different estimates, i.e. every component of GDP calculated according to the different approaches should be estimated independently and on its own.

Figure 1. Volume indices of GDP  
(Previous year = 100)







## 1. Gross domestic product per capita

|                         | 2015  | 2016  | 2017  | 2018* |
|-------------------------|-------|-------|-------|-------|
| BGN                     | 12340 | 13206 | 14280 | 15311 |
| Euro                    | 6309  | 6752  | 7301  | 7829  |
| USD                     | 6994  | 7468  | 8231  | 9237  |
| Exchange rate - USD/BGN | 1.764 | 1.768 | 1.735 | 1.658 |

## 2. Gross domestic product and gross value added by economic sector and economic activity groupings at current prices

|   | (Million BGN) |              |               |               |
|---|---------------|--------------|---------------|---------------|
| Economic sector and economic activity groupings   | 2015          | 2016         | 2017          | 2018*         |
| Agriculture, forestry and fishing   | 3664          | 3817         | 4114          | 3937          |
| Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities | 18013         | 19813        | 21318         | 21642         |
| Construction  | 3322          | 3179         | 3606          | 3996          |
| Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities                   | 16884         | 17970        | 19384         | 21129         |
| Information and communication   | 4053          | 5018         | 5351          | 5753          |
| Financial and insurance activities  | 5355          | 5867         | 5839          | 6390          |
| Real estate activities  | 7535          | 7777         | 8819          | 9770          |
| Professional, scientific and technical activities; administrative and support service activities  | 4819          | 5091         | 5306          | 5645          |
| Public administration and defence; compulsory social security; education; human health and social work activities   | 11037         | 10837        | 11963         | 13217         |
| Arts, entertainment and recreation, repair of household goods and other services  | 1868          | 1849         | 1935          | 2033          |
| <b>Cross value added at basic prices</b>  | <b>76550</b>  | <b>81218</b> | <b>87634</b>  | <b>93513</b>  |
| Adjustments (taxes less subsidies on products)  | 12025         | 12912        | 13408         | 14412         |
| Taxes on products   | 12929         | 13826        | 14453         | 15553         |
| Subsidies on products   | 904           | 913          | 1044          | 1141          |
| <b>Gross Domestic Product</b>   | <b>88575</b>  | <b>94130</b> | <b>101043</b> | <b>107925</b> |

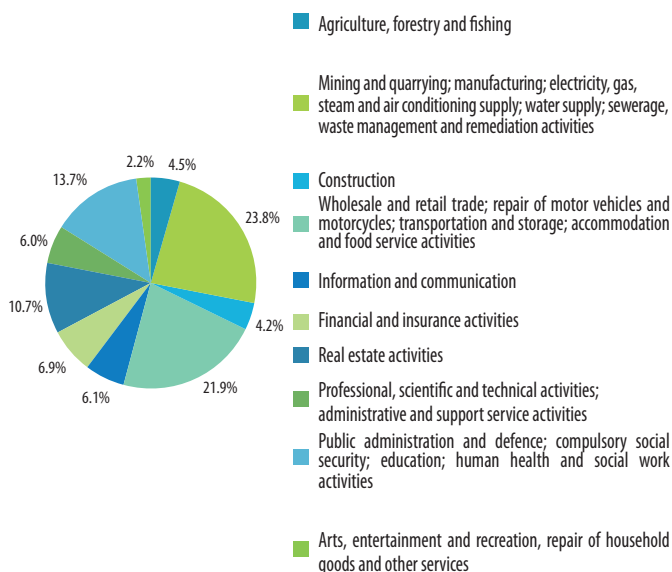
## Gross value added

Gross domestic product (GDP) is calculated along the production approach as the sum of the gross value added at basic prices for the economy as a whole and of the adjustments, which include net taxes on products (taxes less subsidies), value added tax and import duties. On its own, the gross value added is a balancing item of the 'Output' account and determines the result of the production process as the difference between gross output and the goods and services used in this process, that is, the intermediate consumption.

Output (at basic prices) is the value of produced goods and services resulting from the production activity of resident units during the relevant period.

Intermediate consumption includes the value of all goods and services, transformed or entirely used up in the production process during the corresponding period except for the consumption of fixed assets recorded as consumption of fixed capital (amortization).

Figure 2. Structure of GVA by economic sector and economic activity groupings in 2018





### 3. Volume indices of GDP and GVA by economic sector and economic activity groupings

(Preceding year = 100)

| Economic sector and economic activity groupings   | 2015         | 2016         | 2017         | 2018*        |
|---|--------------|--------------|--------------|--------------|
| Agriculture, forestry and fishing   | 93.2         | 105.3        | 108.9        | 98.9         |
| Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities | 103.6        | 105.9        | 104.0        | 100.8        |
| Construction  | 102.8        | 93.2         | 104.4        | 104.0        |
| Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities                   | 106.1        | 102.2        | 102.6        | 102.0        |
| Information and communication   | 101.3        | 116.7        | 106.0        | 103.0        |
| Financial and insurance activities  | 98.5         | 107.4        | 101.0        | 106.7        |
| Real estate activities  | 102.3        | 105.7        | 107.5        | 109.3        |
| Professional, scientific and technical activities; administrative and support service activities  | 107.3        | 101.7        | 101.6        | 102.8        |
| Public administration and defence; compulsory social security; education; human health and social work activities   | 101.4        | 96.9         | 104.9        | 103.5        |
| Arts, entertainment and recreation, repair of household goods and other services  | 105.3        | 98.3         | 105.2        | 101.1        |
| <b>Cross value added at basic prices</b>  | <b>102.9</b> | <b>103.4</b> | <b>104.2</b> | <b>103.0</b> |
| Adjustments (taxes less subsidies on products)  | 107.5        | 107.2        | 101.5        | 103.8        |
| <b>Gross Domestic Product</b>   | <b>103.5</b> | <b>103.9</b> | <b>103.8</b> | <b>103.1</b> |

## Compensation of employees and gross operating surplus/gross mixed income

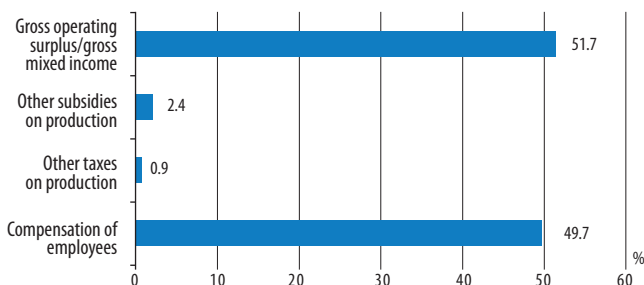
The income approach is compiled simultaneously with the production approach for GDP estimation; it characterizes the activity in which the primary incomes of the participants in the production process originate. According to the income approach for GDP estimation, GDP consists of the compensation of the employees, of the net taxes on production and imports, and of the gross operating surplus/gross mixed income and adjustments.

The compensation of the employees includes the total remuneration, in cash or in kind, paid by the employer to the employees in return for work done by the latter during the accounting period, including the social and health insurance contributions payable by the employer according to the national labour legislation.

Other net taxes on production and imports (taxes minus subsidies) are included as a component of the value added by economic sectors and represent output related unrequited payments of the employers to the state budget less the production subsidies granted by the state budget to the economic units.

Gross operating surplus/gross mixed income is a balancing item for the income approach. It is a measure of the results achieved by the production activities of the economic units. The gross operating surplus is calculated as the difference between the gross value added, the compensation of the employees, and the net taxes on production and imports.

Figure 3. Structure of GVA by income approach in 2018





## 4. Gross domestic product by value added component at current prices

(Million BGN)

|  | 2015         | 2016         | 2017          | 2018*         |
|--|--------------|--------------|---------------|---------------|
| Compensation of employees                                | 36573        | 39388        | 43664         | 46504         |
| Net taxes on production<br>(other taxes minus subsidies) | -1229        | -1681        | -1505         | -1347         |
| Operating surplus and mixed income, gross                | 41206        | 43511        | 45474         | 48356         |
| Consumption of fixed capital                             | 12754        | 13460        | 14272         | x             |
| Operating surplus and mixed income, net                  | 28453        | 30050        | 31202         | x             |
| <b>Gross value added at basic prices</b>                 | <b>76550</b> | <b>81218</b> | <b>87634</b>  | <b>93513</b>  |
| Adjustments  | 12025        | 12912        | 13408         | 14412         |
| <b>GDP at market prices</b>                              | <b>88575</b> | <b>94130</b> | <b>101043</b> | <b>107925</b> |

## Investments and consumption

According to the final expenditure approach, GDP is calculated as a sum of individual consumption, collective consumption, gross fixed capital formation, changes in inventories and the net exports of goods and services.

Individual household consumption consists of final household consumption expenditure, government final consumption expenditure for the provision of individual services to households and final consumption expenditure of the non-profit institutions serving households.

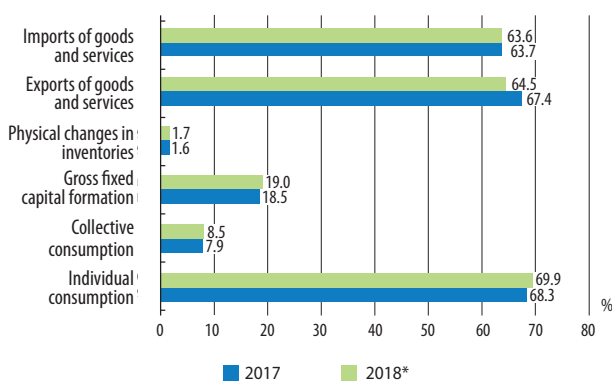
Collective consumption is measured by the final consumption expenditure of government on collective services provided to society as a whole.

Gross fixed capital formation includes expenditure on acquisition of fixed non-financial assets, including the increase of uncompleted construction less revenues from sales of existing fixed assets.

Changes in inventories include the change in materials and supplies, work-in-progress, finished goods and goods for resale in the enterprises, as well as the changes of households inventories resulting from their unincorporated activity.

Net exports of goods and services (exports minus imports of goods and services) as a final use GDP component represents the difference between the values of the exports and imports of goods and services. Exports and imports are valued at F.O.B. prices.

Figure 4. Structure of GDP by expenditure approach





## 5. Gross domestic product by expenditure approach, current prices

(Million BGN)

|                               | 2015         | 2016         | 2017          | 2018*         |
|-------------------------------|--------------|--------------|---------------|---------------|
| <b>Gross domestic product</b> | <b>88575</b> | <b>94130</b> | <b>101043</b> | <b>107925</b> |
| Final consumption             | 69676        | 72049        | 77047         | 84648         |
| Individual consumption        | 62563        | 64707        | 69048         | 75464         |
| Collective consumption        | 7113         | 7342         | 7999          | 9184          |
| Gross capital formation       | 18768        | 18020        | 20295         | 22363         |
| Gross fixed capital formation | 18612        | 17484        | 18716         | 20549         |
| Changes in inventories        | 156          | 536          | 1579          | 1814          |
| Net exports                   | 131          | 4060         | 3700          | 915           |
| Exports of goods and services | 56781        | 60223        | 68071         | 69606         |
| Imports of goods and services | 56650        | 56163        | 64371         | 68691         |
| Statistical discrepancy       | 0            | 0            | 0             | 0             |

## 6. Volume indices of GDP by expenditure approach

(Preceding year = 100)

|                               | 2015         | 2016         | 2017         | 2018*        |
|-------------------------------|--------------|--------------|--------------|--------------|
| <b>Gross domestic product</b> | <b>103.5</b> | <b>103.9</b> | <b>103.8</b> | <b>103.1</b> |
| Final consumption             | 103.8        | 103.3        | 104.3        | 106.0        |
| Individual consumption        | 103.9        | 103.4        | 104.3        | 106.0        |
| Collective consumption        | 103.0        | 102.5        | 104.4        | 106.3        |
| Gross capital formation       | .            | .            | .            | .            |
| Gross fixed capital formation | 102.7        | 93.4         | 103.2        | 106.5        |
| Changes in inventories        | .            | .            | .            | .            |
| Net exports                   | .            | .            | .            | .            |
| Exports of goods and services | 105.7        | 108.1        | 105.8        | 99.2         |
| Imports of goods and services | 105.4        | 104.5        | 107.5        | 103.7        |
| Statistical discrepancy       | .            | .            | .            | .            |

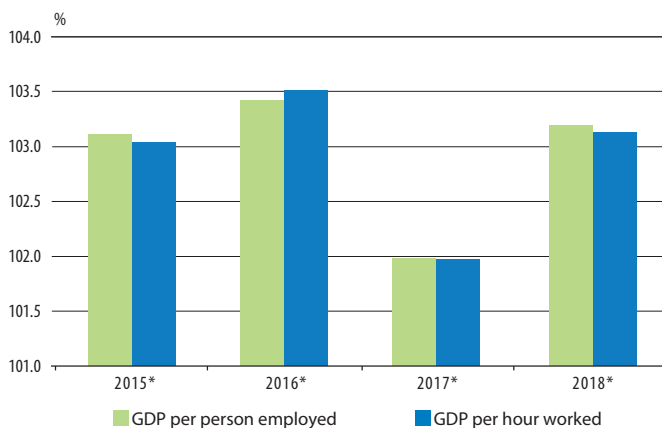
## Labour productivity

Labour productivity is a compound economic indicator, which compares the accomplished result (the newly created product) with the labour input used in a given economic activity within a certain economic area during a specified period of time. The main components of labour productivity are indicators measuring the result of the performed productive activity (as a numerator), and indicators related to the labour input in the production process (as a denominator).

For the purposes of international comparisons, GDP is the preferred measure for the labour productivity of the various national economies.

Using GVA is appropriate for estimating labour productivity at the national level as well as at the production activity level.

Figure 5. Volume indices of GDP per person employed and hour worked (Preceding year = 100)







## 7. Gross domestic product per employed and hour worked at current prices

(BGN)

|                     | 2015* | 2016* | 2017* | 2018* |
|---------------------|-------|-------|-------|-------|
| GDP per employed    | 25702 | 27179 | 28662 | 30646 |
| GDP per hour worked | 15.6  | 16.5  | 17.4  | 18.6  |

8. Gross value added per employed and hour worked by economic sector at the same year prices<sup>1</sup>

(BGN)

| Economic sectors        | Per employed |              |              | Per hour worked |             |             |
|-------------------------|--------------|--------------|--------------|-----------------|-------------|-------------|
|                         | 2016*        | 2017*        | 2018*        | 2016*           | 2017*       | 2018*       |
| Agriculture             | 6107         | 6187         | 6305         | 4.1             | 4.2         | 4.3         |
| Industry                | 26258        | 28208        | 28583        | 15.5            | 16.6        | 16.8        |
| Services                | 24644        | 26227        | 28057        | 14.8            | 15.7        | 16.8        |
| <b>Total of economy</b> | <b>21707</b> | <b>22944</b> | <b>24334</b> | <b>13.2</b>     | <b>14.0</b> | <b>14.8</b> |

9. Volume indices of GVA per employed and hour worked by economic sector<sup>1</sup>

(Preceding year = 100)

| Economic sectors        | Per employed |              |              | Per hour worked |              |              |
|-------------------------|--------------|--------------|--------------|-----------------|--------------|--------------|
|                         | 2016*        | 2017*        | 2018*        | 2016*           | 2017*        | 2018*        |
| Agriculture             | 109.4        | 102.3        | 105.3        | 109.2           | 102.4        | 105.6        |
| Industry                | 104.2        | 103.2        | 99.7         | 104.2           | 103.1        | 99.8         |
| Services                | 100.6        | 102.9        | 101.7        | 100.9           | 102.8        | 101.7        |
| <b>Total of economy</b> | <b>102.8</b> | <b>102.2</b> | <b>102.3</b> | <b>102.9</b>    | <b>102.2</b> | <b>102.2</b> |

<sup>1</sup> GVA of the imputed rent is not included in the estimation of labour productivity.



**X. FINANCE**



## Monetary aggregates

Money supply comprises liabilities with money character of monetary financial institutions (MFIs) to the resident sectors with exception of the liabilities to the Central government sector and the Monetary financial institutions sector. It is measured using the following monetary aggregates: M1, M2 and M3.

The monetary aggregate M1 - 'narrow money' - includes the most liquid instruments used in settlements (currency outside the MFIs and overnight deposits in national and foreign currency).

The 'Currency outside monetary financial institutions' indicator represents currency in circulation less cash in BGN held by other monetary financial institutions.

Overnight deposits include deposits without an agreed maturity, which are immediately convertible into currency or transferable on demand through banker's order or by cheque without significant restrictions or penalties. One-day deposits are also included.

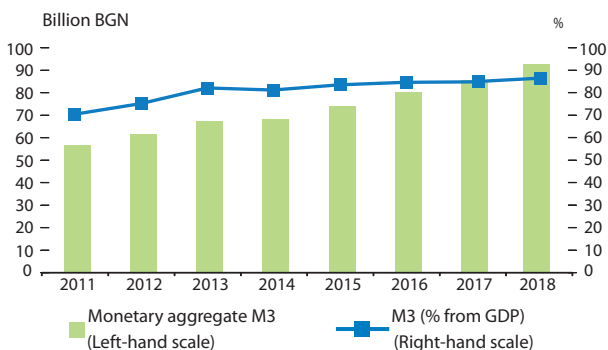
The monetary aggregate M2 includes monetary aggregate M1 and quasi-money.

Quasi-money comprise deposits with agreed maturity of up to two years and deposits redeemable at notice (incl. savings deposits) up to three months. Deposits with agreed maturity are not immediately available as they have an agreed term prior to withdrawal. Received loans are also included under this category. Deposits redeemable at notice include savings deposits and other deposits redeemable at notice.

The monetary aggregate M3 (broad money) includes monetary aggregate M2 and marketable instruments.

Marketable instruments consist of repos, money market funds shares/units and debt securities issued up to two years.

Figure 1. Monetary aggregate M3





## 1. Money supply as of 31.12.<sup>1,2</sup>

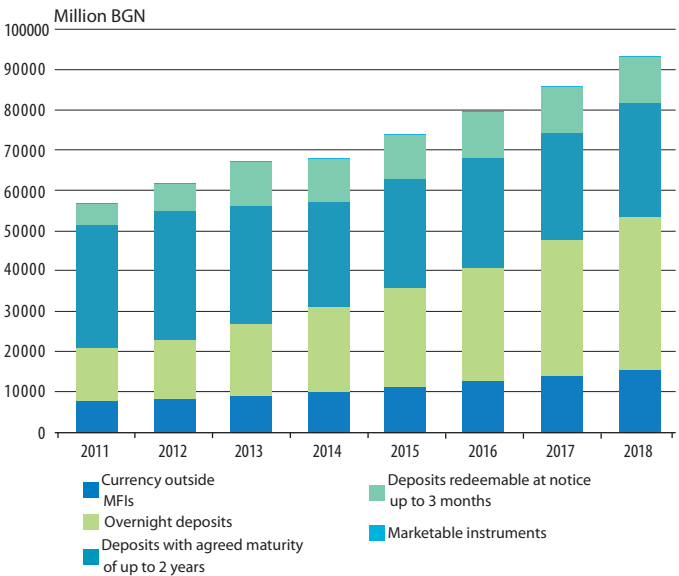
(Million BGN)

|   | 2015           | 2016           | 2017           | 2018           |
|---|----------------|----------------|----------------|----------------|
| <b>Broad money M3</b>   | <b>73961.4</b> | <b>79595.4</b> | <b>85727.1</b> | <b>93255.6</b> |
| Money M1  | 35970.0        | 40834.6        | 47734.4        | 53557.2        |
| Currency outside MFIs   | 11377.8        | 12761.6        | 14148.5        | 15560.8        |
| Overnight deposits  | 24592.2        | 28073.0        | 33585.9        | 37996.4        |
| Money M2 (M1 + quasi-money)   | 73891.2        | 79503.4        | 85655.0        | 93255.1        |
| Quasi-money   | 37921.2        | 38668.8        | 37920.6        | 39697.9        |
| Deposits with agreed maturity up to 2 years   | 26989.3        | 27225.9        | 26710.2        | 28184.6        |
| Deposits redeemable at notice up to 3 months  | 10931.9        | 11442.9        | 11210.4        | 11513.3        |
| Marketable instruments (debt securities issued up to 2 years + MMFs shares/units + repos) | 70.2           | 92.0           | 72.1           | 0.5            |

<sup>1</sup> Source: BNB.

<sup>2</sup> The definition of monetary aggregates is in accordance with the requirements of the ECB.

Figure 2. Components of the monetary aggregate M3

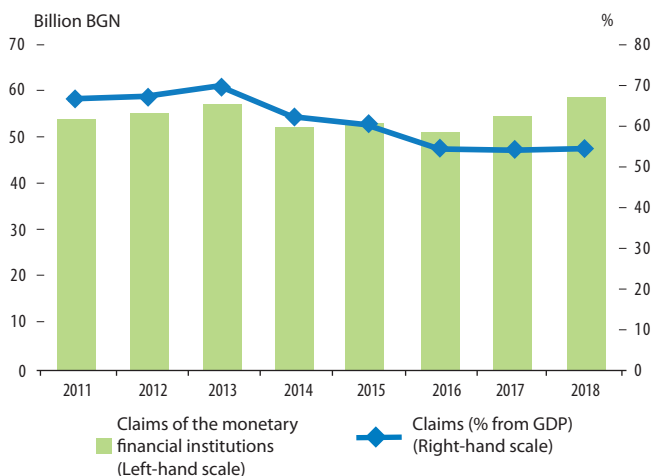


## Claims of the monetary financial institutions on government and non-government sectors

Claims of the monetary financial institutions on government and non-government sectors represent domestic credit, which is part of net domestic assets included in the Monetary survey. It is part of the monthly monetary statistics published by the Bulgarian National Bank.

Domestic credit covers credit to the consolidated general government sector (net claims on the central government sector, and gross claims on sectors local government and social security funds) and credit to the non-government sector (gross claims on non-financial corporations, financial corporations, households and NPISHs).

Figure 3. Claims of the monetary financial institutions on government and non-government sectors





## 2. Claims of MFIs on government and non-government sectors as of 31.12.<sup>1</sup>

(Million BGN)

|  | 2015           | 2016           | 2017           | 2018           |
|--|----------------|----------------|----------------|----------------|
| <b>Claims on General government</b>        | <b>2431.6</b>  | <b>-723.6</b>  | <b>357.7</b>   | <b>-400.9</b>  |
| Central government (net)                   | 2138.0         | -1034.7        | 35.5           | -770.2         |
| Claims                                     | 9194.0         | 10736.2        | 10956.1        | 9847.3         |
| Government securities                      | 8589.5         | 10163.0        | 10462.3        | 9301.1         |
| Repos                                      | 124.7          | 74.0           | 8.8            | 0.0            |
| Loans                                      | 479.9          | 499.2          | 485.0          | 546.2          |
| Less: liabilities (deposits and repos)     | 7056.0         | 11770.9        | 10920.6        | 10617.5        |
| Local government and Social security funds | 293.6          | 311.1          | 322.2          | 369.3          |
| Securities other than shares               | 63.1           | 100.8          | 106.6          | 98.2           |
| Repos                                      | -              | -              | -              | -              |
| Loans                                      | 230.5          | 210.3          | 215.6          | 271.1          |
| <b>Claims on non-government sector</b>     | <b>50772.9</b> | <b>51676.3</b> | <b>54025.2</b> | <b>58857.8</b> |
| Non-financial corporations                 | 30938.0        | 31060.4        | 31511.8        | 33524.8        |
| Repos                                      | 140.8          | 155.8          | 197.1          | 224.0          |
| Loans                                      | 30473.7        | 30511.8        | 31002.7        | 32686.0        |
| Securities other than shares               | 95.6           | 165.9          | 129.1          | 400.4          |
| Shares and other equity                    | 227.8          | 226.9          | 182.9          | 214.4          |
| Financial corporations                     | 1693.1         | 2107           | 2884.6         | 3503.7         |
| Repos                                      | 102.0          | 146.0          | 108.8          | 110.4          |
| Loans                                      | 1190.8         | 1513.5         | 2297.4         | 2840.8         |
| Securities other than shares               | 36.1           | 33.8           | 27.4           | 47.6           |
| Shares and other equity                    | 364.1          | 413.7          | 451.0          | 504.9          |
| Households and NPISHs                      | 18141.9        | 18508.9        | 19628.8        | 21829.3        |
| Repos                                      | 1.4            | 1.4            | 2.2            | 1.7            |
| Loans                                      | 18140.4        | 18507.5        | 19626.6        | 21827.6        |

<sup>1</sup> Source: BNB.

## Interest rates

Interest rates refer to BGN denominated instruments. They are average weighted with the respective volumes except for the base interest rate and the long-term interest rate (LTIR) for convergence assessment purposes which are calculated as simple average values.

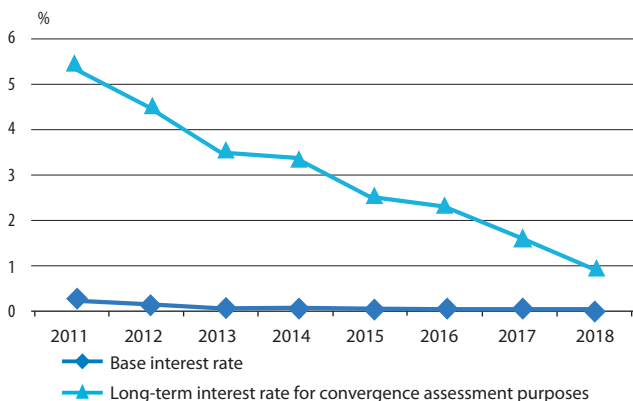
Yield on long-term government securities is the average weighted effective yield to maturity on individual transactions in interest-bearing government securities on the secondary market during the reporting period. The yield is calculated using the ISMA formula at ACT/365 day count convention. The securities are grouped by their original maturity.

The long-term interest rate for convergence assessment purposes is determined on the basis of the secondary market yield to maturity of a long-term government bond (benchmark bond) issued by the Ministry of Finance and denominated in national currency.

The annual effective interest rates are average weighted with the volumes of new business throughout the reporting period or the outstanding amounts as of the end of the reporting period. These are the interest rates applied by the banks on loans and deposits vis-a-vis resident 'Non-financial corporations' and 'Households and NPISHs' sectors.

The annual percentage rate of charge comprises all interest payments on a loan, as well as all fees, commissions and other charges a client has to pay in order to obtain the loan. It is calculated for consumer loans and loans for house purchases only.

Figure 4. Dynamics of the interest rates







### 3. Interest rates<sup>1,2</sup>

|   | (Per cent) |       |       |       |
|---|------------|-------|-------|-------|
|   | 2015       | 2016  | 2017  | 2018  |
| Base interest rate  | 0.01       | 0.00  | 0.00  | 0.00  |
| Interbank money market                                      | 0.02       | -0.06 | -0.30 | -0.49 |
| Yield on long-term government securities                    | 1.50       | 0.93  | 0.67  | 0.54  |
| Long-term interest rate for convergence assessment purposes | 2.49       | 2.27  | 1.60  | 0.89  |
| New business <sup>3</sup>                                   |            |       |       |       |
| Deposits with agreed maturity                               | 1.30       | 0.58  | 0.22  | 0.17  |
| Short-term loans, other than overdraft                      | 5.20       | 4.17  | 5.71  | 7.07  |
| Long-term loans, other than overdraft                       | 7.22       | 5.80  | 4.89  | 4.93  |
| Annual percentage rate of charge                            | 9.85       | 8.90  | 7.82  | 7.94  |
| Outstanding amounts <sup>3</sup>                            |            |       |       |       |
| Overnight deposits <sup>4</sup>                             | 0.15       | 0.04  | 0.02  | 0.01  |
| Deposits with agreed maturity                               | 1.72       | 0.95  | 0.44  | 0.26  |
| Overdraft <sup>4</sup>                                      | 7.02       | 5.97  | 5.07  | 4.65  |
| Short-term loans, other than overdraft                      | 5.96       | 5.47  | 5.97  | 6.97  |
| Long-term loans, other than overdraft                       | 7.37       | 6.14  | 5.27  | 5.05  |

<sup>1</sup> Source: BNB.

<sup>2</sup> The interest rates are on BGN instruments.

<sup>3</sup> The data for 2017 are preliminary. Effective annual rates applied by banks on loans and deposits vis-a-vis 'Non-financial corporations' and 'Households and Non-profit institutions serving households (NPISHs)' sectors.

<sup>4</sup> The interest rates on new business and on outstanding amounts coincide.

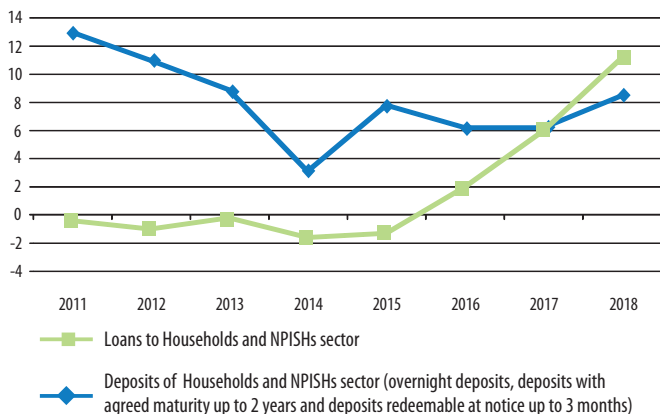
## Deposits and loans of Households and NPISHs sector

Deposits are funds accepted by the monetary financial institutions, and can be payable at sight, without any notice, upon notice or under other previously agreed payment conditions. Deposits are accepted upon agreement between the parties concerning the terms and conditions for the keeping of the deposit accounts, interest rate, the time of repayment and the penalties for the parties in case of failure to perform their obligations. The deposits are liabilities of financial institutions.

Deposits with agreed maturity are not immediately available as they have an agreed term prior to withdrawal. These deposits cannot be used for payments purposes and are not convertible into cash money without any significant restrictions or penalties. Received loans are also included under this category.

Deposits redeemable at notice include savings deposits and other deposits redeemable at notice. Savings deposits are non-transferable deposits without specified maturity used for safekeeping the funds of households against issuance of a personal savings book or an analogous document. These include deposits on house purchase, children's deposits and other deposits. Other deposits redeemable at notice are non-transferable deposits without specified maturity which cannot be converted into currency without any notice. Their conversion into cash is not possible or they can be converted into cash prior to the term of the notice but by imposing a sanction. Non-transferable deposits with specified maturity which can be converted into cash prior to maturity only at notice are also included.

Figure 5. Annual change of deposits and loans of Households and NPISHs sector





Loans are financial assets created to provide the borrowers with funds, goods, or services. Terms and conditions of loans (fixed by the creditor or negotiated) are usually evidenced by non-transferable document. Loan is an unconditional debt which has to be repaid upon maturity and which generates income in the form of interest. Margin deposits made by the reporting agents are also included in the 'Financial corporations' sector.

Overdrafts represent debit balance on a current account. Repayment is automatic upon receipt of funds on the respective current account. Both overdrafts with pre-agreed interest terms and amounts and without pre-agreed terms are included.

Consumer loans - loans granted for the purpose of purchase of goods and services for personal use of the households.

Loans for house purchases - loans extended to households for the purpose of investing in housing for own use or rental, including building and home improvements.

Other loans - all other loans extended to households, including loans for education and medical treatment. Loans for commercial or production purposes and loans to NPISHs are also included in the indicator.

#### 4. Deposits and loans of Households and NPISHs sector as of 31.12.<sup>1</sup>

(Million BGN)

|   | 2015           | 2016           | 2017           | 2018           |
|---|----------------|----------------|----------------|----------------|
| <b>Deposits of Households and NPISHs sector<sup>2</sup></b> | <b>40474.2</b> | <b>43003.1</b> | <b>45681.7</b> | <b>49557.0</b> |
| In BGN  | 23463.1        | 25811.2        | 28253.2        | 31140.1        |
| Deposits with agreed maturity up to 2 years                 | 10518.2        | 10773.0        | 11332.1        | 11911.7        |
| Deposits redeemable at notice up to 3 months                | 6759.7         | 7147.2         | 7163.6         | 7487.0         |
| Overnight deposits  | 6185.2         | 7891.0         | 9757.5         | 11741.4        |
| In foreign currency <sup>2</sup>                            | 17011.1        | 17191.9        | 17428.5        | 18416.9        |
| <b>Loans to Households and NPISHs sector</b>                | <b>18140.4</b> | <b>18507.3</b> | <b>19626.7</b> | <b>21827.6</b> |
| In BGN  | 12703.4        | 14180.1        | 16331.0        | 19103.9        |
| Overdraft   | 1321.5         | 1233.7         | 1197.3         | 1234.5         |
| Consumer loans  | 6077.2         | 6425.9         | 7116.9         | 8641.3         |
| Loans for house purchases                                   | 4809.8         | 5671.6         | 6947.1         | 8421.1         |
| Other loans   | 494.9          | 848.9          | 1069.7         | 807.0          |
| In foreign currency <sup>3</sup>                            | 5437.0         | 4327.2         | 3295.7         | 2723.7         |

<sup>1</sup> Source: BNB.

<sup>2</sup> The indicator includes data on overnight deposits, deposits with agreed maturity up to 2 years and deposits redeemable at notice up to 3 months.

<sup>3</sup> The indicator includes data on overdraft, consumer loans, loans for house purchases and other loans.



## **XI. PRICES**



## Consumer price indices - annual inflation

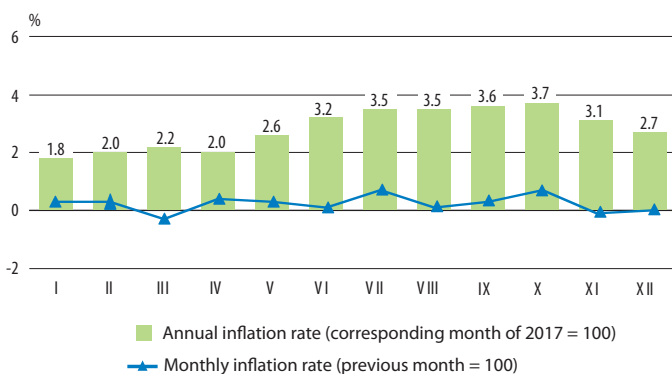
The consumer price index (CPI) is an official measure of the inflation in the Republic of Bulgaria. It measures the total relative price change of goods and services used by households for private (non-production) consumption and it is calculated by applying the structure of the final monetary consumption expenditures of Bulgarian households. The main source of information concerning the expenditures is the Households budget survey in the country. CPI in year  $t$  is calculated with structure of expenditures for year  $t - 1$ . Since 1999 NSI has applied a methodology for constructing and calculating consumer price index, according to Eurostat and requirements and International Monetary Fund recommendations. For ensuring the comparable consumer price index series, monthly consumer price indices are revised for the period from January 1995 to December 2000.

The chain consumer price indices measure the price change in current month compared to the previous month. The chain consumer price indices are used as a measure of monthly inflation.

The 12-month consumer price indices measure the price change between the current month and the same month of the previous year. The 12-month consumer price indices are used as a measure of annual inflation.

Consumer price indices over December of the previous year measure the accumulated changes in the prices of the current month with respect to December of the previous year. Consumer price indices over December of the previous year have been used as measures of the inflation since the beginning of the year. In December each year, the 12-month index is equal to the consumer price index over December of the previous year.

Figure 1. Consumer prices indices by months in 2018  
(Annual and monthly inflation rates)



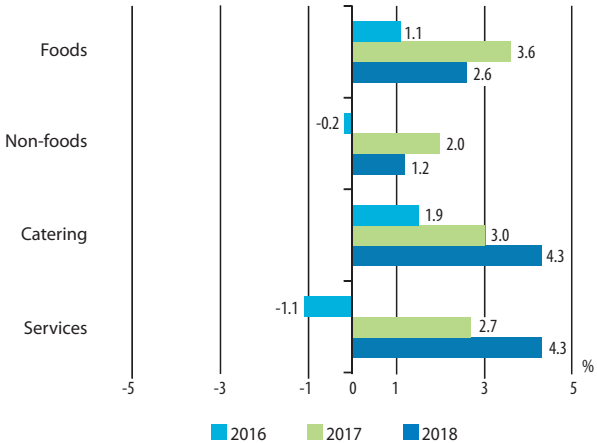


## 1. Annual consumer prices indices by main commodity groups (Annual inflation rates)

(December of the current year compared to December of the preceding year)

| Commodity groups  | 2015        | 2016       | 2017       | 2018       |
|---|-------------|------------|------------|------------|
| <b>Total</b>  | <b>-0.4</b> | <b>0.1</b> | <b>2.8</b> | <b>2.7</b> |
| Food and non-alcoholic beverages                                  | 0.5         | 1.3        | 3.8        | 2.6        |
| Alcoholic beverages and tobacco                                   | 0.8         | 2.4        | 1.8        | 3.7        |
| Clothing and footwear   | 0.8         | -1.6       | -0.5       | -1.8       |
| Housing, water, electricity, gas and other fuels                  | -0.2        | 0.1        | 5.4        | 4.6        |
| Furnishing, household equipment and routine household maintenance | 0.0         | -2.0       | 0.6        | 1.2        |
| Health  | -0.8        | -0.2       | 0.4        | 0.4        |
| Transport   | -7.6        | -0.6       | 3.3        | 0.0        |
| Communication   | -0.6        | -4.8       | -0.7       | 3.9        |
| Recreation and culture  | 0.4         | -0.6       | 0.6        | 4.5        |
| Education   | 2.8         | 3.4        | 4.0        | 2.3        |
| Restaurants and hotels  | 1.8         | 1.8        | 2.8        | 4.6        |
| Miscellaneous goods and services                                  | 0.5         | -1.3       | 0.3        | 3.2        |

Figure 2. Consumer prices indices by commodity groups  
(Annual inflation rates)



## Consumer price indices - annual average inflation

The annual average consumer price indices measure the average price change during the 12 months of the current year compared to the average price change during the 12 months of the previous year. The annual average consumer price indices are used as a measure of the annual average inflation.

Figure 3. Consumer prices indices  
(Annual average inflation rates)

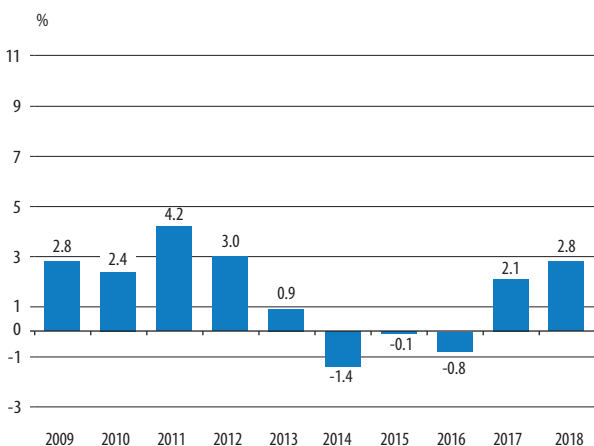
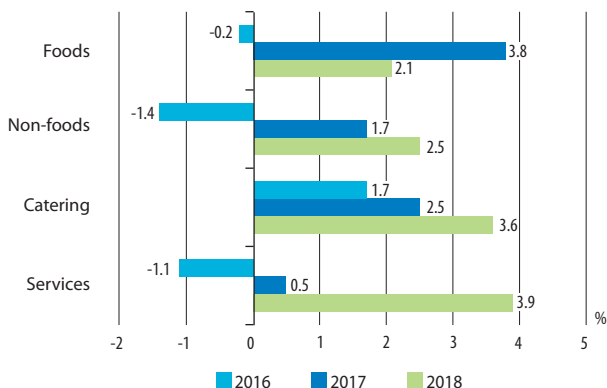


Figure 4. Consumer prices indices by commodity groups  
(Annual average inflation rates)







## 2. Annual average consumer prices indices

(1995 = 100)

|           | 2015    | 2016    | 2017    | 2018    |
|-----------|---------|---------|---------|---------|
| All items | 6550.41 | 6498.09 | 6632.06 | 6818.72 |

## 3. Annual average consumer prices indices by main commodity groups (Annual average inflation rates)

(Preceding year = 100)

| Commodity groups  | 2015        | 2016        | 2017       | 2018       |
|---|-------------|-------------|------------|------------|
| <b>Total</b>  | <b>-0.1</b> | <b>-0.8</b> | <b>2.1</b> | <b>2.8</b> |
| Food and non-alcoholic beverages                                  | 0.3         | -0.2        | 4.0        | 2.2        |
| Alcoholic beverages and tobacco                                   | 0.8         | 2.0         | 1.5        | 3.4        |
| Clothing and footwear   | 0.6         | -0.5        | -1.4       | -1.4       |
| Housing, water, electricity, gas and other fuels                  | 3.4         | 0.0         | 3.2        | 4.6        |
| Furnishing, household equipment and routine household maintenance | -0.4        | -1.5        | -0.3       | 1.6        |
| Health  | -1.6        | -0.2        | 0.2        | 0.2        |
| Transport   | -9.1        | -6.4        | 3.7        | 4.9        |
| Communication   | -3.1        | -3.7        | -2.6       | 2.6        |
| Recreation and culture  | 2.8         | -0.5        | -2.5       | 3.5        |
| Education   | 2.7         | 2.7         | 4.5        | 3.0        |
| Restaurants and hotels  | 1.1         | 1.4         | 2.5        | 4.5        |
| Miscellaneous goods and services                                  | -0.2        | -1.2        | 0.3        | 2.0        |

## Harmonized index of consumer prices

The Harmonized Index of Consumer Prices (HICP) is the comparable measure of inflation across EU Member states. It is one of the criteria of price stability and for readiness of Bulgaria to join the euro-zone. HICP, just as CPI, measures the total relative price change of goods and services. Both indices are calculated using the same basket of goods and services, but differ with respect to the used weights. HICP is calculated through the use of weights, which reflect the individual and the collective consumption of all households (incl. institutional and foreign households) on the economic territory of the country. The main source of information for HICP weights is the national accounts data. HICP in year  $t$  is calculated with the weights of year  $t-2$ . In compliance with Regulation (EC) No. 2015/2010 **since January 2016 the base year for HICP has been changed and the all indices have been calculated and published at 2015 as a base year.** The time series have been recalculated according to the new base year and have been posted on the NSI website ([www.nsi.bg](http://www.nsi.bg)).

Figure 5. Harmonized indices of consumer prices by months in 2018

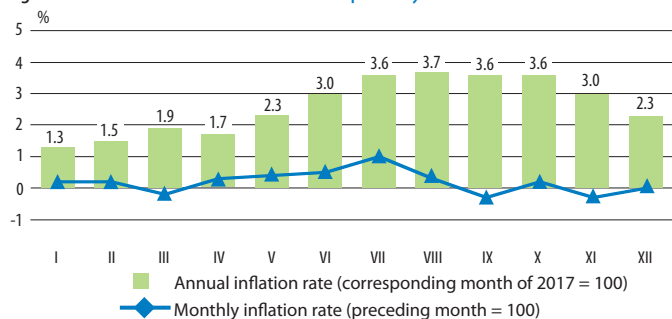
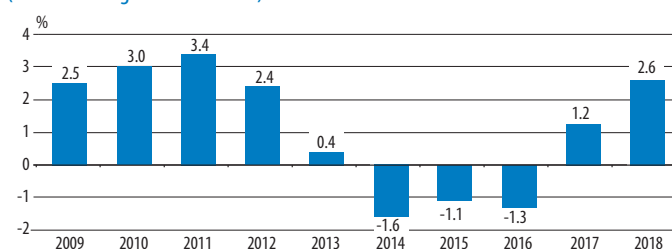


Figure 6. Harmonized indices of consumer prices (Annual average inflation rates)





#### 4. Annual average harmonized indices of consumer prices

(2015 = 100)

|           | 2015   | 2016  | 2017  | 2018   |
|-----------|--------|-------|-------|--------|
| All items | 100.00 | 98.68 | 99.85 | 102.48 |

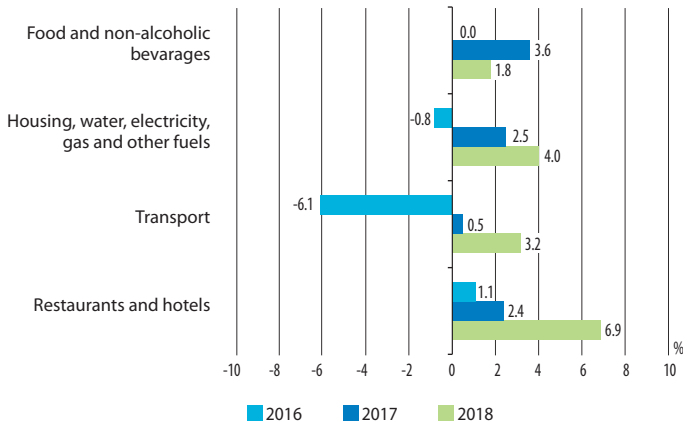
#### 5. Annual average harmonized indices of consumer prices by main commodity groups

(Annual average inflation rates)

(Preceding year = 100)

| Commodity groups  | 2015        | 2016        | 2017       | 2018       |
|---|-------------|-------------|------------|------------|
| <b>Total</b>  | <b>-1.1</b> | <b>-1.3</b> | <b>1.2</b> | <b>2.6</b> |
| Food and non-alcoholic beverages                                  | 0.6         | 0.0         | 3.6        | 1.8        |
| Alcoholic beverages and tobacco                                   | 0.8         | 1.7         | 1.1        | 3.2        |
| Clothing and footwear   | 0.7         | -0.1        | -1.3       | -0.9       |
| Housing, water, electricity, gas and other fuels                  | 3.3         | -0.8        | 2.5        | 4.0        |
| Furnishing, household equipment and routine household maintenance | 0.0         | -1.1        | 0.0        | 0.9        |
| Health  | -1.2        | 0.0         | 0.2        | 0.3        |
| Transport   | -8.1        | -6.1        | 0.5        | 3.2        |
| Communication   | -3.1        | -3.9        | -3.0       | 1.4        |
| Recreation and culture  | 0.7         | -1.1        | -1.7       | 2.1        |
| Education   | 2.7         | 2.3         | 4.4        | 3.0        |
| Restaurants and hotels  | 1.4         | 1.1         | 2.4        | 6.9        |
| Miscellaneous goods and services                                  | 0.1         | -1.1        | 1.8        | 4.1        |

Figure 7. Harmonized indices of consumer prices by selected commodity groups (Annual average inflation rates)



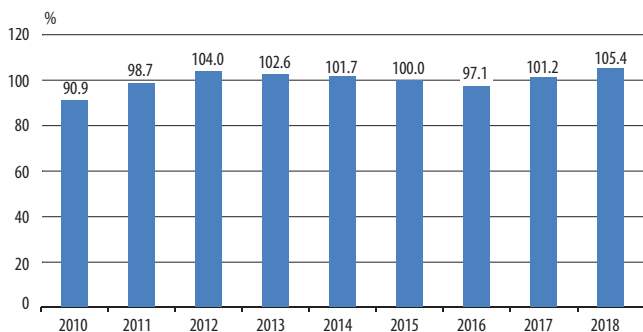
## Industrial producer price indices on the domestic market

The industrial producer price indices on the domestic market measure the average price changes of industrial products produced by industrial enterprises and sold on the domestic market, on the basis of a permanent sample of enterprises and products. Surveyed prices do not include VAT (value added tax), excises and subsidies.

Information for calculation of PPI is received on the bases of monthly surveys on producer prices of industrial products, where the prices of specific products with equal quality in the two surveyed time periods are compared and also in the case of quality change of the surveyed specific products this quality change is taken into account.

Price indexes are calculated at fixed base year, where indexes at different level of detail are calculated as weighted average though ascending weighing system, following the structure of Classification of Economic Activities (NACE.BG 2008).

Figure 8. Producer price indices on the domestic market (2015 = 100)





## 6. Producer price indices on the domestic market by economic activities

|   | 2016        | 2017         | 2018         | 2016                 | 2017         | 2018         |
|---|-------------|--------------|--------------|----------------------|--------------|--------------|
|   | 2010 = 100  |              |              | Preceding year = 100 |              |              |
| <b>Total</b>  | <b>97.1</b> | <b>101.2</b> | <b>105.4</b> | <b>97.1</b>          | <b>104.2</b> | <b>104.1</b> |
| <b>Mining and quarrying</b>   | <b>95.3</b> | <b>104.2</b> | <b>105.2</b> | <b>95.3</b>          | <b>109.4</b> | <b>100.9</b> |
| <b>Manufacturing</b>  | <b>98.1</b> | <b>101.3</b> | <b>103.8</b> | <b>98.1</b>          | <b>103.3</b> | <b>102.4</b> |
| Manufacture of food products, beverages and tobacco products                              | 100.6       | 102.1        | 103.0        | 100.6                | 101.5        | 100.8        |
| Manufacture of textiles, wearing apparel, leather and related products                    | 101.0       | 102.1        | 103.7        | 101.0                | 101.1        | 101.5        |
| Manufacture of wood and paper products, and printing                                      | 99.9        | 101.3        | 104.6        | 99.9                 | 101.4        | 103.3        |
| Manufacture of coke, and refined petroleum products                                       | ..          | ..           | ..           | ..                   | ..           | ..           |
| Manufacture of chemicals and chemical products  | 95.9        | 98.4         | 101.5        | 95.9                 | 102.6        | 103.2        |
| Manufacture of pharmaceuticals, medicinal chemical and botanical products                 | 101.4       | 102.2        | 104.3        | 101.4                | 100.8        | 102.0        |
| Manufacture of rubber and plastics products, and other non-metallic mineral products      | 99.9        | 100.0        | 100.1        | 99.9                 | 100.1        | 100.1        |
| Manufacture of basic metals and fabricated metal products, except machinery and equipment | 98.2        | 104.0        | 106.2        | 98.2                 | 106.0        | 102.1        |
| Manufacture of computer, electronic and optical products                                  | 103.0       | 103.1        | 102.7        | 103.0                | 100.2        | 99.5         |
| Manufacture of electrical equipment   | 98.6        | 102.6        | 104.1        | 98.6                 | 104.1        | 101.5        |
| Manufacture of machinery and equipment n.e.c.   | 101.8       | 101.9        | 103.6        | 101.8                | 100.1        | 101.7        |
| Manufacture of transport equipment  | 100.2       | 101.2        | 103.4        | 100.2                | 101.0        | 102.2        |
| Other manufacturing, and repair and installation of machinery and equipment               | 101.1       | 102.6        | 104.8        | 101.1                | 101.5        | 102.1        |
| <b>Electricity, gas, steam and air-conditioning supply</b>                                | <b>95.6</b> | <b>100.6</b> | <b>108.0</b> | <b>95.6</b>          | <b>105.2</b> | <b>107.3</b> |

## Producer prices in agriculture

The survey of producer prices in agriculture is carried out in accordance with the main requirements of the Eurostat agricultural price statistics methodology (i.e., the Handbook of Agricultural Price Statistics).

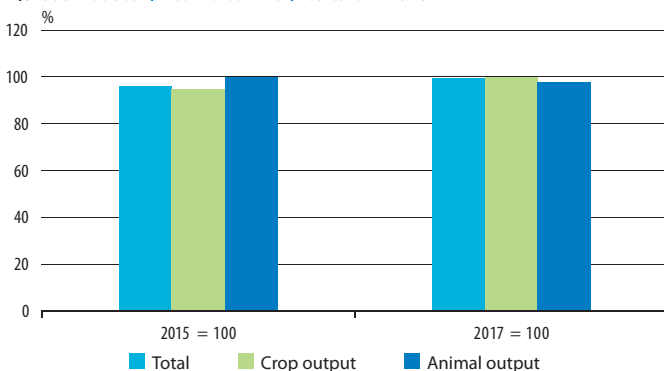
The survey is based on samples and is carried out quarterly.

The object of the survey is the producer price of a defined specific product. This is the price of the largest purchase or sale, in terms of quantity, during the respective month of the reference period. In the case of daily purchases or sales, the price in the middle of the month is recorded.

The producer's price is the output price of the agricultural farm, i.e., this price excludes expenditures for delivery, storage, transportation and the other expenditures arising from selling or purchasing agricultural products. This price does not include the product subsidies received (if such subsidies exist), VAT and other paid taxes.

On the basis of the collected information on agricultural producer prices, the producer price indices are calculated, using as a base (100) the year 2015, as well as the preceding year.

Figure 9. Producer price indices in agriculture in 2018





## 7. Producer price indices for agricultural products and live animals in 2018

|                       | 2018 as % to |              |
|-----------------------|--------------|--------------|
|                       | 2015         | 2017         |
| <b>Total</b>          | <b>95.8</b>  | <b>99.5</b>  |
| <b>Crop output</b>    | <b>94.5</b>  | <b>100.2</b> |
| Cereals crops         | 100.4        | 104.0        |
| Industrial crops      | 83.7         | 94.2         |
| Forage plants         | 94.2         | 90.6         |
| Potatoes              | 101.6        | 104.9        |
| Vegetables            | 104.6        | 98.7         |
| Fruit                 | 101.6        | 107.3        |
| Other crop products   | 114.8        | 80.8         |
| <b>Animal output</b>  | <b>100.2</b> | <b>97.4</b>  |
| Animals               | 90.5         | 92.5         |
| Cattle                | 90.1         | 101.2        |
| Pigs                  | 91.7         | 89.7         |
| Sheep and goats       | 93.9         | 94.3         |
| Poultry               | 88.3         | 93.5         |
| Animal products       | 107.3        | 100.8        |
| Milk                  | 111.0        | 100.3        |
| Cow's milk            | 113.8        | 100.2        |
| Other milk types      | 102.6        | 104.6        |
| Eggs                  | 104.3        | 103.5        |
| Other animal products | 77.9         | 99.4         |

## Prices of goods and services, currently consumed in agriculture

The survey of the prices of goods and services, currently consumed in agriculture is carried out in accordance with the main requirements of the Eurostat agricultural price statistics methodology (The Handbook of Agricultural Price Statistics). Five surveys on prices of fertilizers, animal feeding stuffs, plant protection products, veterinary-medical products and seeds and planting stock are carried out.

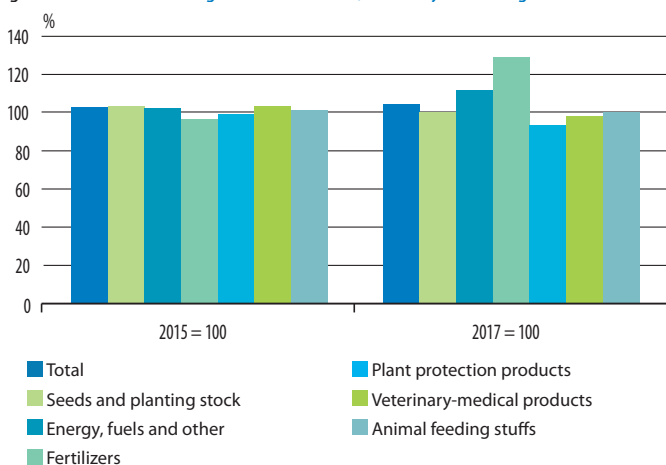
The surveys are based on samples and are carried out quarterly.

The objects of the surveys are the purchasing prices of the surveyed goods and services, currently consumed in agriculture.

The surveyed unit price is the price at the input of the agricultural farm, i.e., the price, which the purchaser has actually paid for the goods. This price includes taxes and levies and excludes subsidies and deductible VAT.

Based on the information from the five surveys, as well as on the information from other surveys conducted by the NSI, common price index of the goods and services, currently used in agriculture is calculated using as a base (100) the year 2015, as well as the preceding year.

Figure 10. Price indices of goods and services, currently used in agriculture in 2018

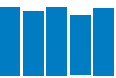






## 8. Price indices of goods and services currently consumed in agriculture in 201

|  | 2018 as % to |              |
|--|--------------|--------------|
|  | 2015         | 2017         |
| <b>Total</b>                             | <b>102.6</b> | <b>104.6</b> |
| Seeds and planting stock                 | 103.7        | 100.2        |
| Energy, fuels and other                  | 102.4        | 112.0        |
| Fertilizers                              | 96.8         | 128.9        |
| Straight fertilizers                     | 96.9         | 129.4        |
| Nitrogenous fertilizers                  | 101.8        | 126.7        |
| Phosphatic fertilizers                   | 85.7         | 146.5        |
| Potassic fertilizers                     | 56.7         | 124.4        |
| Compound fertilizers                     | 95.9         | 110.6        |
| Plant protection products and pesticides | 99.0         | 93.7         |
| Fungicides                               | 102.1        | 94.8         |
| Insecticides                             | 95.5         | 89.8         |
| Herbicides                               | 98.2         | 94.0         |
| Veterinary-medical products              | 103.7        | 98.2         |
| Animal feeding stuffs                    | 101.3        | 100.3        |
| Straight feeding stuffs                  | 99.2         | 101.4        |
| Compound feeding stuffs                  | 102.3        | 99.8         |
| Maintenance of materials                 | 112.8        | 90.3         |
| Maintenance of buildings                 | 103.3        | 102.3        |
| Other goods and services                 | 104.9        | 103.1        |



### **Price indices of goods and services contributing to agricultural investment**

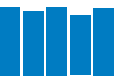
To calculate the price indices of goods and services contributing to agricultural investment using as a base (100) the year 2015, as well as the preceding year:

- Quarterly indices for import of agricultural machinery and transport equipment from the department 'Foreign trade statistics';
- Monthly indices in building construction from the department 'Business trends and tourism'.



## 9. Price indices of goods and services contributing to agricultural investment in agriculture in 2018

|                               | 2018 as % to |              |
|-------------------------------|--------------|--------------|
|                               | 2015         | 2017         |
| <b>Total</b>                  | <b>95.3</b>  | <b>107.3</b> |
| Materials                     | 95.6         | 105.3        |
| Machinery and other equipment | 96.8         | 104.9        |
| Transport equipment           | 83.3         | 108.8        |
| Buildings                     | 94.5         | 110.6        |



### Total index of goods and services in agriculture

The total index is calculated based on the prices indices of goods and services currently consumed in agriculture and price indices of goods and services contributing to agricultural investment.

#### 10. Price indices of goods and services in agriculture in 2018

|              | 2018 as % to |              |
|--------------|--------------|--------------|
|              | 2015         | 2017         |
| <b>Total</b> | <b>102.1</b> | <b>104.8</b> |

**XII. EXPORTS AND  
IMPORTS OF GOODS**



## Foreign trade turnover

The indicators, which describe the foreign trade turnover of the Republic of Bulgaria are based on the following data: the Single Administrative Document (SAD) for exports and imports with third countries; the monthly Intrastat declarations of the providers of statistical information on the values of arrivals and dispatches for trade between EU Member States; the statistical adjustments for non-response and intra-Community trade under the thresholds; additional statistical information from other administrative sources.

The main trading partner of Bulgaria, during the recent years is EU - more than one-half of the country's foreign trade is carried out with the Member States.

Figure 1. Exports and imports

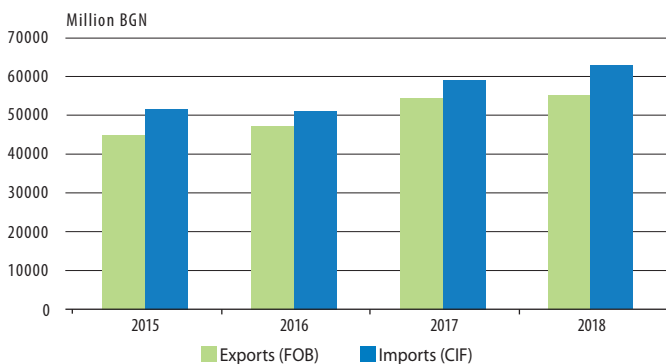
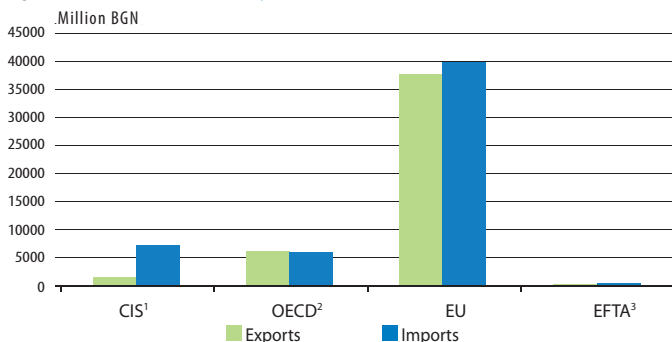


Figure 2. Exports and imports by economic zones in 2018



<sup>1</sup> CIS includes: Azerbaijan; Armenia; Belarus; Kazakhstan; Kyrgyz Republic; Moldova, Republic of; Russian Federation; Tajikistan; Turkmenistan; Uzbekistan and Ukraine.

<sup>2</sup> OECD includes: Australia; Virgin Islands (US); United States; Iceland; Canada; Mexico; New Zealand; Norway; Republic of Korea; Turkey; Switzerland; Japan; Israel and Chile.

<sup>3</sup> EFTA includes: Norway; Switzerland; Iceland and Liechtenstein.



## 1. Foreign trade turnover

(Million BGN)

|                 | 2015           | 2016           | 2017            | 2018            |
|-----------------|----------------|----------------|-----------------|-----------------|
| <b>Turnover</b> | <b>96498.5</b> | <b>98392.6</b> | <b>113831.9</b> | <b>118163.3</b> |
| Exports (FOB)   | 44949.5        | 47186.3        | 54598.5         | 55246.9         |
| Imports (CIF)   | 51549.0        | 51206.2        | 59233.4         | 62916.4         |

## 2. Number of countries, trade partners of Bulgaria

|                 | 2015       | 2016       | 2017       | 2018       |
|-----------------|------------|------------|------------|------------|
| <b>Turnover</b> | <b>210</b> | <b>207</b> | <b>208</b> | <b>209</b> |
| Exports (FOB)   | 208        | 203        | 205        | 207        |
| Imports (CIF)   | 172        | 174        | 173        | 166        |

## 3. Exports and imports by economic zones

(Million BGN)

|                   | 2015           | 2016           | 2017           | 2018           |
|-------------------|----------------|----------------|----------------|----------------|
| <b>Exports</b>    | <b>44949.5</b> | <b>47186.3</b> | <b>54598.5</b> | <b>55246.9</b> |
| of which:         |                |                |                |                |
| CIS <sup>1</sup>  | 1431.1         | 1334.7         | 2119.7         | 1455.1         |
| OECD <sup>2</sup> | 5466.7         | 5378.2         | 6741.4         | 6242.0         |
| EU <sup>3</sup>   | 29049.4        | 31157.6        | 34546.6        | 37697.5        |
| EFTA <sup>4</sup> | 224.2          | 338.0          | 404.5          | 380.3          |
| <b>Imports</b>    | <b>51549.0</b> | <b>51206.2</b> | <b>59233.4</b> | <b>62916.4</b> |
| of which:         |                |                |                |                |
| CIS <sup>1</sup>  | 7308.1         | 5610.4         | 7205.2         | 7295.2         |
| OECD <sup>2</sup> | 4576.3         | 4774.8         | 5410.0         | 6031.5         |
| EU <sup>3</sup>   | 33157.2        | 33989.3        | 37807.8        | 39903.8        |
| EFTA <sup>4</sup> | 413.5          | 433.0          | 477.4          | 550.6          |

<sup>1</sup> CIS includes: Azerbaijan; Armenia; Belarus; Kazakhstan; Kyrgyz Republic; Moldova, Republic of; Russian Federation; Tajikistan; Turkmenistan; Uzbekistan and Ukraine.

<sup>2</sup> OECD includes: Australia; Virgin Islands (US); United States; Iceland; Canada; Mexico; New Zealand; Norway; Republic of Korea; Turkey; Switzerland; Japan; Israel and Chile.

<sup>3</sup> EU including Croatia.

<sup>4</sup> EFTA includes: Norway; Switzerland; Iceland and Liechtenstein.



### Exports by main trade partner countries

The geographical distribution of the data on exports is presented according to the countries of destination of the goods. The graph shows exports to the top 10 Bulgarian trade partner countries.

The distribution of exports according to the Standard International Trade classification shows the biggest share of manufactured goods classified chiefly by material, followed by machinery and transport equipment.

Figure 3. Exports to the top 10 Bulgarian trade partner countries in 2018

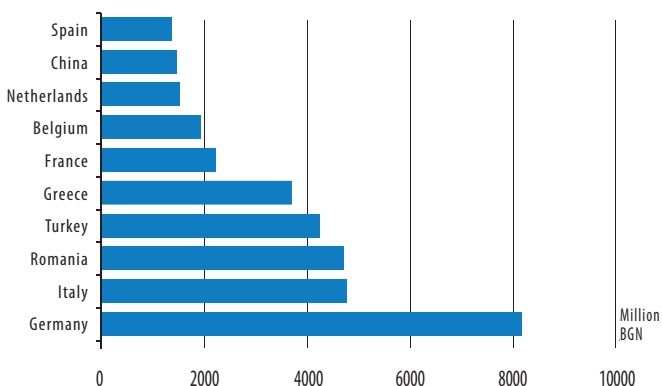
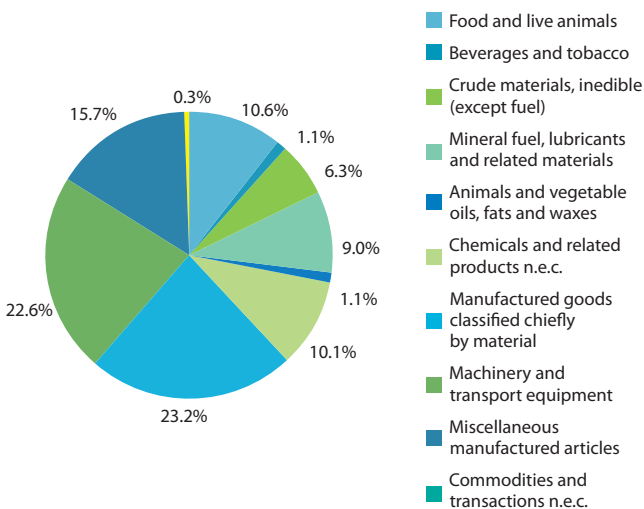


Figure 4. Structure of exports by sections of SITC, rev. 4 in 2018







## 4. Exports by countries main trade partners

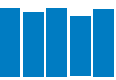
(Million BGN)

| Country                     | 2015           | 2016           | 2017           | 2018           |
|-----------------------------|----------------|----------------|----------------|----------------|
| <b>Total</b>                | <b>44949.5</b> | <b>47186.3</b> | <b>54598.5</b> | <b>55246.9</b> |
| of which:                   |                |                |                |                |
| Austria                     | 804.0          | 898.7          | 961.3          | 991.0          |
| Algeria                     | 127.7          | 437.4          | 228.9          | 129.5          |
| Belgium                     | 1658.0         | 1264.5         | 2195.1         | 1921.2         |
| China                       | 1049.5         | 914.5          | 1329.0         | 1463.0         |
| Croatia                     | 187.1          | 218.7          | 223.3          | 363.4          |
| Cyprus                      | 299.5          | 160.4          | 157.3          | 200.3          |
| Czech Republic              | 769.8          | 787.2          | 1069.1         | 1182.4         |
| Denmark                     | 245.5          | 283.3          | 315.0          | 404.5          |
| Egypt                       | 738.3          | 567.2          | 927.6          | 447.9          |
| France                      | 1908.8         | 2079.8         | 2137.1         | 2203.5         |
| Georgia                     | 316.4          | 323.1          | 351.5          | 342.5          |
| Germany                     | 5659.6         | 6291.2         | 7023.1         | 8163.8         |
| Gibraltar                   | 48.4           | 43.9           | 131.0          | 317.9          |
| Greece                      | 2954.7         | 3228.4         | 3362.5         | 3695.6         |
| Hungary                     | 685.4          | 764.6          | 902.6          | 973.6          |
| Izrael                      | 189.2          | 172.7          | 212.9          | 128.9          |
| Italy                       | 4180.2         | 4245.3         | 4326.8         | 4759.4         |
| Lebanon                     | 159.1          | 288.1          | 166.7          | 132.0          |
| Libya                       | 151.8          | 154.9          | 116.0          | 107.7          |
| Netherlands                 | 1057.1         | 1248.0         | 1293.4         | 1514.3         |
| Poland                      | 1035.0         | 1145.7         | 1231.7         | 1274.1         |
| Portugal                    | 185.2          | 200.6          | 230.2          | 194.6          |
| Republic of North Macedonia | 754.6          | 769.1          | 796.3          | 824.5          |
| Romania                     | 3691.8         | 4048.3         | 4261.9         | 4696.0         |
| Russian Federation          | 783.6          | 765.3          | 1448.9         | 745.6          |
| Serbia                      | 820.0          | 743.4          | 927.2          | 1034.1         |
| Singapore                   | 664.5          | 355.8          | 471.6          | 493.2          |
| Slovakia                    | 330.7          | 321.9          | 404.9          | 424.6          |
| Slovenia                    | 360.7          | 386.6          | 404.0          | 407.9          |
| Spain                       | 1038.3         | 1295.7         | 1533.8         | 1366.3         |
| Sweden                      | 297.3          | 355.4          | 426.8          | 494.4          |
| Switzerland                 | 174.7          | 266.5          | 322.8          | 298.1          |
| Turkey                      | 3923.8         | 3694.9         | 4853.3         | 4228.9         |
| Ukraine                     | 313.9          | 278.5          | 294.4          | 361.4          |
| United Arab Emirates        | 416.7          | 457.4          | 321.5          | 193.7          |
| United Kingdom              | 1146.4         | 1156.2         | 1272.7         | 1363.2         |
| United States               | 718.2          | 693.5          | 797.6          | 929.9          |

## 5. Exports by sections of SITC, rev. 4

(Million BGN)

|   | 2015           | 2016           | 2017           | 2018           |
|---|----------------|----------------|----------------|----------------|
| <b>Total</b>                                      | <b>44949.5</b> | <b>47186.3</b> | <b>54598.5</b> | <b>55246.9</b> |
| Food and live animals                             | 4857.3         | 5399.5         | 5612.7         | 5863.3         |
| Beverages and tobacco                             | 823.9          | 810.9          | 720.9          | 633.5          |
| Crude materials, inedible (except fuel)           | 2953.8         | 3134.3         | 3347.7         | 3496.3         |
| Mineral fuel, lubricants and related materials    | 4859.4         | 4275.4         | 5415.0         | 4963.1         |
| Animals and vegetable oils, fats and waxes        | 471.6          | 483.4          | 585.7          | 612.1          |
| Chemicals and related products n.e.c.             | 4437.3         | 4732.6         | 5420.7         | 5569.8         |
| Manufactured goods classified chiefly by material | 9968.6         | 9595.8         | 12792.7        | 12814.8        |
| Machinery and transport equipment                 | 9400.8         | 10163.4        | 11443.0        | 12489.2        |
| Miscellaneous manufactured articles               | 7058.2         | 8466.4         | 9113.2         | 8649.3         |
| Commodities and transactions n.e.c.               | 118.4          | 124.6          | 146.9          | 155.5          |



### Imports by main trade partner countries

The geographical distribution of the data on imports is presented according to the countries of consignment of the goods. The graph shows imports from the top 10 partner countries.

The distribution of imports according to the Standard International Trade classification shows the biggest share of machinery and transport equipment, followed by manufactured goods classified chiefly by material.

Figure 5. Imports from the top 10 Bulgarian trade partner countries in 2018

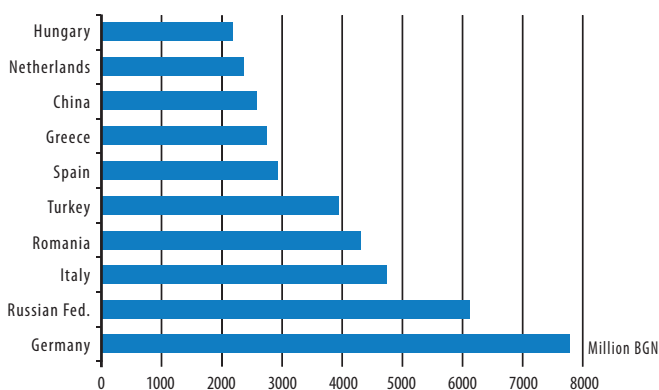
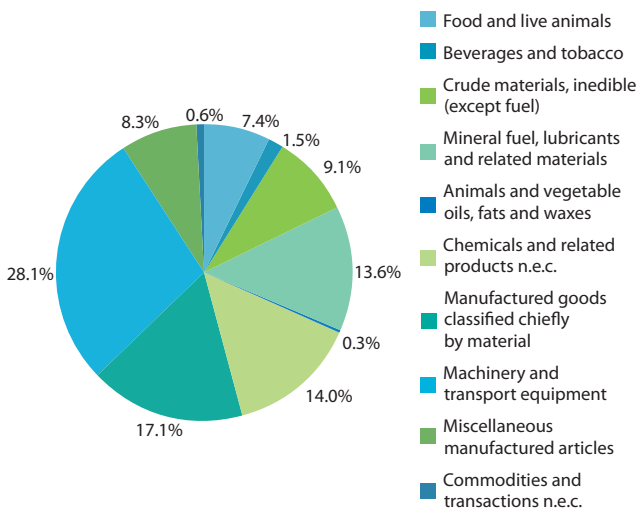


Figure 6. Structure of imports by sections of SITC, rev. 4 in 2018





## 6. Imports by countries main trade partners

(Million BGN)

| Country                     | 2015           | 2016           | 2017           | 2018           |
|-----------------------------|----------------|----------------|----------------|----------------|
| <b>Total</b>                | <b>51549.0</b> | <b>51206.2</b> | <b>59233.4</b> | <b>62916.4</b> |
| of which:                   |                |                |                |                |
| Austria                     | 1389.9         | 1412.4         | 1426.1         | 1571.3         |
| Belgium                     | 1186.5         | 1188.4         | 1248.1         | 1247.7         |
| China                       | 1894.5         | 2034.9         | 2171.2         | 2575.6         |
| Croatia                     | 116.5          | 123.0          | 155.5          | 186.3          |
| Czech Republic              | 1095.2         | 1086.9         | 1335.5         | 1494.9         |
| Denmark                     | 243.6          | 233.9          | 271.4          | 288.4          |
| Egypt                       | 201.4          | 709.7          | 1098.8         | 1025.7         |
| France                      | 1629.8         | 1611.8         | 1705.4         | 1722.8         |
| Germany                     | 6640.6         | 6694.1         | 7243.7         | 7783.7         |
| Georgia                     | 446.9          | 280.7          | 585.5          | 644.6          |
| Greece                      | 2479.7         | 2462.4         | 2605.9         | 2737.6         |
| Hungary                     | 1909.4         | 1948.9         | 2085.1         | 2172.3         |
| India                       | 275.5          | 238.9          | 273.9          | 381.2          |
| Italy                       | 3902.5         | 4049.5         | 4290.1         | 4737.0         |
| Ireland                     | 159.1          | 192.1          | 223.7          | 268.8          |
| Japan                       | 165.3          | 186.0          | 205.9          | 273.4          |
| Jordan                      | 111.8          | 38.0           | 51.2           | 8.6            |
| Korea, Rep .of              | 165.6          | 218.1          | 222.2          | 297.6          |
| Netherlands                 | 1727.3         | 1868.3         | 2174.0         | 2386.2         |
| Poland                      | 1608.7         | 2066.2         | 2136.8         | 2092.1         |
| Republic of North Macedonia | 507.7          | 505.2          | 641.7          | 628.3          |
| Romania                     | 3494.3         | 3548.7         | 4174.7         | 4314.7         |
| Russian Federation          | 6201.9         | 4570.0         | 6068.2         | 6121.7         |
| Serbia                      | 696.8          | 761.7          | 1183.4         | 1235.1         |
| Slovakia                    | 741.0          | 686.5          | 762.6          | 770.3          |
| Slovenia                    | 341.3          | 396.2          | 432.0          | 463.1          |
| Spain                       | 2362.9         | 2031.1         | 3117.8         | 2930.6         |
| Sweden                      | 318.0          | 322.8          | 378.7          | 400.6          |
| Switzerland                 | 377.3          | 384.2          | 414.4          | 478.4          |
| Taiwan                      | 216.4          | 219.7          | 197.8          | 222.9          |
| Turkey                      | 2924.9         | 3179.5         | 3733.9         | 3935.4         |
| Ukraine                     | 916.2          | 801.5          | 896.4          | 934.6          |
| United Kingdom              | 942.4          | 1174.1         | 930.1          | 962.7          |
| United States               | 474.7          | 408.3          | 454.4          | 568.3          |

## 7. Imports by sections of SITC, rev. 4

(Million BGN)

|   | 2015           | 2016           | 2017           | 2018           |
|---|----------------|----------------|----------------|----------------|
| <b>Total</b>  | <b>51549.0</b> | <b>51206.2</b> | <b>59233.4</b> | <b>62916.4</b> |
| Food and live animals                                 | 3981.0         | 4149.8         | 4616.9         | 4626.8         |
| Beverages and tobacco                                 | 733.1          | 786.2          | 807.6          | 930.3          |
| Crude materials, inedible (except fuel)               | 4230.3         | 3696.8         | 5386.3         | 5755.3         |
| Mineral fuel, lubricants and related materials        | 8042.6         | 6377.6         | 8393.6         | 8533.0         |
| Animals and vegetable oils, fats and waxes            | 177.9          | 181.7          | 194.3          | 201.3          |
| Chemicals and related products n.e.c.                 | 7238.4         | 7609.5         | 8411.1         | 8818.2         |
| Manufactured goods classified chiefly by the material | 8722.6         | 9177.5         | 10100.3        | 10789.0        |
| Machinery and transport equipment                     | 14006.3        | 14319.5        | 15999.4        | 17674.5        |
| Miscellaneous manufactured articles                   | 4137.9         | 4608.4         | 5007.0         | 5249.2         |
| Commodities and transactions n.e.c.                   | 279.2          | 299.2          | 316.9          | 338.8          |

### Exports and imports by commodities

The NSI applies the Special System of Trade for the reporting of foreign trade flows.

The reporting of commodity flows by kind of commodity is done according to Combined Nomenclature.

#### 8. Exports of selected commodities

| Commodities  | 2015   | 2016   | 2017   | 2018   |
|--|--------|--------|--------|--------|
| Meat of swine - fresh, chilled or frozen - thousand tons | 2.2    | 3.3    | 3.9    | 6.1    |
| Poultry meat - fresh, chilled or frozen - thousand tons  | 34.7   | 35.4   | 39.5   | 40.1   |
| Cheese and yellow cheese - thousand tons                 | 16.8   | 15.7   | 17.4   | 14.9   |
| Tomatoes, fresh or chilled - thousand tons               | 4.4    | 4.3    | 6.2    | 10.7   |
| Cucumbers and gherkins, fresh or chilled - thousand tons | 6.9    | 11.1   | 5.9    | 8.7    |
| Maize - thousand tons                                    | 1178.4 | 1342.4 | 990.3  | 1418.9 |
| Preserved tomatoes - thousand tons                       | 3.8    | 3.0    | 4.4    | 3.8    |
| Other preserved vegetables - thousand tons               | 24.2   | 25.0   | 25.7   | 24.2   |
| Tobacco, unmanufactured - thousand tons                  | 34.0   | 41.2   | 29.8   | 26.8   |
| Cigarettes - thousand tons                               | 16.5   | 13.1   | 12.2   | 9.4    |
| Dentifrices - thousand tons                              | 9.0    | 9.6    | 9.2    | 9.0    |
| New pneumatic tyres of rubber - thousand tons            | 2.6    | 2.5    | 3.7    | 2.8    |
| Men's or boys' suits, jackets, trousers - million BGN    | 539.5  | 592.4  | 519.0  | 441.1  |
| Men's or boys' shirts - million BGN                      | 84.1   | 88.9   | 72.5   | 71.7   |
| Footwear upper of leather - thousand pairs               | 6115.5 | 5286.6 | 4808.5 | 3944.0 |
| Pumps for liquids - million BGN                          | 171.4  | 196.1  | 226.4  | 261.8  |
| Lathes - thousand tons                                   | 3.8    | 4.0    | 4.0    | 4.0    |
| Electric accumulators - million BGN                      | 268.0  | 288.1  | 297.9  | 330.5  |
| Furniture - million BGN                                  | 257.1  | 291.1  | 316.4  | 319.8  |



## 9. Imports of selected commodities

| Commodities                                  | 2015   | 2016   | 2017   | 2018   |
|--|--------|--------|--------|--------|
| Bananas - thousand tons                      | 39.9   | 42.4   | 46.8   | 52.7   |
| Oranges - thousand tons                      | 35.0   | 38.2   | 32.9   | 41.4   |
| Lemons - thousand tons                       | 21.4   | 23.8   | 24.0   | 34.2   |
| Grapefruit - thousand tons                   | 14.2   | 16.3   | 11.8   | 18.1   |
| Olives - thousand tons                       | 20.0   | 17.4   | 17.4   | 17.7   |
| Coffee beans - thousand tons                 | 34.0   | 38.8   | 35.9   | 37.8   |
| Pepper (black and white) - tons              | 898.5  | 737.0  | 856.3  | 884.6  |
| Rice - thousand tons                         | 40.9   | 28.4   | 27.6   | 36.5   |
| Margarine - thousand tons                    | 9.8    | 7.9    | 9.7    | 7.4    |
| Chocolate - thousand tons                    | 20.5   | 22.3   | 26.4   | 29.7   |
| Fruit and vegetable juices - thousand tons   | 17.5   | 19.7   | 20.0   | 22.0   |
| Sugar - thousand tons                        | 246.8  | 226.1  | 196.3  | 214.5  |
| Soya groats - thousand tons                  | 119.3  | 108.7  | 115.0  | 114.3  |
| Salt - thousand tons                         | 213.5  | 253.0  | 357.5  | 259.6  |
| Coal (excl. anthracite) - thousand tons      | 806.3  | 516.2  | 587.4  | 505.1  |
| Anthracite - thousand tons                   | 293.5  | 270.8  | 339.8  | 339.9  |
| Coke and semi-coke of coal - thousand tons   | 76.2   | 93.6   | 62.7   | 60.9   |
| Cellulose - thousand tons                    | 20.3   | 32.7   | 15.6   | 10.1   |
| Newsprint - thousand tons                    | 44.1   | 41.0   | 31.9   | 28.4   |
| Cigarette paper - thousand tons              | 4.8    | 6.2    | 6.6    | 5.8    |
| Cotton (incl. linter) - thousand tons        | 5.2    | 6.8    | 6.8    | 4.9    |
| Footwear upper of leather - thousand pairs   | 6572.8 | 3740.1 | 3515.9 | 3019.9 |
| Tubes of cast iron and steel - thousand tons | 151.0  | 253.0  | 84.7   | 87.6   |
| Refrigerators - thousand items               | 76.5   | 66.7   | 51.4   | 81.5   |
| Washing machines thousand items              | 181.7  | 194.1  | 185.3  | 218.6  |
| Vacuum-cleaners - thousand items             | 253.2  | 359.8  | 366.6  | 377.9  |
| TV sets - thousand items                     | 907.3  | 720.6  | 692.5  | 705.5  |
| Household sewing machines - thousand items   | 34.7   | 4.2    | 3.6    | 8.2    |
| Combines (corn) - in numbers                 | 907    | 626    | 668    | 842    |
| Passenger cars - thousand items              | 76.0   | 85.8   | 99.3   | 102.6  |
| Trucks - thousand items                      | 9.6    | 10.0   | 12.2   | 13.3   |
| Busses - in numbers                          | 491    | 597    | 649    | 734    |
| Bicycles - thousand items                    | 32.3   | 34.4   | 36.2   | 34.3   |
| Motorcycles - thousand items                 | 4.4    | 16.4   | 21.5   | 23.6   |
| Tractors - thousand items                    | 9.6    | 27.5   | 8.3    | 10.4   |
| Cultivators - in numbers                     | 138    | 142    | 217    | 970    |
| Cameras - million BGN                        | 2.3    | 0.8    | 0.2    | 0.5    |
| Clocks and watches - thousand items          | 1443.5 | 1188.9 | 1076.3 | 1079.9 |



### **XIII. BALANCE OF PAYMENTS**



## Balance of payments

The Balance of payments (standard presentation) is in accordance with the Sixth edition of the 'Balance of Payments and International Investment Position Manual' (IMF, 2008) and the 'Guidelines of the European Central Bank'. The components of the Balance of payments are classified in the following main categories:

**Current Account** - comprises the acquisition and provision of goods and services, primary and secondary income between the country and the rest of the world.

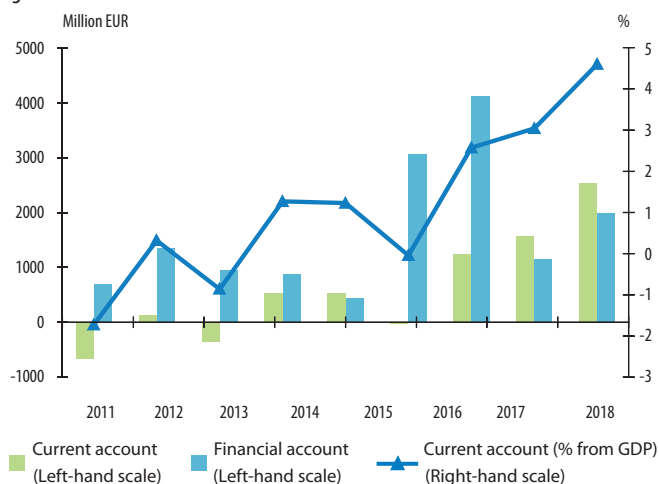
**Capital Account** - includes capital transfers and acquisition or disposal of non-produced, non-financial assets.

**Financial Account** - comprises all transactions in the external financial assets and liabilities of an economy. Reserves and Related Items - include those external assets that are readily available for direct financing of balance of payments deficits.

Net errors and omissions is an offsetting item.

The Balance of payments is compiled by the Bulgarian National Bank.

Figure 1. Current and financial account





1. Balance of payments of Bulgaria<sup>1</sup>

(Million EUR)

|   | 2015          | 2016          | 2017          | 2018          |
|---|---------------|---------------|---------------|---------------|
| <b>Current and Capital Account</b>                                      | <b>1407.0</b> | <b>2314.9</b> | <b>2108.5</b> | <b>3145.0</b> |
| <b>Current Account<sup>1</sup></b>                                      | <b>-15.4</b>  | <b>1244.0</b> | <b>1578.2</b> | <b>2547.5</b> |
| Goods and Services - Net  | 381.2         | 2076.0        | 2092.5        | 1143.3        |
| Goods - Net <sup>2</sup>  | -2622.4       | -984.4        | -765.8        | -2264.1       |
| Services - Net  | 3003.6        | 3060.4        | 2858.4        | 3407.4        |
| Primary income - Net  | -2036.9       | -2416.5       | -2368.5       | -547.2        |
| Secondary income - Net  | 1640.4        | 1584.6        | 1854.2        | 1951.4        |
| <b>Capital Account<sup>3</sup></b>                                      | <b>1422.4</b> | <b>1070.9</b> | <b>530.3</b>  | <b>597.5</b>  |
| Gross acquisitions/disposals of non-produced non-financial assets - Net | 122.6         | 80.0          | 96.7          | 94.4          |
| Capital transfers - Net   | 1299.8        | 990.9         | 433.6         | 503.2         |
| <b>Financial account - Net<sup>3</sup></b>                              | <b>3079.5</b> | <b>4135.0</b> | <b>1153.1</b> | <b>1989.0</b> |
| Direct investment - Net <sup>4</sup>                                    | -2241.1       | -615.4        | -1998.9       | -1416.1       |
| Portfolio investment - Net <sup>5</sup>                                 | -581.6        | -630.4        | 2615.5        | 1416.3        |
| Financial derivatives - Net   | 15.8          | -16.5         | -23.8         | 44.4          |
| Other investment - Net  | 2156.8        | 1929.9        | 659.2         | 582.8         |
| BNB Reserve assets <sup>6</sup>   | 3729.7        | 3467.3        | -98.9         | 1361.6        |
| <b>Balancing Items:</b>   |               |               |               |               |
| Current and Capital Account Balance                                     | 1407.0        | 2314.9        | 2108.5        | 3145.0        |
| Financial Account Balance   | 3079.5        | 4135.0        | 1153.1        | 1989.0        |
| Net errors and Omissions <sup>7</sup>                                   | 1672.5        | 1820.1        | -955.5        | -1156.0       |

<sup>1</sup> Standard presentation in accordance with IMF 6-th edition of the „Balance of Payments and International Investment Position Manual“. Preliminary data as of March 22, 2019.

<sup>2</sup> Preliminary NSI and BNB data for 2018. The data are based on the balance of payments compilation methodology.

<sup>3</sup> A minus sign denotes a capital outflow (decrease in assets or liabilities) and a positive sign - a capital inflow (increase in assets or liabilities).

<sup>4</sup> Preliminary data compiled in accordance with the asset/liability principle. Data are provided by direct investment companies reporting to BNB, banks, the Central Depository, notaries, the NSI, the Agency for Privatisation. The 2017 and 2018 data are subject to revisions with the annual NSI data and reports from foreign direct investment enterprises.

<sup>5</sup> Based on data provided by banks, nonbank financial institutions, insurance companies and pension funds, general government institutions, and nonfinancial corporations acquiring securities without intermediation of a resident investment intermediary.

<sup>6</sup> Excluding valuation changes due to the exchange rate or price changes, changes associated with the creation of reserve assets (monetization/demonetization of gold and the allocation or cancellation of SDRs) and reclassifications. A positive sign (+) denotes an increase in the reserves, a minus sign (-) - a decrease.

<sup>7</sup> Net errors and omissions represent the difference between the Financial account balance and Current and Capital account balance.

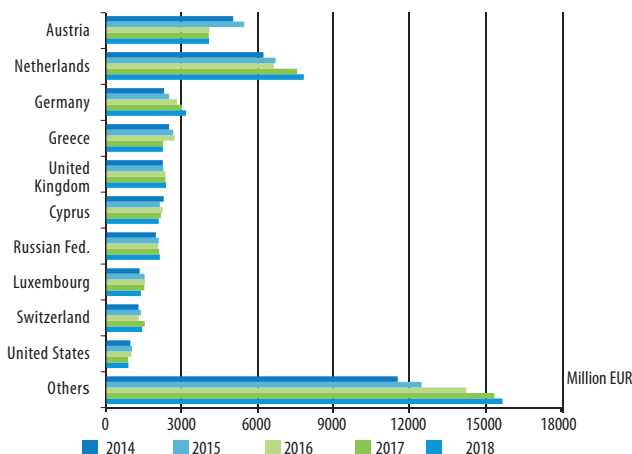
## Foreign direct investments

Foreign direct investment in the country is an international investment in which a direct investor, resident of a foreign economy, obtains a lasting interest in an enterprise resident of the Bulgarian economy (direct investment enterprise). The lasting interest of the direct investor in a long-term relationship with the direct investment enterprise implies a significant degree of influence by the direct investor on the management of the direct investment enterprise. For the purposes of international compatibility of the data of the separate countries, the Balance of Payments Manual has adopted the principle that the acquisition of 10 or more percents of the voting power in the management of an enterprise is considered an establishment of a direct investment relationship.

The foreign direct investment comprises the initial transaction establishing the relationship between the direct investor and the direct investment enterprise, as well as all subsequent transactions between them. The transactions can be related to increase/decrease in the liabilities of the direct investment enterprise to its direct investor, as well as to increase/decrease in the claims of the direct investment enterprise on the direct investor.

The foreign direct investments are reported in the balance of payments from the Bulgarian National Bank.

Figure 2. Stock of FDI in Bulgaria, by country



2. FDI flows in Bulgaria, by economic activity groupings<sup>1</sup>

(Million EUR)

| Economic activity groupings  | 2015          | 2016          | 2017          | 2018          |
|--|---------------|---------------|---------------|---------------|
| <b>All FDI activities</b>  | <b>2399.1</b> | <b>1003.3</b> | <b>2314.1</b> | <b>1744.2</b> |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 435.3         | 477.5         | 339.6         | 135.6         |
| Financial and insurance activities                                   | 460.3         | 179.2         | 294.6         | 583.5         |
| Manufacturing  | 551.9         | 236.9         | 1099.5        | 1281.8        |
| Construction   | 178.9         | 23.2          | 175.9         | -96.3         |
| Electricity, gas, steam and air conditioning supply                  | 74.8          | 15.0          | -206.9        | -109.9        |
| Not allocated  | 477.8         | 79.3          | 380.8         | 12.6          |
| Real estate activities   | -41.6         | -41.9         | 345.7         | -148.9        |
| Information and communication  | 84.6          | 19.4          | -243.1        | 45.5          |
| Administrative and support service activities                        | 11.6          | 82.1          | 45.7          | 48.5          |
| Transportation and storage   | 53.8          | 8.0           | 5.5           | 10.4          |
| Mining and quarrying   | -67.4         | -22.6         | -21.4         | 11.2          |
| Arts, entertainment and recreation                                   | 14.2          | 6.1           | 22.1          | -3.8          |
| Education  | 1.8           | 11.6          | 4.7           | 0.1           |
| Human health and social work activities                              | 1.4           | 0.9           | 3.3           | 1.2           |
| Other service activities   | 0.6           | 0.8           | 0.3           | 5.5           |
| Water supply; sewerage, waste management and remediation activities  | 11.6          | -34.8         | 34.2          | -37.5         |
| Accommodation and food service activities                            | 12.1          | 24.9          | -18.3         | -14.1         |
| Professional, scientific and technical activities                    | 160.6         | -49.1         | 56.8          | 14.1          |
| Agriculture, forestry and fishing                                    | -22.9         | -13.2         | -4.9          | 4.8           |

<sup>1</sup> Source: Bulgarian National Bank. Preliminary data as of March 22, 2019.



## **XIV. TANGIBLE FIXED ASSETS**



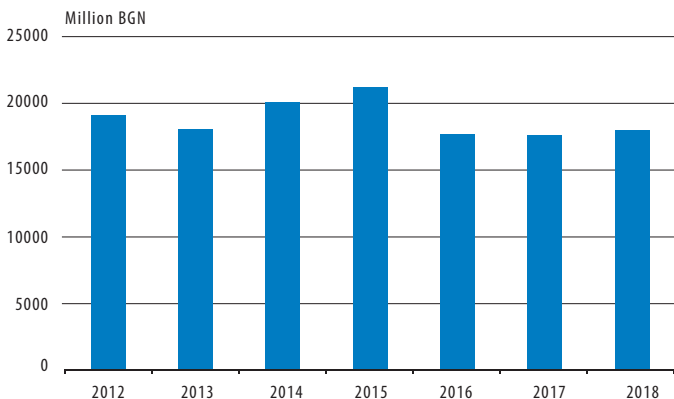


### Expenditure on acquisition of tangible fixed assets

The expenditure on acquisition of tangible fixed assets include the actual expenditure on acquisition of tangible fixed assets of land, buildings and construction equipment, machines, equipment and means of transport, other expenditure made through construction and purchase, including used tangible fixed assets.

The data about expenditure on acquisition of tangible fixed assets are shown at current prices.

Figure 1. Expenditure on acquisition of tangible fixed assets





## 1. Expenditure on acquisition of tangible fixed assets by kind

(Thousand BGN)

|  | 2015            | 2016            | 2017            | 2018            |
|--|-----------------|-----------------|-----------------|-----------------|
| <b>Total</b>                               | <b>21191026</b> | <b>17671830</b> | <b>17628630</b> | <b>18012358</b> |
| Land                                       | 1415858         | 1537108         | 1336832         | 968939          |
| Buildings and construction equipments      | 8615447         | 5616058         | 6058777         | 6637997         |
| Machines, equipment and means of transport | 8894282         | 8647328         | 8197836         | 9500024         |
| Other expenditure                          | 2265439         | 1871336         | 2035185         | 905398          |

## 2. Expenditure on acquisition of tangible fixed assets by economic activity groupings

(Thousand BGN)

|   | 2016            | 2017            | 2018            |
|---|-----------------|-----------------|-----------------|
| <b>Total</b>  | <b>17671830</b> | <b>17628630</b> | <b>18012358</b> |
| Agriculture, forestry and fishing   | 1315656         | 1451728         | 1110602         |
| Manufacturing, mining and quarrying and other industry  | 5692090         | 5483668         | 5794098         |
| Construction  | 1074825         | 1120730         | 920307          |
| Wholesale and retail trade, transportation and storage, accommodation and food service activities | 4744915         | 4571993         | 4271575         |
| Information and communication   | 673383          | 580836          | 557184          |
| Financial and insurance activities  | 407260          | 293933          | 421084          |
| Real estate activities  | 1552160         | 1865705         | 1459305         |
| Professional, scientific, technical, administration and support service activities                | 966536          | 1068252         | 1273572         |
| Public administration, defense, education, human health and social work activities                | 978850          | 938235          | 2061879         |
| Other services  | 266155          | 253550          | 142752          |

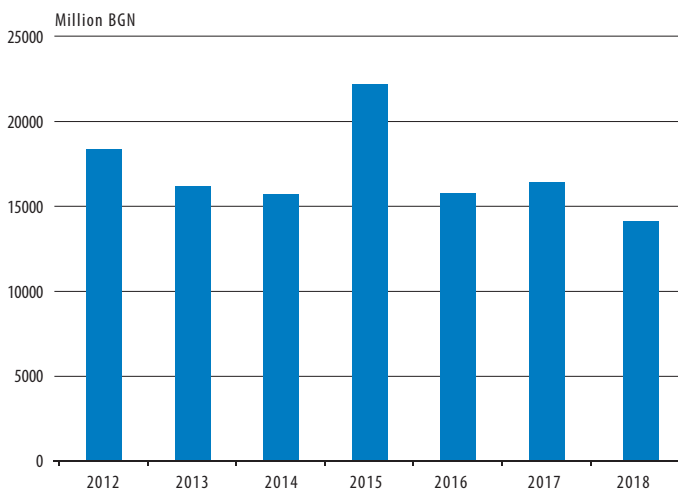


### Acquired tangible fixed assets

The acquired tangible fixed assets include the value of all acquired tangible fixed assets, irrespective of the manner of their acquisition (construction or purchase). The tangible fixed assets acquired by construction are reported after their putting into operation according to Ordinance No. 2/31.07.2003 of the Ministry of Regional Development and Public Works.

The data about acquired tangible fixed assets are shown at current prices.

Figure 2. Acquired tangible fixed assets







## 3. Acquired tangible fixed assets by kind

(Thousand BGN)

|  | 2015            | 2016            | 2017            | 2018            |
|--|-----------------|-----------------|-----------------|-----------------|
| <b>Total</b>                               | <b>22169139</b> | <b>15790217</b> | <b>16786340</b> | <b>14051777</b> |
| Land                                       | 1415858         | 1537108         | 1336832         | 968939          |
| Buildings and construction equipments      | 8305060         | 5014032         | 5830530         | 4087506         |
| Machines, equipment and means of transport | 10124047        | 7724566         | 8278754         | 8468003         |
| Other expenditure                          | 2324174         | 1514511         | 1340224         | 527329          |

## 4. Acquired tangible fixed assets by economic activity groupings

(Thousand BGN)

|   | 2016            | 2017            | 2018            |
|---|-----------------|-----------------|-----------------|
| <b>Total</b>  | <b>15790217</b> | <b>16786340</b> | <b>14051777</b> |
| Agriculture, forestry and fishing   | 1201414         | 1294944         | 1046504         |
| Manufacturing, mining and quarrying and other industry  | 4728005         | 4752849         | 4704215         |
| Construction  | 987588          | 932689          | 734357          |
| Wholesale and retail trade, transportation and storage, accommodation and food service activities | 4324462         | 5163981         | 3402518         |
| Information and communication   | 546808          | 944361          | 495658          |
| Financial and insurance activities  | 376795          | 252936          | 423727          |
| Real estate activities  | 1370456         | 1305933         | 791772          |
| Professional, scientific, technical, administration and support service activities                | 961066          | 1000143         | 1200776         |
| Public administration, defense, education, human health and social work activities                | 997961          | 904840          | 1147599         |
| Other services  | 295662          | 233664          | 104651          |



**XV. DOMESTIC TRADE;  
ACCOMMODATION AND  
FOOD SERVICE ACTIVITIES**

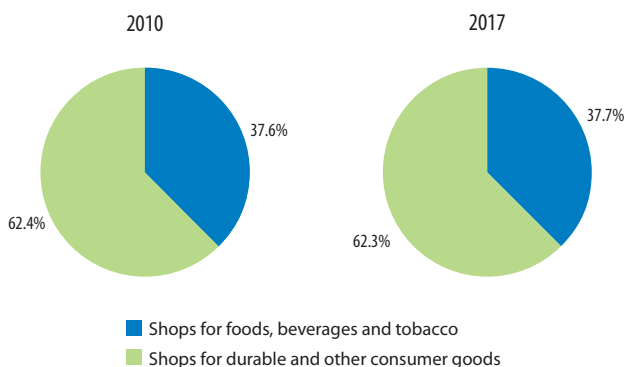


## Retail sales premises

The number of 'Shops' comprises shops and pavilions of the stationary trade network with trade rooms for serving customers. The number of 'Petrol stations' and 'Gas stations' are not included in the number of shops. The retail sales shops are classified according to the predominant kind of goods offered.

In 2017 a reduction in the total number of shops was registered. In comparison with 2010 the number of shops decreased as for 'Foods, beverages and tobacco' as well as for 'Durable and other consumer goods' by 13.7% and 13.9% respectively. The relative share of shops for 'Durable and other consumer goods' in the structure of the shops decreased by 0.1 points compared to 2010, reaching 62.3% in 2017.

Figure 1. Structure of the retail sales shops





## 1. Retail sales premises as of 31.12.

| Kind of premises   | In numbers    |               |               | Change - %<br>(Preceding year = 100) |             |
|--|---------------|---------------|---------------|--------------------------------------|-------------|
|  | 2015          | 2016          | 2017          | 2016                                 | 2017        |
| <b>Shops and pavilions - total</b>                                   | <b>115936</b> | <b>113621</b> | <b>112225</b> | <b>-2.0</b>                          | <b>-1.2</b> |
| <b>For foods, beverages and tobacco</b>                              | <b>43166</b>  | <b>41685</b>  | <b>42300</b>  | <b>-3.4</b>                          | <b>1.5</b>  |
| Specialized shops  | 15006         | 15419         | 14811         | 2.8                                  | -3.9        |
| Unspecialized shops with different kinds of goods                    | 28160         | 26266         | 27489         | -6.7                                 | 4.7         |
| <b>For durable and other consumer goods</b>                          | <b>72770</b>  | <b>71936</b>  | <b>69925</b>  | <b>-1.1</b>                          | <b>-2.8</b> |
| Specialized shops  | 58353         | 56873         | 54053         | -2.5                                 | -5.0        |
| Unspecialized shops with different kinds of goods (mainly non-foods) | 14417         | 15063         | 15872         | 4.5                                  | 5.4         |
| <b>Petrol stations</b>   | <b>2622</b>   | <b>2613</b>   | <b>2605</b>   | <b>-0.3</b>                          | <b>-0.3</b> |
| <b>Gas stations</b>  | <b>452</b>    | <b>438</b>    | <b>460</b>    | <b>-3.1</b>                          | <b>5.0</b>  |

## Turnover in domestic trade, accommodation and food service activities

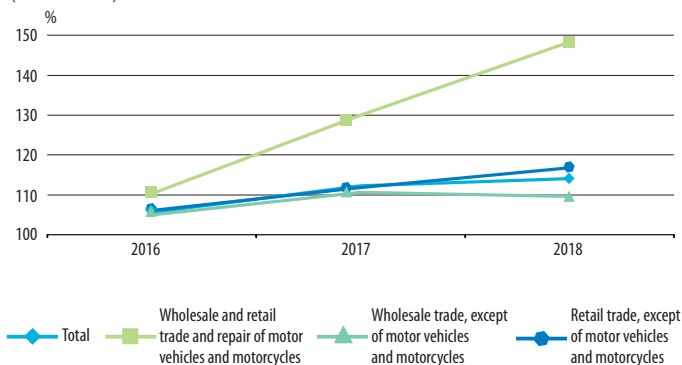
The indicator refers only to the economic subjects classified in accordance with the National Classification of Economic Activities (NACE.BG 2008) in section G - 'Wholesale and retail trade; repair of motor vehicles and motorcycles' and section I 'Accommodation and food service activities'. The turnover includes all revenues invoiced during the reported period for delivery of products, goods or services, including the accrued excises.

The turnover indices are calculated for all groups of trade activities as defined in Regulation (EC) No. 1893/2006 and reflect the turnover changes between two consecutive years' constant prices. They are calculated on the base of 2015 average annual prices and are chain-linked and comparable in coverage. The price impact is eliminated by deflation of the turnover through use of the consumer prices' indices and the producer prices' indices, regrouped according to the content of the relevant activity groups.

According to the preliminary data in 2018 the turnover in section 'Wholesale and retail trade; repair of motor vehicles and motorcycles' increased by 1.6% compared to the previous year. In 'Retail trade, except of motor vehicles and motorcycles' the general increase was 4.4%. In 'Wholesale trade, except of motor vehicles and motorcycles' the decrease of 1.0% determined the magnitude of the overall index, as the activity formed about 70% of the turnover volume in the trade sector. An increase was observed in 'Wholesale and retail trade and repair of motor vehicles and motorcycles' - 14.1%.

The turnover at constant prices in section 'Accommodation and food service activities' in 2018 decreased by 0.7% compared to 2017, which was due principally to the turn-down in 'Accommodation' - 15.4%. In 'Food and beverage service activities' an increase by 13.4% was observed.

Figure 2. Turnover indices for the major trade activities (2015 = 100)





### 2. Turnover in section 'Wholesale and retail trade; repair of motor vehicles and motorcycles' and section 'Accommodation and food service activities'

(Million BGN)

| Economic activities   | 2015          | 2016          | 2017          | 2018          |
|---|---------------|---------------|---------------|---------------|
| <b>Wholesale and retail trade; repair of motor vehicles and motorcycles</b>   | <b>104210</b> | <b>107098</b> | <b>116540</b> | <b>120535</b> |
| Wholesale and retail trade and repair of motor vehicles and motorcycles   | 7463          | 7884          | 8970          | 9800          |
| Wholesale trade, except of motor vehicles and motorcycles   | 70161         | 71610         | 77608         | 78500         |
| of which:   |               |               |               |               |
| Wholesale of agricultural raw materials and live animals  | 8762          | 9134          | 8630          | 6821          |
| Wholesale of food, beverages and tobacco  | 15999         | 16890         | 18266         | 19555         |
| Wholesale of household goods  | 10771         | 11507         | 12265         | 12135         |
| Wholesale of information and communication equipment  | 2345          | 2467          | 2684          | 2816          |
| Wholesale of other machinery, equipment and supplies  | 4159          | 3780          | 4072          | 4392          |
| Other specialised wholesale   | 22411         | 21096         | 23570         | 24340         |
| Retail trade, except of motor vehicles and motorcycles  | 26586         | 27604         | 29962         | 32235         |
| of which:   |               |               |               |               |
| Retail sale of food, beverages and tobacco  | 9803          | 10538         | 11324         | 12483         |
| Other retail sale in non-specialised stores   | 1116          | 1159          | 1280          | 1294          |
| Retail sale of automotive fuel in specialised stores  | 5020          | 4543          | 5016          | 5458          |
| Dispensing chemist; retail sale of medical and orthopaedic goods, cosmetic and toilet articles in specialised stores              | 2645          | 2919          | 3100          | 3530          |
| Retail sale of textiles, clothing, footwear and leather goods in specialised stores   | 1274          | 1390          | 1498          | 1473          |
| Retail sale of audio and video equipment; hardware, paints and glass; electrical household appliances, etc. in specialised stores | 3070          | 3161          | 3369          | 3562          |
| Retail sale of computers, peripheral units and software; telecommunications equipment, etc. in specialised stores                 | 2956          | 3088          | 3396          | 3431          |
| <b>Accommodation and food service activities</b>  | <b>3856</b>   | <b>4358</b>   | <b>4776</b>   | <b>5239</b>   |
| Accommodation   | 1563          | 1827          | 1982          | 1954          |
| Food and beverage service activities  | 2293          | 2531          | 2794          | 3285          |





**XVI. INDUSTRY**



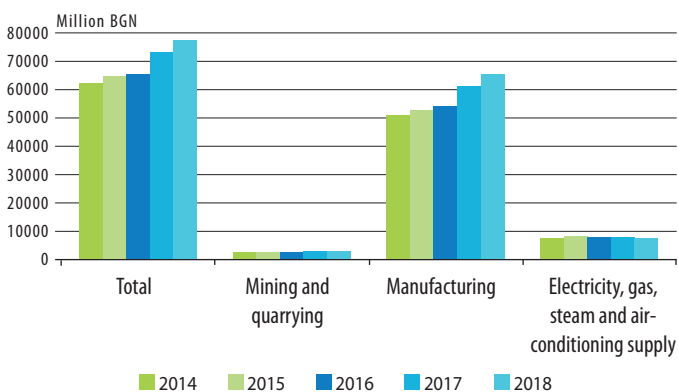
## Production value of industrial enterprises

The 'Industry' comprises the activity of industrial enterprises, classified in the mining and quarrying industry, manufacturing, electricity, gas, steam and air conditioning supply and water supply, sewerage, waste management and remediation activities.

The indicator 'Production value of industrial enterprises' refers to the entire of the industrial enterprises i.e., it includes receipts from their non-industrial activities. The production value comprises the following elements: receipts from sales of industrial production and services; expenditure on acquisition of tangible fixed assets on own account of the enterprises, other receipts, changes in stocks of finished goods and changes in stocks of work-in-progress.

All data in value terms are published at current prices.

Figure 1. Production value of industrial enterprises





## 1. Production value of industrial enterprises

(Thousand BGN)

|  | 2016            | 2017            | 2018            |
|--|-----------------|-----------------|-----------------|
| <b>Total</b>   | <b>65352612</b> | <b>72979700</b> | <b>77079450</b> |
| Mining and quarrying                                     | 2496478         | 2851938         | 2796522         |
| Manufacturing  | 53747760        | 60892649        | 65086068        |
| Electricity, gas, steam and air-conditioning supply      | 7626465         | 7681625         | 7432370         |
| Water supply, sewerage, waste management and remediation | 1481909         | 1553488         | 1764490         |

## 2. Production value of industrial enterprises by economic activities

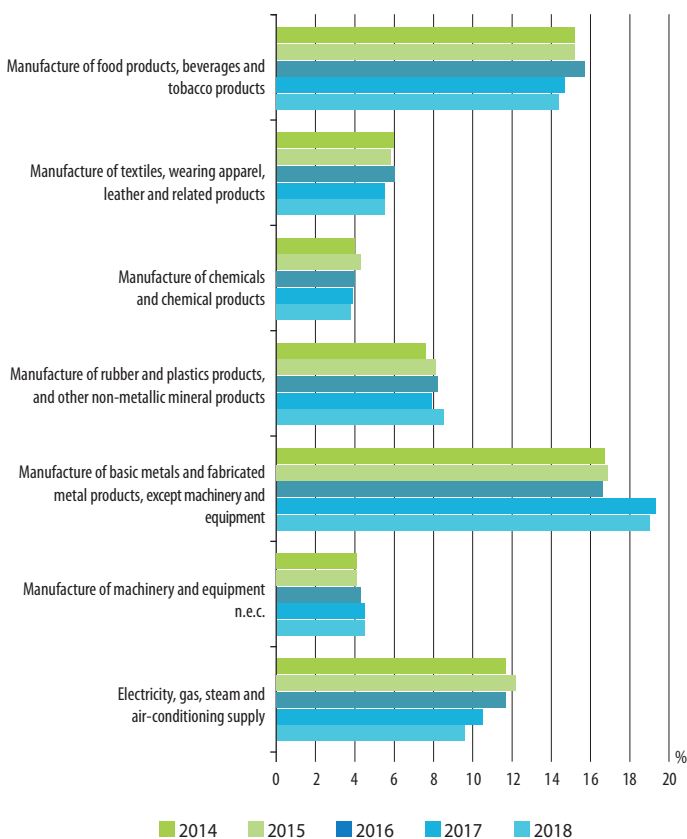
(Thousand BGN)

| Economic activities   | 2016            | 2017            | 2018            |
|---|-----------------|-----------------|-----------------|
| <b>Total</b>  | <b>65352612</b> | <b>72979700</b> | <b>77079450</b> |
| <b>Mining and quarrying</b>   | <b>2496478</b>  | <b>2851938</b>  | <b>2796522</b>  |
| <b>Manufacturing</b>  | <b>53747760</b> | <b>60892649</b> | <b>65086068</b> |
| Manufacture of food products, beverages and tobacco products                              | 10241629        | 10700206        | 11102985        |
| Manufacture of textiles, wearing apparel, leather and related products                    | 3892453         | 3986612         | 4272784         |
| Manufacture of wood and paper products, and printing                                      | 2829568         | 2984194         | 3202842         |
| Manufacture of coke, and refined petroleum products                                       | ..              | ..              | ..              |
| Manufacture of chemicals and chemical products  | 2622988         | 2834162         | 2930827         |
| Manufacture of pharmaceuticals, medicinal chemical and botanical products                 | ..              | ..              | ..              |
| Manufacture of rubber and plastics products, and other non-metallic mineral products      | 5381932         | 5777748         | 6535358         |
| Manufacture of basic metals and fabricated metal products, except machinery and equipment | 10870309        | 14095908        | 14676069        |
| Manufacture of computer, electronic and optical products                                  | 977833          | 1178681         | 1279030         |
| Manufacture of electrical equipment   | 2887534         | 3245706         | 3578331         |
| Manufacture of machinery and equipment n.e.c.   | 2789235         | 3253612         | 3470632         |
| Manufacture of transport equipment  | 2520206         | 2664457         | 3192216         |
| Other manufacturing, and repair and installation of machinery and equipment               | 2773946         | 3033151         | 3395029         |
| <b>Electricity, gas, steam and air-conditioning supply</b>                                | <b>7626465</b>  | <b>7681625</b>  | <b>7432370</b>  |
| <b>Water supply, sewerage, waste management and remediation</b>                           | <b>1481909</b>  | <b>1553488</b>  | <b>1764490</b>  |

## Structure of the production value of industrial enterprises

The structures (relative shares) are calculated at current prices. A change in the contribution of the main industrial activities in the volume of production is observed. The shares of manufacture of rubber and plastics products, and other non-metallic mineral products and the manufacture of transport equipment increased, while there was a decrease of the share of the electricity, gas, steam and air-conditioning supply and the manufacture of food products, beverages and tobacco products.

Figure 2. Share of the production value in some economic activities





### 3. Structure of the production value of industrial enterprises by economic activities

(Per cent)

| Economic activities   | 2016         | 2017         | 2018         |
|---|--------------|--------------|--------------|
| <b>Total</b>  | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| <b>Mining and quarrying</b>   | <b>3.8</b>   | <b>3.9</b>   | <b>3.6</b>   |
| <b>Manufacturing</b>  | <b>82.2</b>  | <b>83.5</b>  | <b>84.5</b>  |
| Manufacture of food products, beverages and tobacco products                              | 15.7         | 14.7         | 14.4         |
| Manufacture of textiles, wearing apparel, leather and related products                    | 6.0          | 5.5          | 5.5          |
| Manufacture of wood and paper products, and printing                                      | 4.3          | 4.1          | 4.2          |
| Manufacture of coke, and refined petroleum products                                       | ..           | ..           | ..           |
| Manufacture of chemicals and chemical products  | 4.0          | 3.9          | 3.8          |
| Manufacture of pharmaceuticals, medicinal chemical and botanical products                 | ..           | ..           | ..           |
| Manufacture of rubber and plastics products, and other non-metallic mineral products      | 8.2          | 7.9          | 8.5          |
| Manufacture of basic metals and fabricated metal products, except machinery and equipment | 16.6         | 19.3         | 19.0         |
| Manufacture of computer, electronic and optical products                                  | 1.5          | 1.6          | 1.7          |
| Manufacture of electrical equipment   | 4.4          | 4.4          | 4.6          |
| Manufacture of machinery and equipment n.e.c.   | 4.3          | 4.5          | 4.5          |
| Manufacture of transport equipment  | 3.9          | 3.7          | 4.1          |
| Other manufacturing, and repair and installation of machinery and equipment               | 4.2          | 4.2          | 4.4          |
| <b>Electricity, gas, steam and air-conditioning supply</b>                                | <b>11.7</b>  | <b>10.5</b>  | <b>9.6</b>   |
| <b>Water supply, sewerage, waste management and remediation</b>                           | <b>2.3</b>   | <b>2.1</b>   | <b>2.3</b>   |

## Production value indices of industrial enterprises

Industrial production value indices are calculated on the basis of their values at constant prices. For the calculation of production value at constant prices a total deflator is used calculated as weighted average of the producer price indexes on the domestic market and the producer price indexes on the non-domestic market.

### 4. Production value indices of industrial enterprises

|  | (Preceding year = 100) |              |              |
|--|------------------------|--------------|--------------|
|  | 2016                   | 2017         | 2018         |
| <b>Total</b>   | <b>103.9</b>           | <b>106.8</b> | <b>102.3</b> |
| Mining and quarrying                                     | 101.8                  | 105.2        | 96.6         |
| Manufacturing  | 104.8                  | 108.6        | 103.7        |
| Electricity, gas, steam and air-conditioning supply      | 98.1                   | 95.3         | 91.6         |
| Water supply, sewerage, waste management and remediation | 102.8                  | 102.0        | 109.5        |



## 5. Production value indices of industrial enterprises by economic activities

(Preceding year = 100)

| Economic activities   | 2016         | 2017         | 2018         |
|---|--------------|--------------|--------------|
| <b>Total</b>  | <b>103.9</b> | <b>106.8</b> | <b>102.3</b> |
| <b>Mining and quarrying</b>   | <b>101.8</b> | <b>105.2</b> | <b>96.6</b>  |
| <b>Manufacturing</b>  | <b>104.8</b> | <b>108.6</b> | <b>103.7</b> |
| Manufacture of food products, beverages and tobacco products                              | 104.7        | 103.0        | 102.5        |
| Manufacture of textiles, wearing apparel, leather and related products                    | 105.1        | 99.8         | 104.7        |
| Manufacture of wood and paper products, and printing                                      | 101.9        | 102.4        | 103.1        |
| Manufacture of coke, and refined petroleum products                                       | 112.0        | 106.3        | 89.4         |
| Manufacture of chemicals and chemical products  | 103.6        | 107.7        | 100.9        |
| Manufacture of pharmaceuticals, medicinal chemical and botanical products                 | 98.8         | 106.0        | 107.8        |
| Manufacture of rubber and plastics products, and other non-metallic mineral products      | 102.1        | 107.1        | 111.7        |
| Manufacture of basic metals and fabricated metal products, except machinery and equipment | 101.1        | 118.3        | 101.4        |
| Manufacture of computer, electronic and optical products                                  | 110.6        | 121.9        | 110.6        |
| Manufacture of electrical equipment   | 108.9        | 109.4        | 109.0        |
| Manufacture of machinery and equipment n.e.c.   | 104.3        | 114.2        | 105.6        |
| Manufacture of transport equipment  | 107.0        | 105.2        | 118.9        |
| Other manufacturing, and repair and installation of machinery and equipment               | 108.8        | 108.0        | 110.6        |
| <b>Electricity, gas, steam and air-conditioning supply</b>                                | <b>98.1</b>  | <b>95.3</b>  | <b>91.6</b>  |
| <b>Water supply, sewerage, waste management and remediation</b>                           | <b>102.8</b> | <b>102.0</b> | <b>109.5</b> |

## Industrial products in kind

The annual statistical survey on industrial products in kind is conducted on the basis of the National Nomenclature of Industrial Production (PRODCOM.BG), which is identical to the European Nomenclature of Industrial Products (PRODCOM List) and ensures comparability with EU industrial products. Information is collected according to the methodology of the statistical survey for all PRODCOM.BG headings for which it is known that production exists, on the basis of a representative sample of industrial enterprises and non-industrial ones whose secondary activity is industrial.

The data on the output of industrial products in kind (Table 6) comprises total production in volume terms for the respective reference year, including industrial products manufactured on the sub-contracting basis, and intermediate consumption of the enterprises (any production by the enterprise which is incorporated into the manufacture of other products).

Figure 3. Cement

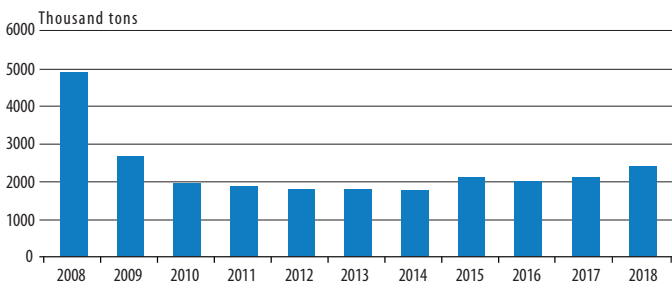
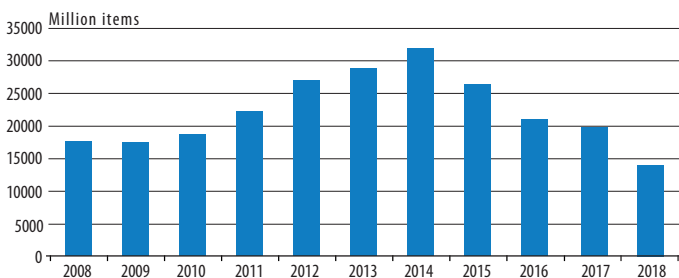


Figure 4. Cigarettes containing tobacco or mixtures of tobacco and tobacco substitutes







## 6. Output of basic industrial products

| Industrial products  | 2015  | 2016  | 2017   | 2018  |
|--|-------|-------|--------|-------|
| Copper ores and concentrates - thousand tons   | 30589 | 30158 | 30550  | 31258 |
| Lead, zinc and tin ores and concentrates - thousand tons   | 682   | 754   | 793    | 868   |
| Limestone flux, limestone and other calcareous stone used for the manufacture of lime or cement (excluding crushed limestone aggregate and calcareous dimension stone) - thousand tons | 6051  | 6007  | 6272   | 5298  |
| Natural sands - thousand tons  | 7619  | 6146  | 6084   | 5353  |
| Refined unwrought lead (excluding lead powders or flakes) - thousand tons  | 82    | 81    | 84     | ..    |
| Pulley tackle and hoists powered by an electric motor (excluding of the kind used for raising vehicles) - in numbers   | 13741 | 14597 | 16233  | 16323 |
| Self-propelled works trucks fitted with lifting or handling equipment, powered by an electric motor, with a lifting height $\geq 1$ m - in numbers                                     | 99    | 115   | 121    | 188   |
| Self-propelled works trucks fitted with lifting or handling equipment, non-powered by an electric motor - in numbers   | 167   | 157   | 132    | 162   |
| Non-numerically controlled horizontal lathes, for removing metal - in numbers  | 658   | 716   | 770    | 739   |
| Bicycles and other cycles (including delivery tricycles), non-motorised - thousand items   | 940   | 918   | 770    | 732   |
| Lead-acid accumulators for starting piston engines - thousand items  | 2970  | 3346  | 2677   | 2695  |
| Lifts and skip hoists - in numbers   | 825   | 839   | 1172   | 1539  |
| Electrical instantaneous or storage water heaters and immersion heaters - thousand items   | 892   | 912   | 1052   | 1088  |
| Electricity supply or production meters (incl. calibrated) - thousand items  | 532   | 435   | 419    | 376   |
| Paints and varnishes based on synthetic or modified natural polymers dispersed or dissolved in an aqueous medium - thousand tons   | 46    | 43    | 46     | 41    |
| Washing preparations and cleaning preparations - tons  | 85780 | 94886 | 101522 | 9886  |
| Tooth paste - thousand items   | 75084 | 82669 | 80263  | 79506 |
| Shampoos - tons  | 5040  | 5711  | 5562   | 4625  |
| Portland cement and similar hydraulic cements - thousand tons  | 2114  | 1994  | 2117   | 2331  |
| Quicklime, slaked lime and hydraulic lime - thousand tons  | 1484  | 1530  | 1506   | 1548  |
| Non-refractory clay building bricks - thousand cub. m  | 558   | 560   | 619    | 605   |

## 6. Output of basic industrial products

(Continued)

| Industrial products   | 2015  | 2016  | 2017  | 2018  |
|---|-------|-------|-------|-------|
| Bituminous mixtures based on natural asphalt, on natural bitumen, on petroleum bitumen, on mineral tar or on mineral tar pitch - thousand tons                                    | 3624  | 2145  | 2187  | 3020  |
| Corrugated paper and paperboard in rolls or sheets - thousand tons  | 108   | 113   | 114   | 114   |
| Toilet paper - thousand tons  | 26.6  | 28.9  | 27.9  | 27.1  |
| Cotton yarn - thousand tons   | 4.1   | 3.4   | 3.2   | 2.3   |
| Wool yarn - thousand tons   | 3.1   | 2.7   | 2.3   | 2.3   |
| Cotton fabrics - million sq. m  | 8.5   | 9.7   | 7.5   | 7.4   |
| Woollen fabrics - million sq. m   | 1.9   | 1.6   | 1.2   | 1.0   |
| Silk fabrics - million sq. m  | 1.2   | 1.7   | 1.9   | 1.0   |
| Panty hose and tights - million items   | 5.8   | 5.2   | 6.4   | 6.2   |
| Stockings, socks and other hosiery, knitted or crocheted - million pairs  | 44.2  | 49.4  | 52.4  | 49.7  |
| Bed linen of cotton (excluding knitted or crocheted) - tons   | 1098  | 1105  | 1289  | 1111  |
| Footwear with leather uppers, with rubber, plastic or leather outer soles (including boots; excluding sports footwear, footwear with a protective metal toe-cap) - thousand pairs | 3881  | 3878  | 3821  | 3530  |
| Meat (excl. edible offal) <sup>1</sup> - thousand tons  | 171   | 184   | 185   | 207   |
| Sausages - thousand tons  | 100   | 97    | 100   | 100   |
| Fish and fish products processed and preserved - thousand tons  | 10    | 11    | 12    | 11    |
| Vegetables processed and preserved <sup>1</sup> - thousand tons   | 81    | 87    | 79    | 75    |
| Fruit manufactured and preserved <sup>1</sup> - thousand tons   | 70    | 72    | 74    | 70    |
| Butter, fats and other cream based on milk <sup>1</sup> - thousand tons   | 1     | 1     | 1     | 1     |
| White cheese <sup>1</sup> - thousand tons   | 51    | 53    | 58    | 58    |
| Yellow cheese <sup>1</sup> - thousand tons  | 20    | 21    | 24    | 26    |
| Milk in liquid form <sup>1</sup> - thousand litres  | 74493 | 65296 | 70860 | 71750 |
| Yoghurt <sup>1</sup> - thousand tons  | 128   | 134   | 146   | 132   |
| Refined sunflower oil and its fractions (excluding chemically modified) - thousand tons   | 129   | 121   | 135   | 127   |
| Mayonnaise, other sauces and preparations therefor, mixed condiments and mixed seasonings - thousand tons   | 15    | 15    | 14    | 15    |
| Wheat or meslin flour - thousand tons   | 503   | 517   | 491   | 476   |
| Rice - thousand tons  | 19    | 36    | 45    | 27    |
| Prepared feeds for farm animals (excluding premixtures) - thousand tons   | 774   | 831   | 777   | 849   |



## 6. Output of basic industrial products

(Continued and end)

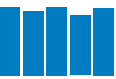
| Industrial products   | 2015  | 2016  | 2017  | 2018  |
|---|-------|-------|-------|-------|
| Uncooked pasta - tons   | 11522 | 10287 | 8801  | 8778  |
| Jams, marmalades, fruit jellies, fruit or nut purees and pastes (excluding of citrus fruit, homogenised preparations) - thousand tons   | 12    | 12    | 13    | 12    |
| Spirits obtained from distilled grape wine or grape marc - thousand litres alc 100%   | 7405  | 8388  | 11058 | 7736  |
| Wines including with 'Protected geographical indication (PGI)' and sort of wines and grape must with fermentation prevented or arrested by the addition of alcohol (excluding sparkling wine and wine 'Protected Designation of Origin') - million litres | 132   | 158   | 134   | 133   |
| Beer made from malt (excluding non-alcoholic beer, beer containing $\leq 0.5\%$ by volume of alcohol) - million litres  | 485   | 515   | 499   | 527   |
| Cigarettes containing tobacco or mixtures of tobacco and tobacco substitutes - million items  | 26493 | 21087 | 19733 | 14242 |

<sup>1</sup> Source: Ministry of Agriculture, Food and Forestry.



**XVII. CONSTRUCTION AND  
HOUSING FUND**



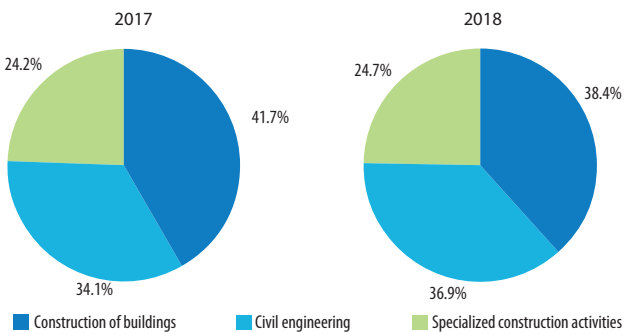


### Production of enterprises in construction

The data on the production of enterprises in the construction are shown at current prices.

The enterprises are classified by economic activity grouping according to the Classification of Economic Activities (NACE.BG 2008), where they are divided as follows: Construction of buildings, Civil engineering and Specialized construction activities.

Figure 1. Structure of production of construction enterprises





## 1. Production of construction enterprises

(Thousand BGN)

|                                     | 2015            | 2016            | 2017            | 2018            |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|
| <b>Total</b>                        | <b>17852816</b> | <b>11570990</b> | <b>13451734</b> | <b>14827407</b> |
| Construction of buildings           | 5220381         | 4466943         | 5612305         | 5694888         |
| Civil engineering                   | 9186903         | 4259889         | 4584485         | 5472506         |
| Specialized construction activities | 3445532         | 2844158         | 3254944         | 3660013         |

## Housing fund

Data about the housing fund as of the end of 2018 is calculated on the basis of the results of the Census of the housing fund as of 1<sup>st</sup> February 2011, and accumulation of the number of new constructed residential buildings and deduction of the number of destroyed residential buildings during the period 1.02.2011 - 31.12.2018.

Residential buildings are the buildings which by initial building or after reconstruction are suitable for living by one or several households. In the coverage of the survey are included inhabited and uninhabited residential buildings, cook-houses (as separate buildings), hostels, boarding houses, cloisters and the homes for elderly people, where joint households live.

Steel-concrete buildings are those of which the carrier and the floor constructions are built of steel-concrete and the walls are made of panels, brick masonry or other materials.

Solid structures are those of which the carrier walls are of brick and stone masonry and the belts, the beams and the floor construction are made of steel-concrete but have no steel-concrete columns. The buildings of which the floor elements are precast reinforced concrete units also refers to the solid structures.

In the group of 'other buildings' are included the structures that are built of stones, sun-dried brick, wood and other materials.

Figure 2. Dwellings

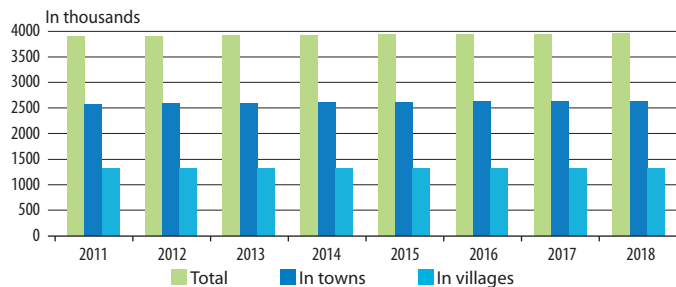
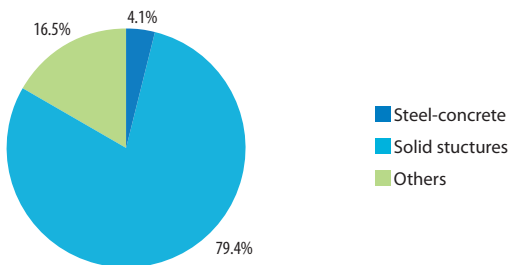


Figure 3. Structure of residential buildings by kind of construction in 2018







## 2. Housing fund

|                                     | 2015        | 2016   | 2017   | 2018   |
|-------------------------------------|-------------|--------|--------|--------|
|                                     | Total       |        |        |        |
| Dwellings - thousand numbers        | 3935        | 3944   | 3952   | 3959   |
| Useful floor space - thousand sq. m | 287933      | 288690 | 289385 | 290094 |
| of which: Living floor space        | 218401      | 218881 | 219316 | 219771 |
|                                     | In towns    |        |        |        |
| Dwellings - thousand numbers        | 2613        | 2621   | 2628   | 2634   |
| Useful floor space - thousand sq. m | 193400      | 194012 | 194561 | 195107 |
| of which: Living floor space        | 145534      | 145920 | 146261 | 146611 |
|                                     | In villages |        |        |        |
| Dwellings - thousand numbers        | 1322        | 1323   | 1324   | 1325   |
| Useful floor space - thousand sq. m | 94533       | 94678  | 94824  | 94987  |
| of which: Living floor space        | 72867       | 72961  | 73055  | 73160  |

## 3. Residential buildings by structure of building

(Thousand numbers)

|                  | 2015        | 2016        | 2017        | 2018        |
|------------------|-------------|-------------|-------------|-------------|
|                  | Total       |             |             |             |
| <b>Total</b>     | <b>2072</b> | <b>2073</b> | <b>2075</b> | <b>2077</b> |
| Steel-concrete   | 79          | 81          | 83          | 85          |
| Solid structures | 1651        | 1650        | 1650        | 1650        |
| Others           | 342         | 342         | 342         | 342         |
|                  | In towns    |             |             |             |
| <b>Total</b>     | <b>777</b>  | <b>778</b>  | <b>779</b>  | <b>780</b>  |
| Steel-concrete   | 52          | 53          | 54          | 55          |
| Solid structures | 667         | 667         | 667         | 667         |
| Others           | 58          | 58          | 58          | 58          |
|                  | In villages |             |             |             |
| <b>Total</b>     | <b>1295</b> | <b>1295</b> | <b>1296</b> | <b>1297</b> |
| Steel-concrete   | 27          | 28          | 29          | 30          |
| Solid structures | 984         | 983         | 983         | 983         |
| Others           | 284         | 284         | 284         | 284         |

### Permits issued for buildings and dwellings completed

Data about building permits issued for construction are collected from quarterly statistical surveys of NSI, which ensure information about building permits issued for construction of new buildings for the type of buildings and the gross building area by municipal authorities.

Type of buildings is classified according to the Classification of types of construction (CC) and is divided into:

- Residential - buildings for which the useful floor area is mostly used for permanent residential habitation.
- Non-residential - buildings for various purpose, including:
  - administrative - offices and buildings for administrative work of departments and other organizations and associations (representative buildings - banks, post offices, government department offices, conference and congress centers, court-of-law, municipal halls, etc.);
  - other buildings - buildings used for different activities: production, trade, transport, education, cultural purposes, sports, agriculture, health, recreation and facilities for short accommodation (hotels, motels, rest houses, huts and others).

The gross building area is the sum of all floors areas according to their external dimensions.

In the scope of the survey were the newly built residential buildings with approved record of handover Form 16 or a valid usage license according to Regulation № 2/31.07.2003 of the Ministry of Regional Development and Public Works.

Living floor space is the floor area of living-rooms, bedrooms, recesses for sleeping, dining-rooms, the living rooms, cabinets and libraries of scientists and drawing rooms but does not include the areas of the kitchens. Service floor space is the floor area of the rooms and kitchens with less than 4 square meters of floor area, vestibules with a portal or another screen, corridors, bathrooms, toilets, larders, hanging closets, other service rooms such as drying-rooms, laundries or balconies regardless of their area. The area of kitchens with over 4 sq. m floor area is stated separately.

The useful area of the dwelling is the sum of the living floor space, service floor space and the area of the kitchens.



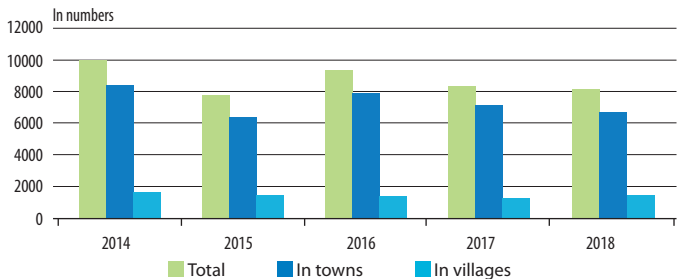
## 4. Building permits issued for construction of new buildings

| Kind of buildings                               | 2015  | 2016  | 2017  | 2018  |
|---|-------|-------|-------|-------|
| Residential buildings - in numbers              | 4310  | 4514  | 5562  | 5774  |
| Dwellings in residential buildings - in numbers | 17264 | 18157 | 24969 | 35526 |
| Gross building area - thousand sq. m            | 2317  | 2428  | 3216  | 4471  |
| Administrative buildings - in numbers           | 157   | 163   | 127   | 128   |
| Gross building area - thousand sq. m            | 173   | 285   | 219   | 504   |
| Other buildings - in numbers                    | 4382  | 4685  | 5460  | 4826  |
| Gross building area - thousand sq. m            | 2482  | 2767  | 3163  | 3087  |

## 5. Dwellings completed

|                                     | 2015        | 2016 | 2017 | 2018 |
|-------------------------------------|-------------|------|------|------|
|                                     | Total       |      |      |      |
| Dwellings - in numbers              | 7806        | 9342 | 8384 | 8136 |
| Useful floor space - thousand sq. m | 723         | 786  | 732  | 751  |
| of which: Living floor space        | 444         | 500  | 461  | 484  |
|                                     | In towns    |      |      |      |
| Dwellings - in numbers              | 6382        | 7939 | 7134 | 6722 |
| Useful floor space - thousand sq. m | 539         | 630  | 574  | 575  |
| of which: Living floor space        | 325         | 399  | 359  | 370  |
|                                     | In villages |      |      |      |
| Dwellings - in numbers              | 1424        | 1403 | 1250 | 1414 |
| Useful floor space - thousand sq. m | 184         | 156  | 158  | 176  |
| of which: Living floor space        | 119         | 101  | 102  | 114  |

Figure 4. Dwellings completed





## **XVIII. ENERGY**



## Overall energy balance sheet

The overall energy balance (OEB) is an aggregate of the energy balances of all energy products consumed in the country, in an unified unit of measurement.

*Primary energy production* represents any kind of extraction of energy products from natural sources in the territory of the country. Includes coal production (accounting for purified production), crude oil, natural gas, nuclear energy, renewable energy (water, wind, solar, geothermal and heat from the environment), biomass, biogas, liquid biofuels and non-renewable fuels.

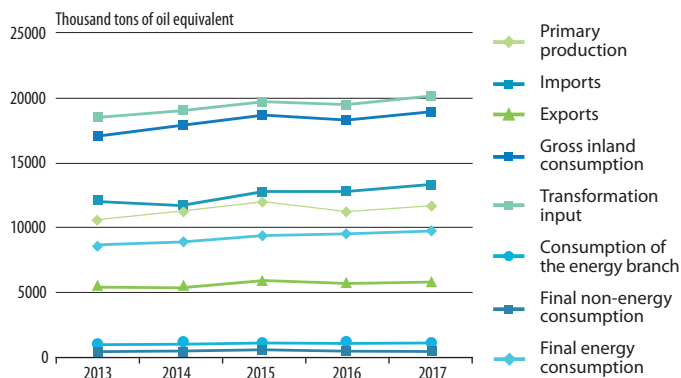
*Recovered and recycled products* refer to slurry and shale from coal recovered from mines as well as to lubricating oils used for petroleum products which are processed.

*Imports* (incl. arrivals) and *exports* (incl. dispatches) include the quantities passed through the political boundaries of the country, whether customs clearance has taken place or not. Transit is not reported (excluding electricity). Only energy products produced in the country are reported as exports in the energy balance.

*Stock change* is the difference between stocks at the beginning and at the end of the year in producers, large foreign trade companies and consumers.

*International maritime bunkers* are the quantities of fuels delivered to ships of all flags that are engaged in international navigation. The international navigation may take place at sea, on inland lakes and waterways, and in coastal waters (port of departure and port of arrival in different countries).

Figure 1. **Energy flows**





## 1. Overall energy balance sheet for 2017

(Thousand tons of oil equivalent)

|  | Total          | Solid fossil fuels | Manufactured gases | Peat and peat products | Oil shale and oil sands | Oil and petroleum products <sup>1</sup> |
|--|----------------|--------------------|--------------------|------------------------|-------------------------|---|
| Primary production                     | 11673.9        | 5669.5             | -                  | -                      | -                       | 24.3                                    |
| Recovered and recycled products        | 42.8           | 29.2               | -                  | -                      | -                       | 13.6                                    |
| Imports                                | 13312.3        | 582.5              | -                  | -                      | -                       | 9588.0                                  |
| Change in stock                        | -237.3         | -149.2             | -                  | -                      | -                       | -108.9                                  |
| Exports                                | 5813.3         | 9.3                | -                  | -                      | -                       | 4880.1                                  |
| International maritime bunkers         | 80.1           | -                  | -                  | -                      | -                       | 80.1                                    |
| <b>Gross inland consumption</b>        | <b>18898.3</b> | <b>6122.8</b>      | -                  | -                      | -                       | <b>4556.8</b>                           |
| Transformation input                   | 20108.0        | 6038.6             | -                  | -                      | -                       | 8228.9                                  |
| Transformation output                  | 13336.6        | 359.3              | -                  | -                      | -                       | 7827.8                                  |
| Energy sector                          | 1126.3         | 0.6                | -                  | -                      | -                       | 394.2                                   |
| Distribution losses                    | 486.5          | 5.5                | -                  | -                      | -                       | 1.8                                     |
| <b>Available for final consumption</b> | <b>10276.2</b> | <b>437.5</b>       | -                  | -                      | -                       | <b>3521.7</b>                           |
| Final non-energy consumption           | 476.6          | 48.0               | -                  | -                      | -                       | 150.6                                   |
| Final energy consumption               | 9738.3         | 371.6              | -                  | -                      | -                       | 3370.5                                  |
| Statistical differences                | 61.2           | 17.8               | -                  | -                      | -                       | 0.6                                     |

## 1. Overall energy balance sheet for 2017

(Continued and end)

(Thousand tons of oil equivalent)

|  | Natural gas   | Renewables and biofuels | Non-renewable waste | Nuclear energy | Heat          | Electricity   |
|--|---------------|-------------------------|---------------------|----------------|---------------|---------------|
| Primary production                     | 66.3          | 1938.1                  | 35.1                | 3940.7         | -             | -             |
| Recovered and recycled products        | -             | -                       | -                   | -              | -             | -             |
| Imports                                | 2723.0        | 100.2                   | -                   | -              | -             | 318.6         |
| Change in stock                        | -0.2          | 21.0                    | -                   | -              | -             | -             |
| Exports                                | 26.8          | 107.3                   | -                   | -              | -             | 789.8         |
| International maritime bunkers         | -             | -                       | -                   | -              | -             | -             |
| <b>Gross inland consumption</b>        | <b>2762.2</b> | <b>1951.9</b>           | <b>35.1</b>         | <b>3940.7</b>  | -             | <b>-471.2</b> |
| Transformation input                   | 1054.4        | 751.0                   | 0.1                 | 3940.7         | 12.7          | 81.6          |
| Transformation output                  | -             | 172.7                   | -                   | -              | 1054.9        | 3922.0        |
| Energy sector                          | 34.1          | 0.7                     | -                   | -              | 202.0         | 494.6         |
| Distribution losses                    | 11.2          | -                       | -                   | -              | 169.2         | 298.9         |
| <b>Available for final consumption</b> | <b>1662.5</b> | <b>1372.8</b>           | <b>35.0</b>         | -              | <b>-671.1</b> | <b>2575.6</b> |
| Final non-energy consumption           | 278.0         | -                       | -                   | -              | -             | -             |
| Final energy consumption               | 1352.7        | 1378.2                  | 35.0                | -              | 658.6         | 2571.7        |
| Statistical differences                | 32            | -5                      | -                   | -              | 13            | 4             |

<sup>1</sup> Data on crude oil production have been made by assessment of the information from 'Bulletin on the state and development of the energy sector in the Republic of Bulgaria' of the Ministry of Energy.

## 2. Structure of primary energy production

(Per cent)

|                            | 2014         | 2015         | 2016         | 2017         |
|----------------------------|--------------|--------------|--------------|--------------|
| <b>Total</b>               | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| Solid fossil fuels         | 45.3         | 48.6         | 45.3         | 48.6         |
| Oil and petroleum products | 0.2          | 0.2          | 0.2          | 0.2          |
| Natural gas                | 1.4          | 0.7          | 0.7          | 0.6          |
| Renewables and biofuels    | 16.9         | 17.6         | 17.8         | 16.6         |
| Non-renewable waste        | 0.2          | 0.2          | 0.3          | 0.3          |
| Nuclear heat               | 35.9         | 32.6         | 35.7         | 33.8         |

*Gross inland consumption* is calculated as *Gross Available Energy* less *the International maritime bunkers*. According to the new methodology (in force since 2017 reporting year), the indicator includes ambient heat.

*Transformation input* are fuels and energy used to produce other energy products..

*Transformation output* are the quantities of the secondary energy products derived from different transformation processes: production of electricity and heat, briquetting, coke and blast furnace, production of petroleum products. The total heat production of main activity producer plants and the produced heat sold to third parties by autoproducer plants are reported.

*Consumption of the energy sector* reflects final consumption of energy and fuels (not transformed in other energy products) for the implementation and maintenance of the main activity of companies producing energy products.

*Distribution losses* includes losses in gas and heat distribution, electricity transmission and transport of other fuels.

*Available for final consumption* are the quantities of energy products available for final use, resulting in no other energy products. This indicator is calculated as: *Total energy supply – Transformation input + Transformation output - Energy Sector Consumption – Distribution losses*.

The final consumption is divided for: non-energy and energy purposes.

*Final non-energy consumption* shows the quantities of fuels used as raw material for the production of non-fuel products.

*Final energy consumption* contains data for consumed energy products which are not transformed into others. The quantities of fuel consumed in the Autoproducer plants for the production of heat, used for inner plants' activities, are reported as final energy consumption by the relevant sector of economic activity.

Statistical difference is the difference between *Available for final consumption and Final (non-energy and energy) consumption*.

The information on the overall energy balance is presented in thousand tons of oil equivalent. The Joule and its multiples are used as general energy measure unit in international practice. The conversion from one type of measure unit into another is effected by the following relation:

$$1 \text{ Gigajoule} = 278 \text{ kWh} = 0.0239 \text{ toe.}$$





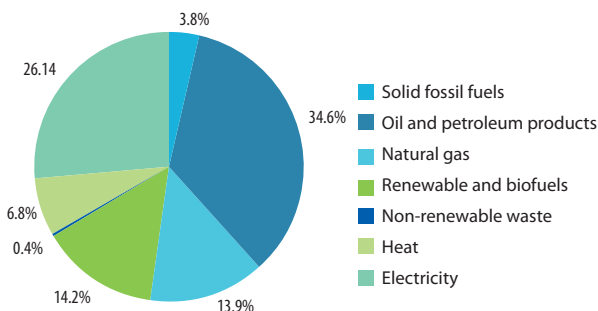
### 3. Final energy consumption by sectors

|                                     | 2015          | 2016          | 2017          | 2017<br>as % to<br>2016 |
|-------------------------------------|---------------|---------------|---------------|-------------------------|
|                                     | 1 000 toe     |               |               |                         |
| <b>Total</b>                        | <b>9389.6</b> | <b>9517.5</b> | <b>9738.3</b> | <b>102.3</b>            |
| <b>Industry</b>                     | <b>2713.3</b> | <b>2641.5</b> | <b>2721.3</b> | <b>103.0</b>            |
| Iron and steel                      | 110.5         | 111.1         | 118.7         | 106.8                   |
| Chemical and petrochemical          | 873.9         | 836.3         | 881.2         | 105.4                   |
| Non-ferrous metals                  | 133.8         | 130.2         | 162.4         | 124.7                   |
| Non-metallic minerals               | 535.2         | 560.2         | 567.7         | 101.3                   |
| Transport equipment                 | 17.6          | 17.1          | 18.8          | 109.9                   |
| Machinery                           | 124.7         | 132.8         | 139.5         | 105.0                   |
| Mining and quarrying                | 116.4         | 116.5         | 122.0         | 104.7                   |
| Food, beverages & tobacco           | 248.6         | 237.2         | 227.7         | 96.0                    |
| Paper, pulp and printing            | 244.6         | 242.4         | 220.5         | 91.0                    |
| Wood and wood products              | 61.9          | 57.8          | 62.3          | 107.8                   |
| Construction                        | 85.8          | 61.4          | 55.9          | 91.0                    |
| Textile and leather                 | 66.6          | 66.8          | 66.6          | 99.7                    |
| Not elsewhere specified (industry)  | 93.8          | 71.5          | 78.0          | 109.1                   |
| <b>Transport</b>                    | <b>3211.6</b> | <b>3267</b>   | <b>3325.2</b> | <b>101.8</b>            |
| Rail                                | 39.5          | 36.7          | 39.7          | 108.2                   |
| Road                                | 3009.8        | 3065.1        | 3092.2        | 100.9                   |
| Domestic aviation                   | 13.4          | 19.5          | 20.6          | 105.6                   |
| Domestic navigation                 | -             | -             | -             | -                       |
| Pipeline transport                  | 149.0         | 145.8         | 172.7         | 118.4                   |
| Not elsewhere specified (transport) | -             | -             | -             | -                       |
| <b>Other</b>                        | <b>3464.7</b> | <b>3609.1</b> | <b>3691.8</b> | <b>102.3</b>            |
| Commercial and public services      | 1086.0        | 1171.7        | 1199.5        | 102.4                   |
| Households                          | 2192.9        | 2252.1        | 2318.7        | 103.0                   |
| Agriculture and forestry            | 185.6         | 185.1         | 173.2         | 93.6                    |
| Fishing                             | 0.2           | 0.2           | 0.3           | 150.0                   |
| Not elsewhere specified (other)     | -             | -             | -             | -                       |

Final energy consumption is the consumption of energy commodities during which they are not transformed into other energy products. Final consumption divides by non-energy use and energy use. The quantities of fuel consumed for the production of non-sold heat by auto-producers are reported in the figures for the final consumption of fuels by relevant sectors of economic activity. The quantities of coke oven gas, blast furnace gas and electricity used in blast furnaces are included in 'Consumption of the energy branch'.

Final energy consumption comprises consumption in the sectors 'Industry', 'Transport' and 'Others' (incl. households, agriculture and forestry, trade, public organizations, financial institutions, governmental agencies, health services and others).

Figure 2. Structure of final energy consumption by energy sources in 2017





## 4. Balance of electricity

(GWh)

|                                   | 2014           | 2015           | 2016           | 2017           |
|-----------------------------------|----------------|----------------|----------------|----------------|
| <b>Resources</b>                  | <b>51804.5</b> | <b>53476.5</b> | <b>49845.7</b> | <b>49318.2</b> |
| Transformation output             | 47485.5        | 49225.5        | 45277.7        | 45612.8        |
| Imports                           | 4319.0         | 4251.0         | 4568.0         | 3705.4         |
| <b>Distribution</b>               | <b>51804.5</b> | <b>53476.5</b> | <b>49845.7</b> | <b>49318.2</b> |
| Energy sector                     | 6285.0         | 6520.0         | 6389.0         | 6702.0         |
| Industry                          | 8706.0         | 8946.0         | 8910.0         | 9405.2         |
| Transport                         | 306.0          | 352.0          | 354.0          | 377.6          |
| Households                        | 10590.0        | 10644.0        | 10733.0        | 11137.5        |
| Agriculture, forestry and fishing | 241.0          | 221.0          | 223.0          | 222.4          |
| Others                            | 7831.0         | 8163.0         | 8678.0         | 8765.9         |
| Exports                           | 13774.0        | 14826.0        | 10940.0        | 9185.8         |
| Distribution losses               | 4013.0         | 3785.0         | 3577.0         | 3475.9         |
| Statistical differences           | 58.5           | 19.5           | 41.7           | 45.9           |

## Electricity and heat

Electricity generation is the gross electricity generation that is the sum of the electric energy produced by all generating sets concerned (incl. pumped storage) measured at the output terminals of the main generators.

The gross electricity generation includes the electric energy absorbed by the power plants' own generating auxiliaries and the losses in the main generator transformers.

The consumption of electricity by economic activities does not include the power plants' own use.

Heat production covers gross heat production by the public plants and only heat production by auto-producers that is sold to third parties.

The public plants (Main Activity Producers) report the gross heat produced by the installations. It includes the heat consumed by the installation's auxiliaries using a hot fluid (space heating, liquid fuel heating, etc.) and losses in the installation/network heat exchanges.

Auto-producers report the heat sold to third parties only. The production of heat used by a company for its main activities is not included.

The own use of heat by the public plants is included in sector 'Electricity, gas and water supply'.

Figure 3. Structure of electricity consumption by sectors

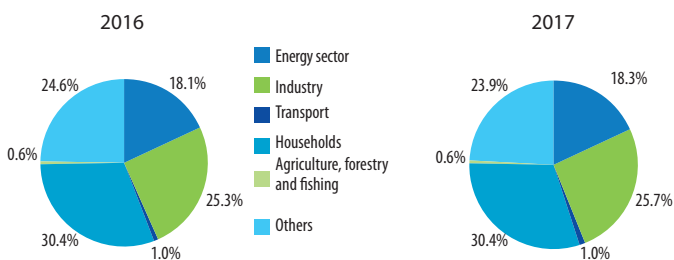
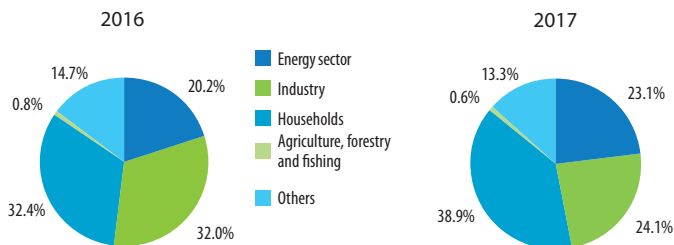


Figure 4. Structure of heat consumption by sectors





## 5. Balance of heat

|                                   | (GWh)          |                |                |                |
|-----------------------------------|----------------|----------------|----------------|----------------|
|                                   | 2014           | 2015           | 2016           | 2017           |
| <b>Resources</b>                  | <b>15049.7</b> | <b>13984.7</b> | <b>13389.5</b> | <b>12268.7</b> |
| Transformation output             | 14592.8        | 13526.9        | 12854.2        | 11756.4        |
| From chemical processes           | 456.9          | 457.8          | 535.3          | 512.3          |
| <b>Distribution</b>               | <b>15049.7</b> | <b>13984.7</b> | <b>13389.5</b> | <b>12268.7</b> |
| Energy sector                     | 2960.3         | 2711.1         | 2345.8         | 2349.4         |
| Industry                          | 5633.3         | 4439.7         | 3719.5         | 2451.1         |
| Households                        | 3613.9         | 3868.9         | 3775.3         | 3951.8         |
| Agriculture, forestry and fishing | 109.2          | 31.9           | 92.2           | 57.9           |
| Others                            | 1185.0         | 1308.6         | 1706.7         | 1346.5         |
| Distribution losses               | 1542.5         | 1623.9         | 1758.6         | 1967.2         |
| Statistical difference            | 5.6            | 0.6            | -8.6           | 145.0          |



## **XIX. TRANSPORT**



## Transport

Transport is a branch in the national economy which comprises transport enterprises that provide services for hire or reward. According to the National classification of economic activities, this section includes all kinds of transport (railway, road, sea, river, aviation, pipeline and urban electric transport).

The section consists of basic data characterizing the conditions and the changes that occurred in the public and private sector.

The total length of the railway lines includes current road and stations' platforms. The current road contains the length of the railway lines between the stations' axes and the distance between the border stations and the state borders. The length of the double and the electrified railway lines is measured in one direction.

In the coach lines and international regular bus lines are included.

The route length of the trolleybus lines, the tram network and the metro is a sum of the total one-way operational length of the lines. The length of the overlaying lines is reported only once.

The data source of registered freight vehicles and buses is the General Directorate Security Police Service at the Ministry of Interior.

The number of trolleybuses, trams and metro motorcars is related to the available vehicles owned by the urban electrical enterprises.





## 1. Basic transport data

|   | 2015  | 2016  | 2017  | 2018  |
|---|-------|-------|-------|-------|
| Length of track, incl. sidings - km                 | 5486  | 5486  | 5468  | 5470  |
| of which: Running track - km                        | 4019  | 4029  | 4030  | 4030  |
| Share of electrified running track - %              | 71.1  | 71.2  | 71.2  | 71.2  |
| Coach lines - in numbers                            | 2826  | 3039  | 3039  | 3137  |
| Total length of coach lines- thousand km            | 417.1 | 447.9 | 434.2 | 434.6 |
| Towns with trolleybus lines - in numbers            | 12    | 10    | 10    | 10    |
| Route length of trolleybus lines as of 31.12. - km  | 454   | 408   | 400   | 396   |
| Route length of tram lines as of 31.12. - km        | 146   | 137   | 137   | 131   |
| Route length of underground lines as of 31.12. - km | 37    | 38    | 38    | 38    |

## 2. Means of transport by kind as of 31.12.

|  | 2015   | 2016   | 2017   | 2018   |
|--|--------|--------|--------|--------|
| Registered cargo vehicles - in numbers                     | 481740 | 494393 | 457740 | 473809 |
| Lorries  | 396582 | 405217 | 372851 | 387186 |
| Special vehicles   | 37349  | 37516  | 34493  | 35481  |
| Road tractors  | 47809  | 51660  | 50396  | 51142  |
| Registered busses - in numbers                             | 23470  | 22928  | 20628  | 20442  |
| Trolleybuses - in numbers                                  | 540    | 437    | 392    | 376    |
| Passenger seats - in numbers                               | 60429  | 48708  | 43868  | 41110  |
| Trams - in numbers   | 280    | 280    | 311    | 301    |
| Passenger seats - in numbers                               | 59078  | 56818  | 62958  | 60853  |
| Railcars for underground electrical transport - in numbers | 208    | 208    | 208    | 208    |
| Passenger seats - in numbers                               | 64064  | 64064  | 64064  | 64064  |
| Sea cargoships - in numbers                                | 3      | 3      | 3      | 3      |
| Carrying capacity - thousand tons                          | 14     | 12     | 12     | 12     |
| Sea passenger ships - in numbers                           | 9      | 10     | 2      | 2      |
| Passenger seats/berths - in numbers                        | 561    | 482    | 156    | 156    |
| Inland non-self-propelled cargoships - in numbers          | 114    | 110    | 112    | 111    |
| Carrying capacity - thousand tons                          | 193    | 186    | 189    | 187    |
| Inland passenger boats - in numbers                        | 1      | 1      | 1      | 1      |
| Seats/berths - in numbers                                  | 243    | 243    | 243    | 243    |

## Goods and passengers carried and transport performance

The main indicators characterizing transport activities are relevant to the realization of carriage of goods and passengers via land, sea, air and urban electrical transport.

Land transport includes the transport activities by rail and road transport, as well as the carriage of goods by pipeline transport.

Data on freight land transport include goods carried and the transport performance of railway, road and pipeline transport. The land passenger transport covers the number of passengers carried and the transport performance of railway and road transport.

The data on urban electrical transport include passengers carried and transport performance of the trolleybus transport in the country, tramway transport and metro in Sofia (stolitsa).

### Freight transport

Figure 1. Goods carried by mode of transport

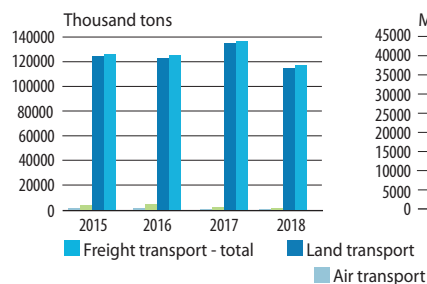
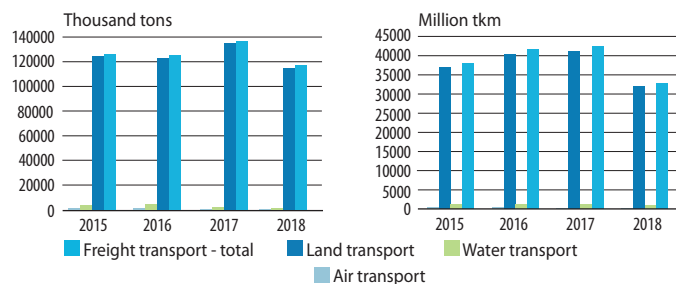


Figure 2. Transport performance by mode of transport



### Passenger transport

Figure 3. Passengers carried by mode of transport

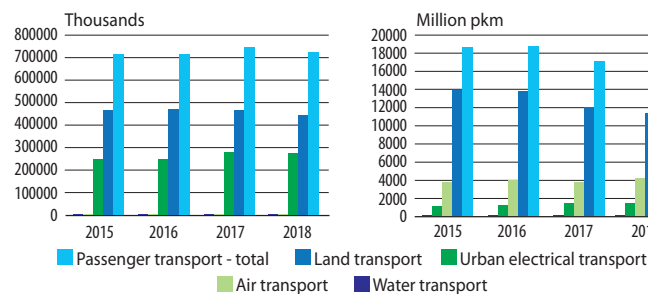
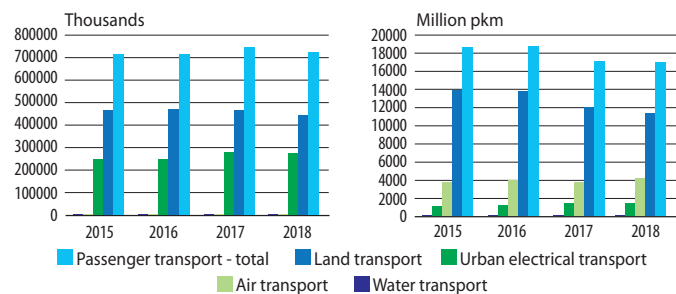


Figure 4. Transport performance by mode of transport





### 3. Goods carried and transport performance by mode of transport

| Mode of transport            | 2015                                | 2016          | 2017          | 2018          |
|------------------------------|-------------------------------------|---------------|---------------|---------------|
|                              | Goods carried - thousand tons       |               |               |               |
| <b>Total</b>                 | <b>125498</b>                       | <b>124358</b> | <b>136685</b> | <b>116642</b> |
| Land transport <sup>1</sup>  | 123626                              | 121910        | 134385        | 114429        |
| Water transport <sup>2</sup> | 1867                                | 2443          | 2291          | 2190          |
| Air transport                | 5                                   | 5             | 9             | 23            |
|                              | Transport performance - million tkm |               |               |               |
| <b>Total</b>                 | <b>37789</b>                        | <b>41546</b>  | <b>42532</b>  | <b>32922</b>  |
| Land transport <sup>1</sup>  | 36677                               | 40263         | 41306         | 31950         |
| Water transport <sup>2</sup> | 1107                                | 1278          | 1218          | 956           |
| Air transport                | 5                                   | 5             | 8             | 16            |

<sup>1</sup> Railways, road and pipeline transport.

<sup>2</sup> Maritime and inland waterway transport.

### 4. Passengers carried and transport performance by mode of transport

| Mode of transport            | 2015                                | 2016          | 2017          | 2018          |
|------------------------------|-------------------------------------|---------------|---------------|---------------|
|                              | Passengers carried - in thousands   |               |               |               |
| <b>Total</b>                 | <b>715206</b>                       | <b>716412</b> | <b>748496</b> | <b>721584</b> |
| Land transport <sup>1</sup>  | 464770                              | 469054        | 466535        | 443869        |
| Water transport <sup>2</sup> | 115                                 | 119           | 109           | 114           |
| Air transport                | 2240                                | 2337          | 2198          | 2470          |
| Urban electrical transport   | 248081                              | 244902        | 279654        | 275131        |
|                              | Transport performance - million pkm |               |               |               |
| <b>Total</b>                 | <b>18513</b>                        | <b>18663</b>  | <b>17045</b>  | <b>16992</b>  |
| Land transport <sup>1</sup>  | 13809                               | 13668         | 11991         | 11365         |
| Water transport <sup>2</sup> | 2                                   | 5             | 5             | 4             |
| Air transport                | 3644                                | 3869          | 3637          | 4200          |
| Urban electrical transport   | 1058                                | 1121          | 1412          | 1423          |

<sup>1</sup> Excl. free of charge travels by railways and road transport.

<sup>2</sup> Maritime and inland waterway transport.



## **XX. TOURISM**



## Accommodation establishments

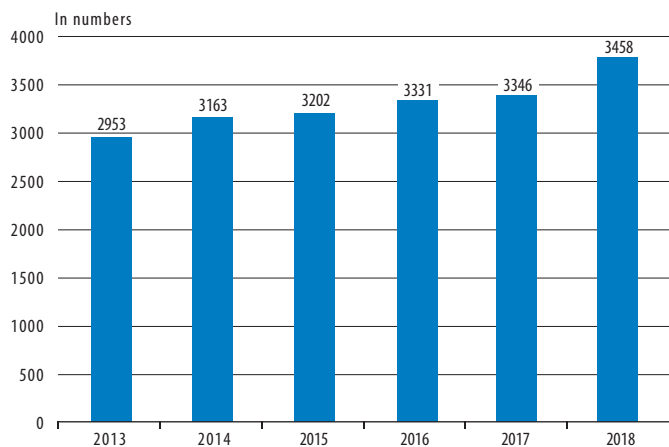
The methodology used in statistical surveys on tourism is in compliance with the Regulation 692/2011 of the European Parliament and of the Council concerning European statistics on tourism and Commission Regulation 1051/2011 implementing Regulation 692/2011 of the European Parliament and of the Council concerning European statistics on tourism, as regards the structure of the quality reports and the transmission of the data.

The object of the survey are all accommodation establishments in use with more than 10 bed-places - hotels, camping sites and other accommodation establishments (holiday settlements, hostels, guests houses, bungalows, rest houses, mountain chalets, private rooms and flats, and other).

The observation of accommodation establishments collects various data by types of accommodation establishments, nights spent, arrivals in accommodation establishments, revenues from nights spent and others.

In 2018, there were 3 458 public and private accommodation establishments functioning in the country - hotels, motels, mountain chalets, camping sites and other establishments for short-term accommodation with more than 10 bed - places.

Figure 1. Accommodation establishments





## 1. Accommodation establishments<sup>1</sup>

|  | 2015        | 2016        | 2017        | 2018        |
|--|-------------|-------------|-------------|-------------|
| <b>Accommodation establishments - in numbers</b>       | <b>3202</b> | <b>3331</b> | <b>3346</b> | <b>3458</b> |
| Bed-places - in thousands                              | 322.4       | 328.3       | 348.7       | 335.6       |
| Bed-nights - in thousands                              | 62394       | 65169       | 66468       | 68223       |
| Using of bed-nights - %                                | 34.3        | 38.6        | 39.2        | 39.3        |
| Nights spent - in thousands                            | 21398       | 25186       | 26054       | 26845       |
| of which: By foreigners                                | 13352       | 16151       | 17106       | 17749       |
| Revenues from nights spent - million BGN               | 1033.5      | 1229.1      | 1340.9      | 1455.7      |
| <b>Hotels - in numbers</b>                             | <b>2180</b> | <b>2158</b> | <b>2110</b> | <b>2102</b> |
| Bed-places - in thousands                              | 279.1       | 281.9       | 293.5       | 286.2       |
| Bed-nights - in thousands                              | 53140       | 56188       | 57287       | 58514       |
| Using of bed-nights - %                                | 37.0        | 41.5        | 42.0        | 42.3        |
| Nights spent - in thousands                            | 19655       | 23319       | 24071       | 24750       |
| of which: By foreigners                                | 13096       | 15865       | 16733       | 17327       |
| Revenues from nights spent - million BGN               | 998.1       | 1191.3      | 1298.8      | 1407.0      |
| <b>Camping sites - in numbers</b>                      | <b>8</b>    | <b>11</b>   | <b>9</b>    | <b>10</b>   |
| Bed-places - in thousands                              | 0.3         | 0.8         | 0.7         | 0.7         |
| Bed-nights - in thousands                              | 173         | 119         | 112         | 106         |
| Using of bed-nights - %                                | 23.0        | 47.9        | 52.1        | 60.0        |
| Nights spent - in thousands                            | 40          | 57          | 58          | 63          |
| of which: By foreigners                                | 2           | 3           | 3           | 2           |
| Revenues from nights spent - million BGN               | 0.4         | 0.4         | 0.4         | 0.5         |
| <b>Other accommodation establishments - in numbers</b> | <b>1014</b> | <b>1162</b> | <b>1227</b> | <b>1346</b> |
| Bed-places - in thousands                              | 43.0        | 45.6        | 54.5        | 48.7        |
| Bed-nights - in thousands                              | 9081        | 8862        | 9069        | 9603        |
| Using of bed-nights - %                                | 18.8        | 20.4        | 21.2        | 21.2        |
| Nights spent - in thousands                            | 1703        | 1810        | 1925        | 2032        |
| of which: By foreigners                                | 254         | 283         | 370         | 420         |
| Revenues from nights spent - million BGN               | 35.0        | 37.4        | 41.7        | 48.2        |

<sup>1</sup> In use.

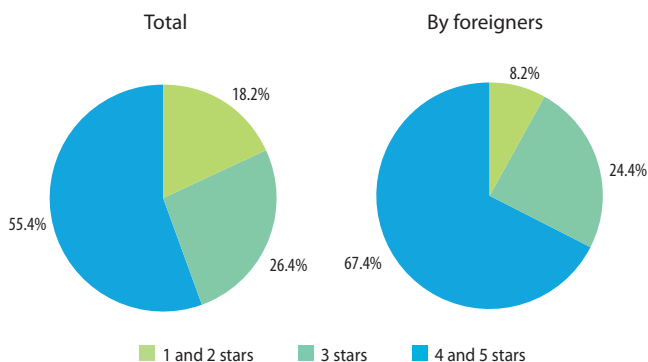
## Nights spent

The total number of the nights spent in 2018 in all accommodation establishments increased by 790.9 thousand (3.0%) to 26 845.0 thousand as compared to 2017. The number of the nights spent by foreigners (17 748.9 thousand) in all accommodation establishments increased by 3.8% in 2018 as compared to the previous year.

Almost all foreigners - 97.4%, preferred to spend the night in hotels while only 2.6% of them spent nights in other accommodation establishments (camping sites, mountain chalets and other establishments for short-time accommodation).

The structure of the nights spent by foreigners in 2018 showed that the highest percentage of nights was spent in four-stars and five-stars accommodation establishments (67.4%), followed by those with three stars (24.4%) and those with one and two stars (8.2%).

Figure 2. Structure of the nights spent in accommodation establishments by categories in 2018







## 2. Nights spent by foreigners in accommodation establishments by country of origin and by categories in 2018

(Number)

| Country                         | Total           | Categories of accommodation establishments |                |                 |                |
|---------------------------------|-----------------|--|----------------|-----------------|----------------|
|                                 |                 | 1 and 2 stars                              | 3 stars        | 4 stars         | 5 stars        |
| <b>Total</b>                    | <b>17748925</b> | <b>1453687</b>                             | <b>4333481</b> | <b>10086369</b> | <b>1875388</b> |
| <b>EU</b>                       | <b>12946620</b> | <b>751461</b>                              | <b>3024435</b> | <b>7927375</b>  | <b>1243349</b> |
| Austria                         | 195815          | 4895                                       | 23802          | 134131          | 32987          |
| Belgium                         | 297577          | 10297                                      | 29515          | 206214          | 51551          |
| Croatia                         | 32931           | 2019                                       | 8138           | 19346           | 3428           |
| Cyprus                          | 28755           | 2057                                       | 5202           | 15780           | 5716           |
| Czech Republic                  | 737979          | 54867                                      | 287643         | 359767          | 35702          |
| Denmark                         | 177336          | 13351                                      | 42264          | 103266          | 18455          |
| Estonia                         | 126023          | 8584                                       | 35595          | 70959           | 10885          |
| Finland                         | 168719          | 18732                                      | 45482          | 85888           | 18617          |
| France                          | 441569          | 29458                                      | 89257          | 269633          | 53221          |
| Germany                         | 3527558         | 65551                                      | 552645         | 2563559         | 345803         |
| Greece                          | 257227          | 20273                                      | 57058          | 141575          | 38321          |
| Hungary                         | 198134          | 14778                                      | 85966          | 86246           | 11144          |
| Ireland                         | 105349          | 23624                                      | 25779          | 45476           | 10470          |
| Italy                           | 213729          | 19016                                      | 55052          | 108147          | 31514          |
| Latvia                          | 77782           | 8274                                       | 21776          | 39823           | 7909           |
| Lithuania                       | 148128          | 9438                                       | 31891          | 90347           | 16452          |
| Luxemburg                       | 16535           | 222  | 665            | 12796           | 2852           |
| Malta                           | 10115           | 388  | 1501           | 6603            | 1623           |
| Netherlands                     | 218229          | 13663                                      | 47008          | 137363          | 20195          |
| Poland                          | 1847172         | 69814                                      | 547999         | 1102359         | 127000         |
| Portugal                        | 30250           | 1941                                       | 5330           | 17470           | 5509           |
| Romania                         | 1883016         | 128617                                     | 518541         | 1064491         | 171367         |
| Slovakia                        | 228312          | 22244                                      | 78501          | 115815          | 11752          |
| Slovenia                        | 40735           | 4883                                       | 17579          | 14326           | 3947           |
| Spain                           | 112646          | 10166                                      | 21479          | 57891           | 23110          |
| Sweden                          | 192183          | 14836                                      | 48389          | 107031          | 21927          |
| United Kingdom                  | 1632816         | 179473                                     | 340378         | 951073          | 161892         |
| <b>Other European countries</b> | <b>2760613</b>  | <b>536857</b>                              | <b>813512</b>  | <b>1148728</b>  | <b>261516</b>  |
| Norway                          | 328251          | 36351                                      | 66955          | 199908          | 25037          |
| Republic of North Macedonia     | 275740          | 18173                                      | 63266          | 162233          | 32068          |
| Russian Federation              | 1255018         | 319177                                     | 394604         | 419526          | 121711         |
| Serbia                          | 146123          | 22187                                      | 41445          | 71266           | 11225          |
| Switzerland                     | 60039           | 3636                                       | 10954          | 31536           | 13913          |
| Turkey                          | 235726          | 39395                                      | 57205          | 111438          | 27688          |
| Ukraine                         | 459716          | 97938                                      | 179083         | 152821          | 29874          |
| <b>Other countries</b>          | <b>785045</b>   | <b>31794</b>                               | <b>119257</b>  | <b>430964</b>   | <b>203030</b>  |
| Israel                          | 612384          | 20147                                      | 91731          | 353307          | 147199         |
| Japan                           | 27778           | 1577                                       | 4693           | 14542           | 6966           |
| United States                   | 144883          | 10070                                      | 22833          | 63115           | 48865          |
| <b>Rest of the world</b>        | <b>1256647</b>  | <b>133575</b>                              | <b>376277</b>  | <b>579302</b>   | <b>167493</b>  |

## Trips of Bulgarian residents abroad and arrivals of foreigners to Bulgaria

The statistical data on travel of Bulgarian residents abroad and on visits by foreigners in Bulgaria are developed on the basis of the monthly information received from the Ministry of the Interior and from a sample survey of the National Statistical Institute among Bulgarian and foreign citizens passing the border crossing control points.

Data on the number of trips of EU citizens are estimated based on information received from the Ministry of the Interior and the airport authorities. Data on the number of third country citizens are obtained directly by the Ministry of the Interior.

Data on the purposes of the trips are developed on the basis of the NSI's regular monthly sample survey of passing Bulgarian and foreign citizens through the country's border crossing control points.

Figure 3. Structure of the trips of Bulgarian residents abroad by purpose of visit in 2018

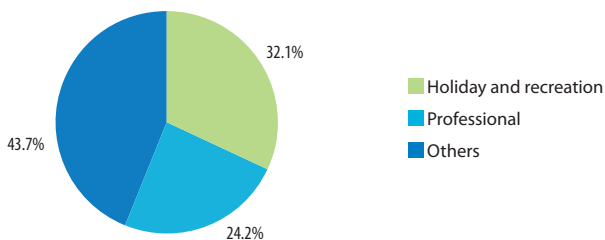
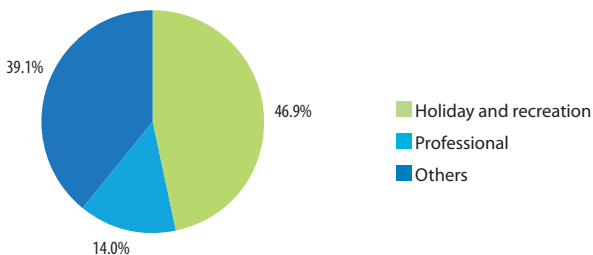


Figure 4. Structure of arrivals of visitors to Bulgaria from abroad by purpose of visit in 2018





### 3. Trips of Bulgarian residents abroad and arrivals of foreigners to Bulgaria by country of origin

(Number)

| Country                         | Trips of Bulgarian residents abroad |                | Arrivals of foreigners to Bulgaria by country of origin |                 |
|---------------------------------|-------------------------------------|----------------|---|-----------------|
|                                 | 2017                                | 2018           | 2017  | 2018            |
| <b>Total</b>                    | <b>6227623</b>                      | <b>6698526</b> | <b>11596167</b>   | <b>12368363</b> |
| <b>EU</b>                       | <b>3762392</b>                      | <b>3993584</b> | <b>6867671</b>  | <b>7250365</b>  |
| Austria                         | 202970                              | 221638         | 216986  | 217541          |
| Belgium                         | 90433                               | 105830         | 152739  | 170146          |
| Croatia                         | 32129                               | 36222          | 29331   | 31459           |
| Cyprus                          | 13834                               | 13722          | 24969   | 25517           |
| Czech Republic                  | 96212                               | 101917         | 209218  | 236265          |
| Denmark                         | 28868                               | 28943          | 67502   | 57405           |
| Finland                         | 4260                                | 5084           | 33533   | 39669           |
| France                          | 141913                              | 148953         | 231348  | 260099          |
| Germany                         | 402111                              | 422268         | 1046219   | 1063502         |
| Greece                          | 1341192                             | 1402560        | 1272997   | 1290313         |
| Hungary                         | 65124                               | 68995          | 111405  | 102956          |
| Ireland                         | 12117                               | 11256          | 31617   | 39322           |
| Italy                           | 229506                              | 242301         | 177250  | 181770          |
| Malta                           | 12834                               | 11237          | 3984  | 4964            |
| Netherlands                     | 63565                               | 71339          | 183755  | 193362          |
| Poland                          | 66836                               | 73849          | 424724  | 474984          |
| Portugal                        | 20030                               | 20126          | 17440   | 17603           |
| Romania                         | 480980                              | 523058         | 1943436   | 2035606         |
| Slovakia                        | 34303                               | 39185          | 81318   | 101887          |
| Slovenia                        | 36854                               | 36738          | 25178   | 22666           |
| Spain                           | 170944                              | 181412         | 89155   | 96100           |
| Sweden                          | 18699                               | 19577          | 56739   | 60178           |
| United Kingdom                  | 170367                              | 178589         | 352054  | 424384          |
| Others countries from EU        | 26311                               | 28785          | 84774   | 102667          |
| <b>Other European countries</b> | <b>2276496</b>                      | <b>2533595</b> | <b>3601426</b>  | <b>3883209</b>  |
| Norway                          | 8323                                | 8469           | 51142   | 62317           |
| Republic of North Macedonia     | 396450                              | 416448         | 583026  | 609591          |
| Russian Federation              | 53868                               | 59080          | 565754  | 522085          |
| Serbia                          | 462953                              | 493950         | 541303  | 632902          |
| Switzerland                     | 19519                               | 18247          | 34280   | 34105           |
| Turkey                          | 1311252                             | 1515894        | 1437276   | 1534809         |
| Ukraine                         | 24131                               | 21507          | 388645  | 487400          |
| <b>Others countries</b>         | <b>46965</b>                        | <b>46973</b>   | <b>319380</b>   | <b>367676</b>   |
| Canada                          | 6680                                | 7363           | 19113   | 20889           |
| Israel                          | 19083                               | 19545          | 209304  | 245567          |
| USA                             | 21202                               | 20065          | 90963   | 101220          |
| <b>Rest of the world</b>        | <b>141770</b>                       | <b>124374</b>  | <b>807690</b>   | <b>867113</b>   |



## **XXI. FORESTRY**



## Total forest area

The total forest area covers all wooded, non-wooded and non-timber producing areas.

The deciduous high stemmed forests include trees of seedling origin, which are naturally and artificially established through afforestation by planting or seeding. The deciduous low stemmed forests include the same species as the deciduous high stemmed forests, but have shoots origin. The forests are managed through methods preserving their biological variety and shoots regeneration (including the stands of *Robina pseudoacacia*).

Wooded forest area is a land under natural or planted stands of trees and bushes that covers natural plantings, sparse forests and crops.

Data on afforestation are based on the inventory of forests.

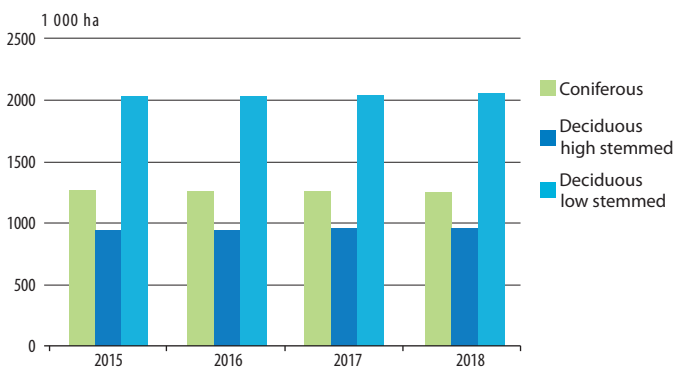
Afforestation in mature non-regenerated forest is defined as afforestation carried out in a mature forest (at age of main cutting) for which natural regeneration is insufficient.

Afforestation of sparse forests is carried out on areas with small numbers of trees per unit of area.

Reforestation of crops is afforestation in artificially established forest areas up to 3 years old for restoration of dry (lost) saplings.

Growing of crops includes activities aiming at supporting the initial growth and the stability of the saplings up to 3 years old (cutting of shoots, digging, removing of competitive plants, etc.).

Figure 1. Forest area by type





## 1. Forest area<sup>1</sup>

(1 000 ha)

|   | 2015        | 2016        | 2017        | 2018        |
|---|-------------|-------------|-------------|-------------|
| <b>Forest by type</b>                           | <b>4223</b> | <b>4231</b> | <b>4243</b> | <b>4257</b> |
| Coniferous                                      | 1261        | 1259        | 1254        | 1251        |
| Deciduous                                       | 2962        | 2972        | 2989        | 3006        |
| High-stemmed                                    | 938         | 942         | 952         | 954         |
| Low-stemmed                                     | 2024        | 2030        | 2037        | 2052        |
| <b>Of which: Wooded forest area<sup>2</sup></b> | <b>3858</b> | <b>3865</b> | <b>3877</b> | <b>3893</b> |
| Coniferous                                      | 1134        | 1131        | 1125        | 1122        |
| Deciduous                                       | 2724        | 2734        | 2752        | 2770        |
| High-stemmed                                    | 878         | 880         | 892         | 895         |
| Low-stemmed                                     | 1846        | 1854        | 1860        | 1875        |

<sup>1</sup> Source: Executive Forest Agency.

<sup>2</sup> Incl. area under *Pinus mugo*.

## 2. Afforestation<sup>1</sup>

(Hectares)

|   | 2015 | 2016 | 2017  | 2018  |
|---|------|------|-------|-------|
| Preparation of area                       | 2025 | 1763 | 1584  | 1278  |
| Afforestation                             | 1592 | 1987 | 1745  | 1503  |
| New afforestation                         | 703  | 1130 | 975   | 853   |
| Mature non-regenerated forests            | 843  | 782  | 716   | 612   |
| Sparse forests                            | 48   | 75   | 54    | 36    |
| Establishment of two-storeyed plantations | 787  | 766  | 677   | 651   |
| Reforestation of artificial forests       | 298  | 318  | 571   | 694   |
| Growing of crops                          | 8574 | 9247 | 10708 | 10987 |

<sup>1</sup> Source: Executive Forest Agency.

## Management of the forests

Thinning and cleaning are regular cuttings in young and middle aged plantations in order to regulate their species structure and to improve the growing conditions and the quality of timber production.

Sanitary logging is cutting of dead (lost) trees and bushes and trees damaged (broken) by storm and snow, in order to insure protection from calamities and diseases.

Supporting of natural regeneration includes all activities to facilitate the forest's natural regeneration - from seeds and shoots.

Figure 2. Management of the forests

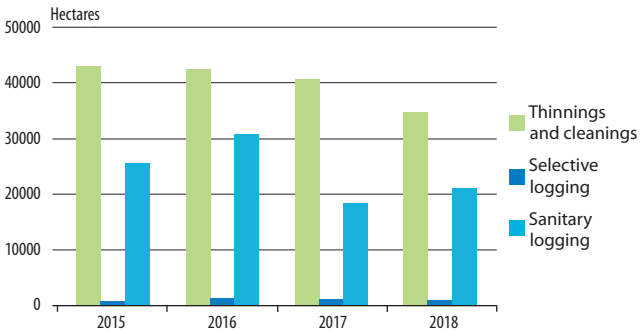
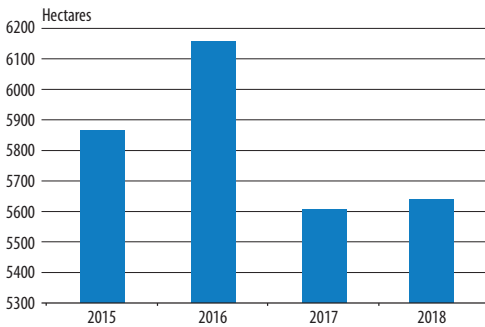


Figure 3. Supporting the natural reproduction of the forests







### 3. Management of the forests<sup>1</sup>

|                                     | (Hectares) |        |        |        |
|-------------------------------------|------------|--------|--------|--------|
|                                     | 2015       | 2016   | 2017   | 2018   |
| Thinnings and cleanings             | 42955      | 42578  | 40615  | 34821  |
| Coniferous                          | 20512      | 18534  | 15980  | 14007  |
| Deciduous high-stemmed              | 14783      | 16526  | 16893  | 14048  |
| Shoots                              | 7660       | 7518   | 7742   | 6766   |
| Selective logging                   | 895        | 1275   | 1060   | 1154   |
| Coniferous                          | 400        | 333    | 317    | 238    |
| Deciduous high-stemmed              | 470        | 537    | 603    | 640    |
| Shoots                              | 25         | 405    | 140    | 276    |
| Sanitary logging                    | 25649      | 30843  | 17890  | 21225  |
| Coniferous                          | 19684      | 24873  | 14633  | 18174  |
| Deciduous high-stemmed              | 2431       | 2965   | 1333   | 1003   |
| Shoots                              | 3534       | 3005   | 1924   | 2048   |
| Trimming                            | 1376       | 1465   | 1776   | 1507   |
| Supporting the natural reproduction | 5869       | 6159   | 5608   | 5640   |
| of which: Chisel shoots             | 4658       | 5412   | 4800   | 4355   |
| Blazed timber logging fund          | 151150     | 126235 | 130221 | 131536 |
| Coniferous                          | 66839      | 50860  | 52887  | 57184  |
| Deciduous high-stemmed              | 34394      | 32967  | 30510  | 30529  |
| Shoots                              | 49917      | 42408  | 46824  | 43823  |

### 4. Production of forest seeds<sup>1</sup>

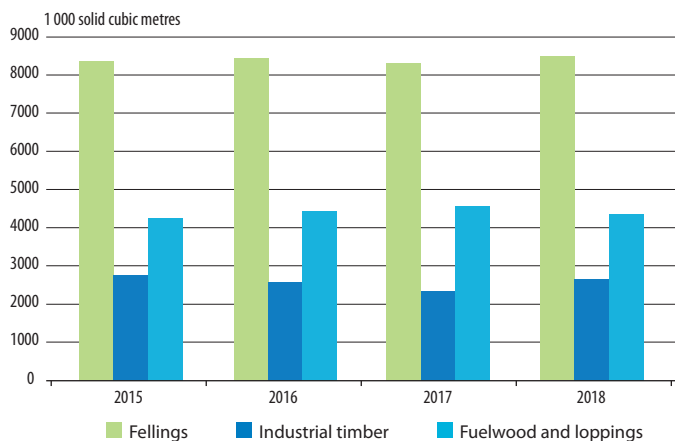
|                              | (Kilograms) |       |       |       |
|------------------------------|-------------|-------|-------|-------|
|                              | 2015        | 2016  | 2017  | 2018  |
| Pick of coniferous strobiles | 6455        | 9907  | 8154  | 5427  |
| Gathered and yield of seeds  | 47303       | 42732 | 56171 | 43732 |
| Coniferous spaces            | 151         | 969   | 803   | 120   |
| Deciduous spaces             | 47152       | 41764 | 55369 | 43720 |
| of which: Oak acorn          | 44692       | 39277 | 53745 | 36144 |

<sup>1</sup> Source: Executive Forest Agency.

## Wood

Data covers: total wood produced of industrial cuttings, firewood and loppings for the population, dead and fallen trees and wood, produced by sanitary logging, conducted in state and private forests.

Figure 4. Wood



5. Wood<sup>1</sup>

(1 000 solid cubic metres)

|                              | 2015       | 2016 | 2017 | 2018 |
|------------------------------|------------|------|------|------|
|                              | Total      |      |      |      |
| Fellings                     | 8389       | 8447 | 8322 | 8476 |
| Removals                     | 7040       | 7044 | 6936 | 7034 |
| Industrial timber            | 2774       | 2589 | 2360 | 2666 |
| Firewood and loppings        | 4266       | 4455 | 4576 | 4368 |
|                              | Coniferous |      |      |      |
| Fellings                     | 3871       | 4140 | 4092 | 4435 |
| Removals                     | 3032       | 3229 | 3205 | 3474 |
| Industrial timber            | 1934       | 1788 | 1614 | 1928 |
| Firewood and loppings        | 1098       | 1441 | 1591 | 1546 |
|                              | Deciduous  |      |      |      |
| Fellings                     | 4518       | 4307 | 4230 | 4041 |
| Removals                     | 4008       | 3815 | 3731 | 3560 |
| Industrial timber            | 840        | 801  | 746  | 738  |
| Firewood and loppings        | 3168       | 3014 | 2985 | 2822 |
| High-stem beech              |            |      |      |      |
| Fellings                     | 860        | 884  | 848  | 807  |
| Removals                     | 762        | 773  | 743  | 713  |
| Industrial timber            | 176        | 166  | 156  | 153  |
| Firewood and loppings        | 586        | 607  | 587  | 559  |
| High-stem oak                |            |      |      |      |
| Fellings                     | 201        | 229  | 207  | 198  |
| Removals                     | 171        | 196  | 180  | 170  |
| Industrial timber            | 35         | 39   | 40   | 34   |
| Firewood and loppings        | 136        | 157  | 140  | 135  |
| Other deciduous high-stemmed |            |      |      |      |
| Fellings                     | 690        | 649  | 619  | 611  |
| Removals                     | 614        | 581  | 549  | 548  |
| Industrial timber            | 276        | 252  | 230  | 246  |
| Firewood and loppings        | 338        | 329  | 319  | 301  |
| Coppice                      |            |      |      |      |
| Fellings                     | 2767       | 2545 | 2556 | 2423 |
| Removals                     | 2461       | 2265 | 2259 | 2129 |
| Industrial timber            | 353        | 344  | 320  | 304  |
| Firewood and loppings        | 2108       | 1921 | 1939 | 1825 |

<sup>1</sup> Source: Executive Forest Agency.

## Game

The number of game species in Bulgaria is determined on an annual basis through game counts carried out both in the state hunting areas and in the hunting areas, managed by the local hunting companies. The game counts consist in estimating the number of game by species, sex, age and number, settled on a certain territory, suitable for game breeding. The process of game counts is carried out through questionnaires, filled by the gamekeepers for the respective region. The Executive Forest Agency maintains a Register for the annual data on spring game counts on national level.

Figure 5. Small game

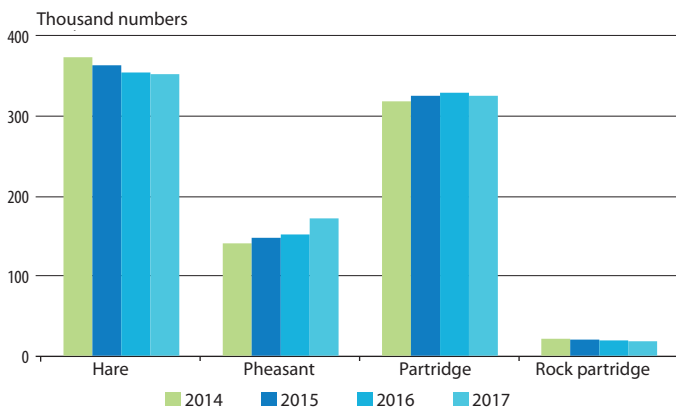
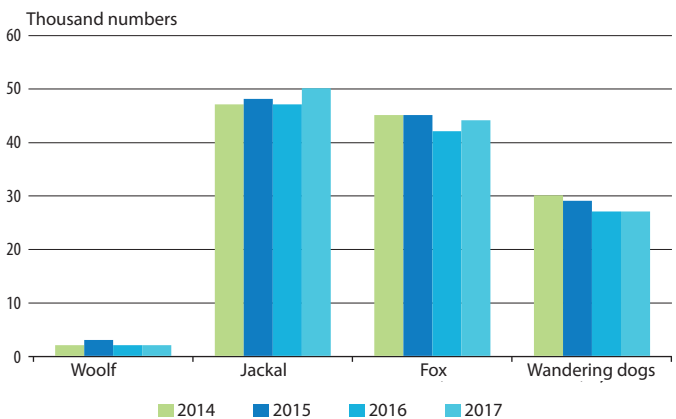


Figure 6. Predatory animals



6. Game<sup>1</sup>

(Number)

|                | 2014              | 2015   | 2016   | 2017   |
|----------------|-------------------|--------|--------|--------|
|                | Big game          |        |        |        |
| Red deer       | 23931             | 24435  | 25910  | 29331  |
| Fallow deer    | 7355              | 7338   | 8159   | 9231   |
| Deer           | 99758             | 102105 | 106323 | 116441 |
| Wild boar      | 86720             | 90130  | 88948  | 99729  |
| Wild goat      | 1763              | 1838   | 1945   | 2267   |
| Mouflon        | 4487              | 3553   | 3753   | 4219   |
| Bear           | 945               | 973    | 943    | 942    |
| Tibetan Yak    | 23                | 22     | 23     | 20     |
| Auroch         | 31                | 32     | 29     | 36     |
| Capercaillie   | 2917              | 3000   | 2940   | 3229   |
|                | Small game        |        |        |        |
| Hare           | 371929            | 362480 | 353091 | 351024 |
| Pheasant       | 139813            | 147277 | 151458 | 171790 |
| Partridge      | 316516            | 323744 | 328198 | 324265 |
| Rock partridge | 21383             | 19919  | 18814  | 18780  |
|                | Predatory animals |        |        |        |
| Wolf           | 2486              | 2575   | 2452   | 2640   |
| Jackal         | 47242             | 47752  | 47294  | 50194  |
| Fox            | 44665             | 44628  | 42326  | 44041  |
| Wandering dogs | 30084             | 28865  | 27437  | 26997  |

<sup>1</sup> Source: Executive Forest Agency.



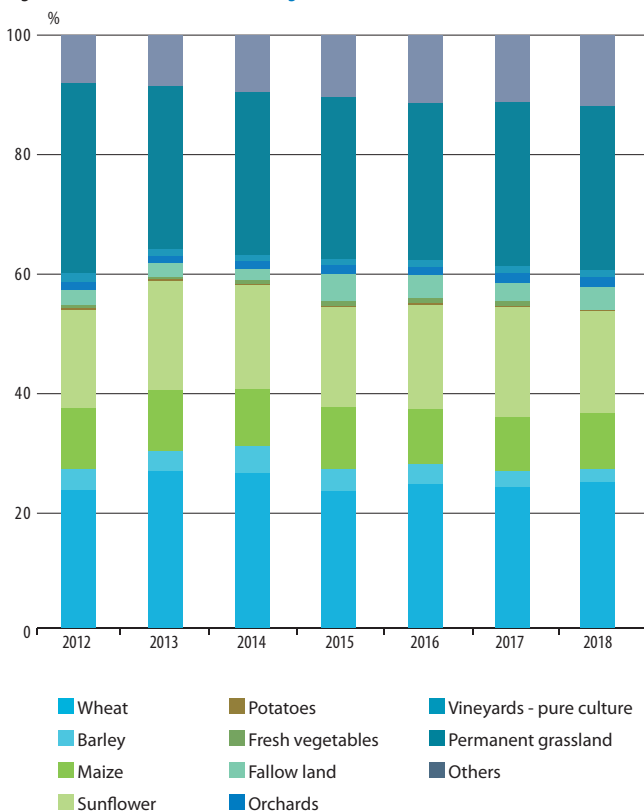
## **XXII. AGRICULTURE**



## Utilized agricultural area and arable land

The data on the crop area and the data on the utilized agricultural area is obtained under the Survey on land use and land cover in Bulgaria based on territorial sample. The survey is carried out during the May - July period and is implemented over the entire territory of Bulgaria. The land cover and land use are observed at approximately 110 000 points grouped in 3 123 segments. The surveyors observe the same points and the same segments each year.

Figure 1. Structure of the utilized agricultural area





1. Arable land and used agricultural area<sup>1,2,3</sup>

(Hectares)

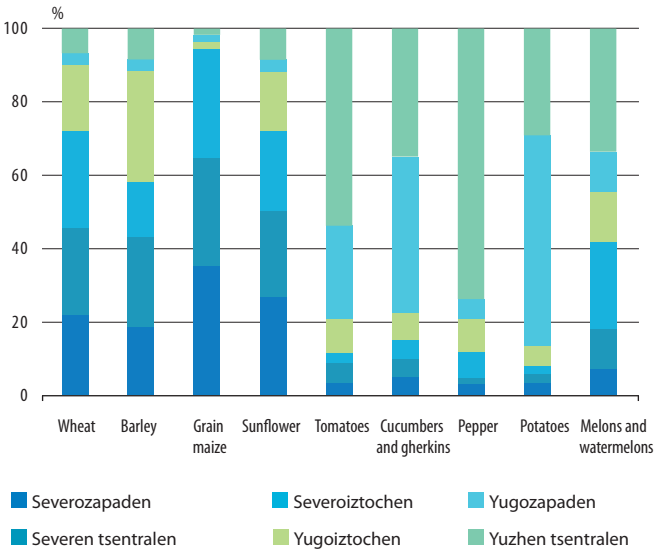
|  | 2015           | 2016           | 2017           | 2018           |
|--|----------------|----------------|----------------|----------------|
| <b>Arable land</b>                         | <b>3493688</b> | <b>3480991</b> | <b>3473825</b> | <b>3463370</b> |
| Wheat                                      | 1151225        | 1215684        | 1197768        | 1237736        |
| Barley                                     | 191433         | 168244         | 138122         | 115773         |
| Rye and triticale                          | 24190          | 30909          | 30639          | 29767          |
| Oats                                       | 13329          | 15675          | 19730          | 16886          |
| Maize                                      | 524121         | 468762         | 461085         | 478354         |
| Other cereals                              | 31479          | 21304          | 19600          | 24641          |
| Sunflower                                  | 851245         | 887845         | 934715         | 859910         |
| Tobacco                                    | 17443          | 13930          | 10506          | 8668           |
| Other oleaginous crops                     | 225847         | 196958         | 181067         | 203397         |
| Other industrial crops                     | 53755          | 55144          | 58848          | 46640          |
| Potatoes                                   | 9449           | 10109          | 12909          | 14611          |
| Beans, peas, other pulses                  | 24617          | 33928          | 78389          | 103445         |
| Fresh vegetables                           | 37538          | 46527          | 33312          | 35483          |
| Annual fodder crops                        | 6871           | 14223          | 17705          | 18152          |
| Grassland under legumes                    | 94288          | 105371         | 115447         | 112702         |
| Grassland under cereals                    | 394            | 3422           | 2504           | 5917           |
| Fallow land                                | 235150         | 191537         | 159959         | 149683         |
| Greenhouses                                | 1314           | 1419           | 1520           | 1606           |
| <b>Utilized agricultural area</b>          | <b>5011494</b> | <b>5021412</b> | <b>5029529</b> | <b>5030276</b> |
| Kitchen gardens                            | 15664          | 15367          | 15258          | 14836          |
| Orchards                                   | 68543          | 77625          | 84320          | 88829          |
| Vineyard - pure culture                    | 54210          | 52517          | 53251          | 53787          |
| Mixed permanent crops                      | 8522           | 8222           | 8220           | 8312           |
| Nurseries                                  | 2202           | 2602           | 2304           | 2100           |
| Total permanent crops                      | 133477         | 140966         | 148094         | 153029         |
| Permanent grassland and meadows - orchards | 1368665        | 1384088        | 1392352        | 1399041        |
| <b>Agricultural area</b>                   | <b>5202752</b> | <b>5214640</b> | <b>5224402</b> | <b>5226194</b> |

<sup>1</sup> Source: Ministry of Agriculture, Food and Forestry.<sup>2</sup> Data are obtained by the survey on land cover and land use of the territory of Bulgaria (BANCILK).<sup>3</sup> Since 2010 in accordance with Regulation (EC) No 1166/2009 nurseries have been included under permanent crops.

## Agricultural crops production

Data on main agricultural crops production is obtained through the survey on the yield of main crops in 2017. The survey is carried out during the month of November through interview with the farmers. Total production of vegetables includes production from open areas and green houses.

Figure 2. Structure of the production of main crop products by statistical regions in 2018





## 2. Harvested area, production and yields of main crops<sup>1</sup>

| Crops       | Harvested area - ha |         | Production - thousand tons |      | Yields - kg/ha |      |
|-------------|---------------------|---------|----------------------------|------|----------------|------|
|             | 2017                | 2018    | 2017                       | 2018 | 2017           | 2018 |
| Wheat       | 1144519             | 1212013 | 6132                       | 5833 | 5358           | 4812 |
| Barley      | 128365              | 103570  | 595                        | 438  | 4635           | 4224 |
| Grain maize | 398152              | 444622  | 2563                       | 3478 | 6437           | 7822 |
| Sunflower   | 898844              | 788656  | 2057                       | 1927 | 2289           | 2443 |

<sup>1</sup> Source: Ministry of Agriculture, Food and Forestry.

## 3. Area, production and yields of vegetable crops, potatoes and melons and watermelons<sup>1</sup>

| Crops                  | Harvested area <sup>2</sup> - ha |       | Production <sup>3</sup> - tons |        | Yields <sup>4</sup> - kg/ha |       |
|------------------------|----------------------------------|-------|--------------------------------|--------|-----------------------------|-------|
|                        | 2017                             | 2018  | 2017                           | 2018   | 2017                        | 2018  |
| Tomatoes               | 4376                             | 3907  | 158762                         | 148077 | 23434                       | 21815 |
| Cucumbers and gherkins | 752                              | 870   | 54398                          | 74357  | 20267                       | 16347 |
| Pepper                 | 3272                             | 2854  | 54822                          | 51958  | 16031                       | 17083 |
| Potatoes               | 12806                            | 14096 | 227815                         | 261694 | 17782                       | 18558 |
| Melons and watermelons | 7494                             | 7084  | 134630                         | 121590 | 17965                       | 17156 |

<sup>1</sup> Source: Ministry of Agriculture, Food and Forestry.

<sup>2</sup> Harvested area, excl. area under glass.

<sup>3</sup> Incl. under glass production.

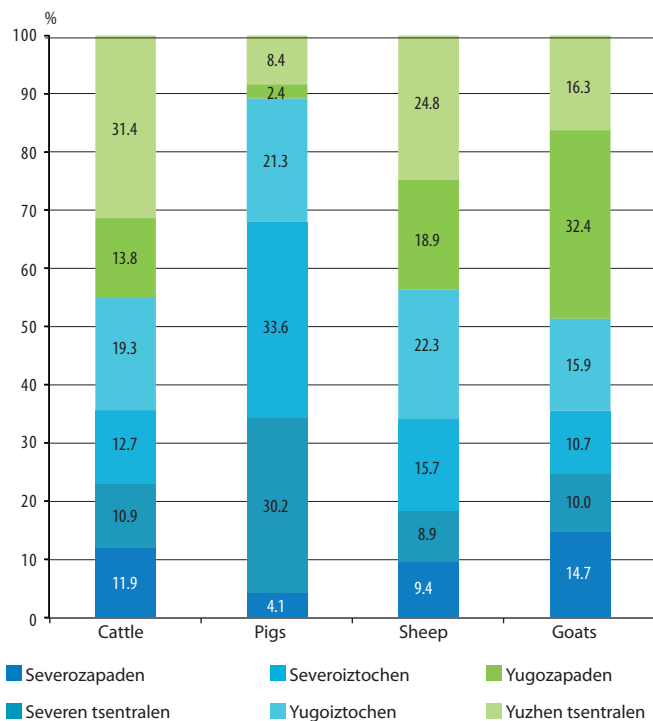
<sup>4</sup> Average yields excl. production under glass.

## Livestock

Information on the number of livestock in Bulgaria is obtained by means of a special survey. Statistical data on the type, category and number of animals, milk production and sales by directions, sales of animals for slaughter, slaughtered animals in farms and main information for structure of livestock is collected. The questionnaire is filled by means of interviews with livestock farmers.

Information on the number of poultry and eggs production is collected by a special survey. All the big farms are observed exhaustively. The results are supplemented with information from sample of small holdings raising poultry.

Figure 3. Structure of main livestock by statistical regions as of 1.11.2018



4. Livestock by type as of 1.11.<sup>1</sup>

(Thousand numbers)

| Type of animals        | 2015    | 2016    | 2017    | 2018    |
|------------------------|---------|---------|---------|---------|
| Cattle                 | 550.2   | 557.9   | 540.1   | 526.5   |
| of which: Cows         | 352.6   | 357.2   | 348.7   | 340.8   |
| Buffaloes              | 10.8    | 12.3    | 12.8    | 15.6    |
| of which: Buffalo-cows | 6.8     | 7.6     | 8.7     | 10.3    |
| Pigs                   | 600.1   | 616.4   | 593.1   | 650.5   |
| of which: Sows         | 46.9    | 47.2    | 44.7    | 51.5    |
| Sheep                  | 1331.9  | 1360.1  | 1316.8  | 1350    |
| of which: Ewes         | 1117.0  | 1128.9  | 1096.4  | 1119.9  |
| Goats                  | 277.0   | 237.5   | 257     | 271.7   |
| of which: She-goats    | 219.9   | 199.4   | 220.8   | 231.2   |
| Poultry                | 15600.0 | 13700.0 | 14756.0 | 15519.0 |
| of which: Hens         | 6980.0  | 7158.0  | 6898.0  | 6951.0  |

5. Farms and livestock by type as of 1.11.2018<sup>1</sup>

|                              | Farms -<br>in thousands | Livestock    |                                  |
|------------------------------|-------------------------|--------------|----------------------------------|
|                              |                         | In thousands | Average per<br>farm - in numbers |
| Cattle                       | 27.2                    | 526.5        | 19.4                             |
| of which:                    |                         |              |                                  |
| Cows                         | 25.6                    | 340.8        | 13.3                             |
| Bovines less than 1 year old | 16.5                    | 105.4        | 6.4                              |
| Buffaloes                    | 0.4                     | 15.6         | 39.0                             |
| of which: Buffalo-cows       | 0.3                     | 10.3         | 34.3                             |
| Pigs                         | 8.8                     | 650.5        | 73.9                             |
| of which: Sows               | 0.7                     | 51.5         | 73.6                             |
| Sheep                        | 21.7                    | 1350.0       | 62.2                             |
| of which: Ewes               | 19.5                    | 1119.9       | 57.4                             |
| Goats                        | 12.1                    | 271.7        | 22.5                             |
| of which: She-goats          | 11.8                    | 231.2        | 19.6                             |

<sup>1</sup> Source: Ministry of Agriculture, Food and Forestry.

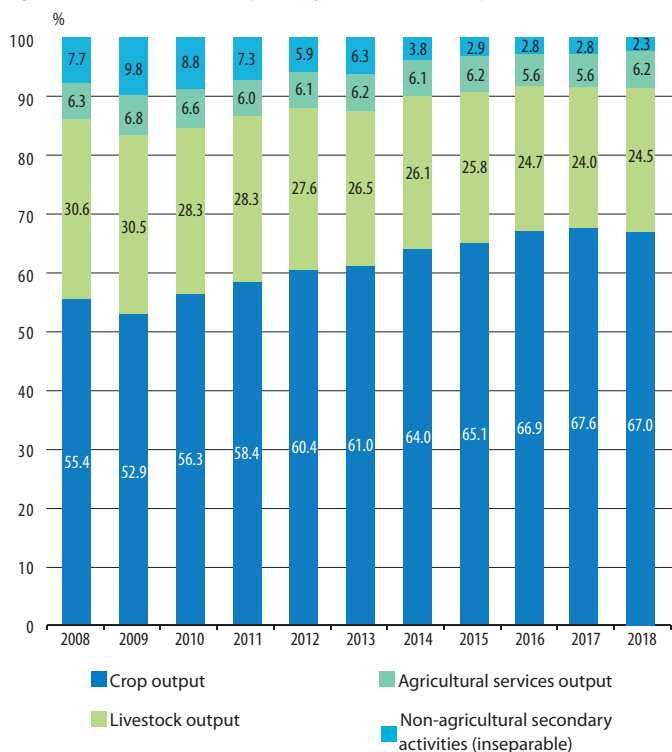
## Economic accounts for agriculture

The Economic accounts for Agriculture (NSI data) are a satellite account in the framework of National Accounts.

Output of agriculture represents all goods and services produced over the accounting period by all the units, including households. Data refer to the final production, excluding internal turnover (goods and services produced and consumed for own during the accounting period). The information from 2007 onwards includes both subsidies from the national budget and the EU budget.

The main purpose of the elaboration of the economic accounts is the calculation of the entrepreneurial income characterizing the state and development tendencies of agriculture.

Figure 4. Structure of final output in agriculture at current prices





## 6. Economic accounts for agriculture - final output at current prices

(Million BGN)

| Indicators  | 2015   | 2016   | 2017   | 2018   |
|---|--------|--------|--------|--------|
| Cereals   | 2403.2 | 2345.8 | 2437.8 | 2651.1 |
| Industrial crops                                    | 1892.6 | 1931.7 | 1969.2 | 1764.3 |
| Fodder  | 125.2  | 159.6  | 223.9  | 198.3  |
| Vegetables  | 281.9  | 344.9  | 384.1  | 351.1  |
| Potatoes  | 63.2   | 50.0   | 78.9   | 51.9   |
| Fruits  | 334.9  | 358.3  | 426.7  | 357.9  |
| Wine  | .      | .      | .      | .      |
| Other crop products                                 | 34.6   | 45.0   | 46.5   | 39.4   |
| Crop output   | 5135.6 | 5235.3 | 5567.1 | 5414.0 |
| Livestock   | 1131.1 | 1061.8 | 1048.9 | 1039.5 |
| Livestock products                                  | 905.3  | 874.6  | 929.8  | 938.5  |
| Livestock output                                    | 2036.4 | 1936.4 | 1978.7 | 1978.0 |
| Agricultural goods output                           | 7172.0 | 7171.7 | 7545.8 | 7392.0 |
| Agricultural services output                        | 485.2  | 439.8  | 465.3  | 501.2  |
| Agricultural output                                 | 7657.2 | 7611.5 | 8011.1 | 7893.2 |
| Non-agricultural secondary activities (inseparable) | 230.9  | 218.8  | 228.7  | 184.0  |
| Output of agricultural activities                   | 7888.1 | 7830.3 | 8239.8 | 8077.2 |
| Total intermediate consumption                      | 4718.3 | 4355.7 | 4479.5 | 4672.5 |
| Gross value added at basic price                    | 3169.8 | 3474.6 | 3760.3 | 3404.7 |
| Fixed capital consumption                           | 783.3  | 860.1  | 868.8  | 928.7  |
| Net value added at basic prices                     | 2386.5 | 2614.5 | 2891.5 | 2476.0 |
| Factor income                                       | 3709.2 | 4195.6 | 4809.1 | 4098.7 |
| Net operating surplus/mixed income                  | 2905.1 | 3363.4 | 3943.4 | 3207.4 |
| Net entrepreneurial income                          | 1861.2 | 2285.1 | 2788.2 | 1937.4 |





## **XXIII. ENVIRONMENT**

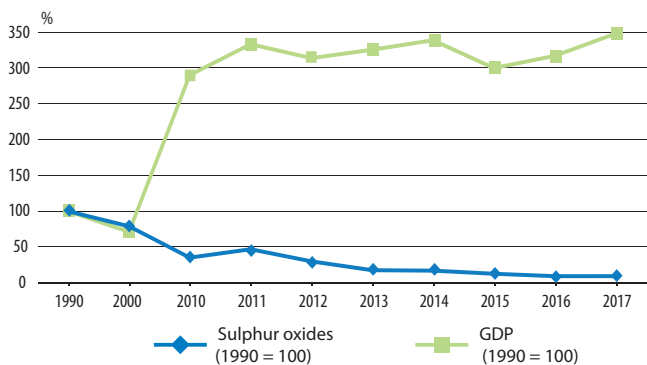


## Emissions of pollutants in the air

The emissions of harmful substances in the air are calculated based on data from a specialized statistical survey of the National Statistical Institute (NSI) and information from the Executive Environmental Agency (EEA) at the Ministry of Environment and Water (MOEW). For primary information collection and calculation of emissions of harmful substances, a methodology of NSI and MOEW, harmonized with the CORINAIR methodology developed by the European Union, is used. Emissions are estimated using a calculation method based on the parameters: fuels consumed, sulphur content, calorific value, quantity of produced output and input of raw materials as well as emission factors applicable for the respective pollutants.

The emissions into the air are a direct result of the economic activity in the country. The amount of the emitted harmful substances depends both on the quantities of consumed fuels and produced output, and the level of technology used. The most common characteristic of the relation economy - environment is contained in the indicator 'Emission per unit of Gross Domestic Product (GDP)'.

Figure 1. Emissions of Sulphur oxides and GDP



1. Emissions of pollutants in the air<sup>1,2</sup>

(Thousand tons)

|                              | Sulphur oxides | Nitrogen oxides | Non-methane volatile organic compounds | Methane    | Carbon oxide | Carbon dioxide | Dinitrogen oxide | Ammonia oxides |
|------------------------------|----------------|-----------------|--|------------|--------------|----------------|------------------|----------------|
| 2015                         |                |                 |  |            |              |                |                  |                |
| <b>Total</b>                 | <b>140</b>     | <b>121</b>      | <b>74</b>                              | <b>660</b> | <b>286</b>   | <b>45461</b>   | <b>23</b>        | <b>48</b>      |
| Industrial heating processes | 96             | 33              | 0                                      | 0          | 1            | 31439          | 7                | 0              |
| Industrial processes         | 38             | 36              | 18                                     | 415        | 27           | 4504           | 0                | 3              |
| Other sources <sup>3</sup>   | 6              | 52              | 56                                     | 244        | 258          | 9519           | 16               | 45             |
| 2016                         |                |                 |  |            |              |                |                  |                |
| <b>Total</b>                 | <b>103</b>     | <b>119</b>      | <b>77</b>                              | <b>680</b> | <b>253</b>   | <b>40975</b>   | <b>23</b>        | <b>49</b>      |
| Industrial heating processes | 58             | 29              | 0                                      | 0          | 1            | 27150          | 6                | 0              |
| Industrial processes         | 39             | 36              | 28                                     | 440        | 27           | 4133           | 0                | 3              |
| Other sources <sup>3</sup>   | 6              | 54              | 49                                     | 240        | 225          | 9692           | 17               | 46             |
| 2017                         |                |                 |  |            |              |                |                  |                |
| <b>Total</b>                 | <b>103</b>     | <b>90</b>       | <b>72</b>                              | <b>707</b> | <b>248</b>   | <b>43194</b>   | <b>24</b>        | <b>49</b>      |
| Industrial heating processes | 50             | 22              | 0                                      | 0          | 1            | 29100          | 7                | 0              |
| Industrial processes         | 46             | 7               | 25                                     | 477        | 28           | 4328           | 0                | 3              |
| Other sources <sup>3</sup>   | 7              | 61              | 47                                     | 230        | 219          | 9766           | 17               | 46             |

<sup>1</sup> Because of rounding some totals do not exceed or are less than the sums of their components.

<sup>2</sup> Emissions are calculated in accordance with the latest edition of CORINAIR. New emission factors are used.

<sup>3</sup> Data on emissions from transport, agriculture and households are included.

## Water use

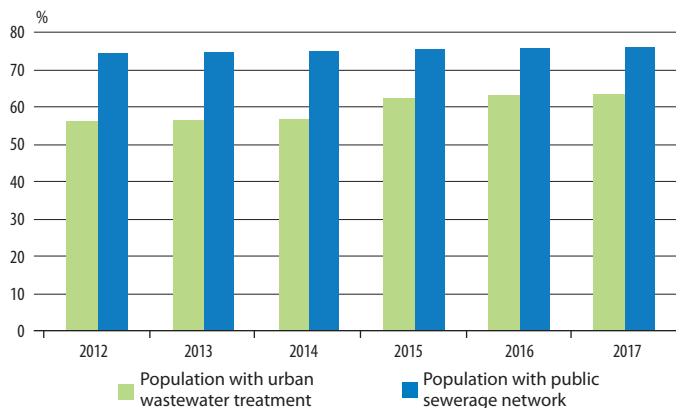
The information is a result from statistical surveys covering comprehensively public water suppliers (PWS) and irrigation systems, as well economic units which have used over 36 thousand m<sup>3</sup> of water annually. Enterprises below this criterion also submit data on a voluntary basis. Water use for hydropower production and water abstraction by physical entities is not included.

Water supply is carried out by water suppliers and through self-supply. The main water users are: agriculture, industry and domestic sector (households and services). The level of water use in the country is mainly determined by water use in the energy production, which requires significant volumes of water for cooling processes. For calculating consumption of drinking water in households (supplied by Public water supply (PWS) partnerships, average per capita) the average annual population is used.

After being used, water is discharged into public sewerage network and water bodies. Two categories are distinguished - wastewater and water from cooling processes. Wastewater discharged into water bodies is formed by public sewerage network (incl. of non-point sources), economic units and households. Wastewater treatment is conducted locally or in urban wastewater treatment plants.

The estimate on population supplied with services on wastewater discharge and treatment is based on information from PWS operators and municipalities with organized discharge of water into UWWTP. It is possible that the share of this population is overestimated due to settlements with partially built sewerage network. Population, whose waters are transported in tanks to the sewerage system or UWWTP, is not included.

Figure 2. Basic indicators related to population and the water services

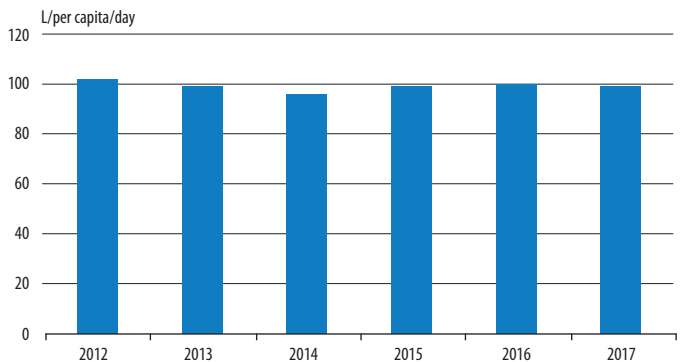




## 2. Water abstraction, water use, wastewater

|  | (Million m <sup>3</sup> /year) |             |             |             |             |
|--|--------------------------------|-------------|-------------|-------------|-------------|
|  | 2013                           | 2014        | 2015        | 2016        | 2017        |
| <b>Gross fresh water abstraction</b>                   | <b>5468</b>                    | <b>5376</b> | <b>5629</b> | <b>5689</b> | <b>5658</b> |
| Fresh surface water                                    | 4910                           | 4829        | 5071        | 5128        | 5076        |
| of which: From artificial reservoirs                   | 2349                           | 2164        | 2423        | 2222        | 2279        |
| Fresh groundwater                                      | 558                            | 547         | 558         | 561         | 582         |
| Gross non-fresh water abstraction                      | 1                              | 0           | 0           | 0           | 0           |
| <b>Water use - total</b>                               | <b>4477</b>                    | <b>4506</b> | <b>4736</b> | <b>4721</b> | <b>4732</b> |
| Agriculture, hunting and forestry (incl. fishing)      | 296                            | 289         | 360         | 355         | 307         |
| of which: Irrigation                                   | 269                            | 258         | 316         | 306         | 255         |
| Industry   | 3841                           | 3887        | 4037        | 4041        | 4091        |
| of which: For cooling in energy production             | 3182                           | 3237        | 3686        | 3681        | 3704        |
| Services   | 80                             | 79          | 81          | 67          | 78          |
| Households   | 261                            | 251         | 259         | 257         | 257         |
| <b>Wastewater discharged into water bodies - total</b> | <b>802</b>                     | <b>789</b>  | <b>804</b>  | <b>803</b>  | <b>768</b>  |
| of which: From WWTPs (urban and other)                 | 571                            | 558         | 579         | 603         | 582         |
| <b>Cooling water discharged into water bodies</b>      | <b>2945</b>                    | <b>3000</b> | <b>3680</b> | <b>3628</b> | <b>3725</b> |

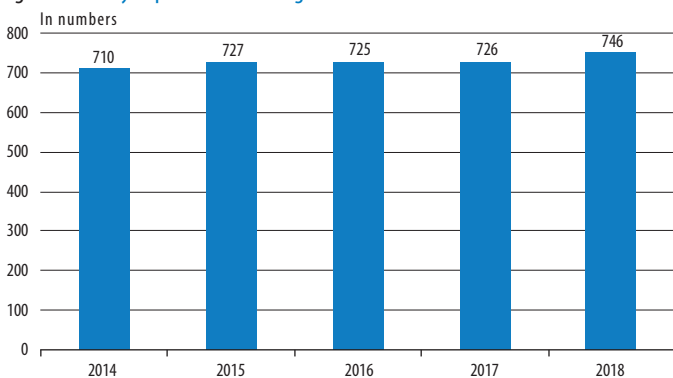
Figure 3. Drinking water used by households, from Public water supply average per capita



## Noise

Source of data about noise levels is the National Center for Public Health and Analyses. Noise levels are observed in different territories and development zones in and outside urban areas. A special noise indicator is used for areas subject to aviation noise. 746 points of noise level measurement were surveyed in 2018. They are located in 36 settlements of the country.

Figure 4. Surveyed points of noise registration





## 3. Surveyed points of noise registration by district in 2018

(Number)

| Districts        | Total      | Of which:<br>over<br>permissible<br>limits | By registered noise level in decibels |            |            |            |            |            |            |
|------------------|------------|--|---------------------------------------|------------|------------|------------|------------|------------|------------|
|                  |            |  | Under<br>58                           | 58 -<br>62 | 63 -<br>67 | 68 -<br>72 | 73 -<br>77 | 78 -<br>82 | Over<br>82 |
| <b>Total</b>     | <b>746</b> | <b>527</b>                                 | <b>170</b>                            | <b>112</b> | <b>268</b> | <b>183</b> | <b>13</b>  | -          | -          |
| Blagoevgrad      | 17         | 3  | 13                                    | 4          | -          | -          | -          | -          | -          |
| Burgas           | 37         | 27   | 9                                     | 4          | 5          | 11         | 8          | -          | -          |
| Varna            | 45         | 19   | 27                                    | 3          | 6          | 9          | -          | -          | -          |
| Veliko Tarnovo   | 48         | 37   | 1                                     | 11         | 28         | 8          | -          | -          | -          |
| Vidin            | 15         | 13   | 5                                     | 2          | 7          | 1          | -          | -          | -          |
| Vratsa           | 15         | 12   | 4                                     | 2          | 8          | 1          | -          | -          | -          |
| Gabrovo          | 20         | 16   | 1                                     | 3          | 11         | 5          | -          | -          | -          |
| Dobrich          | 15         | 11   | 1                                     | 2          | 5          | 7          | -          | -          | -          |
| Kardzhali        | 15         | 13   | 5                                     | -          | 1          | 9          | -          | -          | -          |
| Kyustendil       | 36         | 31   | 6                                     | 4          | 18         | 8          | -          | -          | -          |
| Lovech           | 15         | 13   | 4                                     | 4          | 5          | 2          | -          | -          | -          |
| Montana          | 15         | 13   | -                                     | 2          | 10         | 3          | -          | -          | -          |
| Pazardzhik       | 15         | 11   | 1                                     | 3          | 8          | 3          | -          | -          | -          |
| Pernik           | 24         | 16   | -                                     | 7          | 11         | 6          | -          | -          | -          |
| Pleven           | 21         | 18   | 7                                     | 5          | 8          | 1          | -          | -          | -          |
| Plovdiv          | 45         | 33   | -                                     | 1          | 7          | 36         | 1          | -          | -          |
| Razgrad          | 15         | 14   | 4                                     | 1          | 9          | 1          | -          | -          | -          |
| Ruse             | 30         | 23   | 4                                     | 3          | 13         | 8          | 2          | -          | -          |
| Silistra         | 15         | 13   | -                                     | -          | 12         | 3          | -          | -          | -          |
| Sliven           | 20         | 12   | 7                                     | 1          | 4          | 8          | -          | -          | -          |
| Smolyan          | 15         | 8  | 5                                     | 1          | 5          | 4          | -          | -          | -          |
| Sofia (stolitsa) | 73         | 51   | 27                                    | 6          | 17         | 21         | 2          | -          | -          |
| Sofia            | 35         | 21   | 1                                     | 16         | 18         | -          | -          | -          | -          |
| Stara Zagora     | 45         | 37   | 3                                     | 12         | 12         | 18         | -          | -          | -          |
| Targovishte      | 51         | 30   | 19                                    | 9          | 18         | 5          | -          | -          | -          |
| Haskovo          | 19         | 14   | 4                                     | 3          | 8          | 4          | -          | -          | -          |
| Shumen           | 15         | 9  | 5                                     | -          | 10         | -          | -          | -          | -          |
| Yambol           | 15         | 9  | 7                                     | 3          | 4          | 1          | -          | -          | -          |

## Expenditure on protection and restoration of the environment

Data source is a specialized statistical survey. The survey is exhaustive for statistical units that are previously known to have incurred environmental costs. The rest of the statistical population is covered by a random sample, representative at national level by group of economic activities according to the number of employed (over 10 employees). This methodology enters into force in 2014 in line with the requirements of Regulation (EU) No 691/2011 on European environmental economic accounts.

Environmental protection includes all activities that are directly geared to prevent, reduce and eliminate pollution resulting from industrial or other processes. The expenditures for environmental protection and restoration are divided into the following areas: waste water discharge and treatment, air protection and waste treatment, circulating water supply, land, forests, monitoring and control equipment, etc.

The share of expenditures for protecting and restoration of the environment from GDP output is a key indicator of the measures that society and the state undertake to reduce the negative impact on the environment.

Figure 5. Share of environmental expenditure in GDP

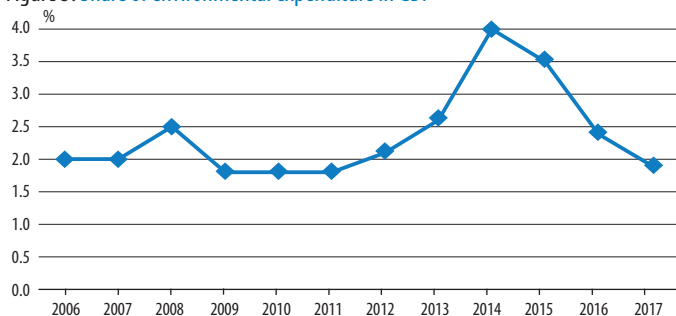
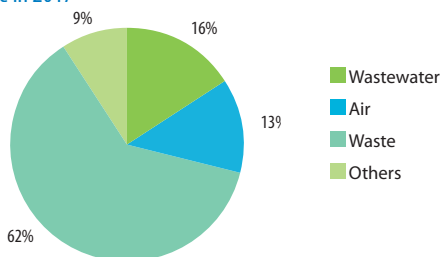


Figure 6. Structure of expenditure on protection and restoration of the environment by ecological use in 2017







#### 4. Expenditure on protection and restoration of the environment

|  | 2013        | 2014 <sup>1</sup> | 2015 <sup>1</sup> | 2016 <sup>1</sup> | 2017        |
|--|-------------|-------------------|-------------------|-------------------|-------------|
| <b>Total - million BGN</b>   | <b>2099</b> | <b>3327</b>       | <b>3065</b>       | <b>1895</b>       | <b>1935</b> |
| On acquisition of tangible and intangible fixed assets - Million BGN | 744         | 1630              | 1842              | 552               | 460         |
| On maintenance of tangible fixed assets - Million BGN                | 1355        | 1697              | 1223              | 1343              | 1475        |
| <b>Share of environmental expenditure in GDP - %</b>                 | <b>2.6</b>  | <b>4.0</b>        | <b>3.5</b>        | <b>2.4</b>        | <b>1.9</b>  |

<sup>1</sup> Revised data.

#### 5. Expenditure on protection and restoration of the environment by use<sup>1</sup>

| Use   | (Thousand BGN)    |                |
|---|-------------------|----------------|
|   | 2016 <sup>1</sup> | 2017           |
| <b>Total</b>  | <b>1894958</b>    | <b>1934958</b> |
| Wastewater  | 336018            | 320728         |
| Circulating water supply  | 44440             | 42860          |
| Air   | 286029            | 244003         |
| Protection and restoration of soil, groundwater and surface water | 64765             | 27045          |
| Forests   | 8095              | 10038          |
| Protection of biodiversity and natural scenery                    | 4166              | 2821           |
| Hunting and fishing projects                                      | 1526              | 3439           |
| Waste   | 1068447           | 1195919        |
| Noise   | 150               | 161            |
| Scientific and research activity                                  | 4664              | 3745           |
| Educational and other activity                                    | 73                | 84             |
| Administrative activity   | 25289             | 39659          |
| Monitoring and control equipment                                  | 49170             | 43367          |
| Environmentant impact assessment                                  | 2126              | 1089           |

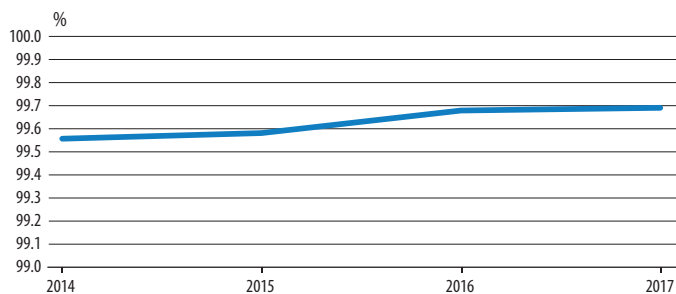
<sup>1</sup> Data are resulting from statistical estimate. Calculation does not include the temporary stored municipal waste. Data from administrative sources on recycled waste are included.

## Municipal waste

The information for municipal waste is provided by a specialized statistical survey, covering exhaustively the municipal administrations, in combination with administrative data (EEA). Data on waste generated by households not covered by organized waste collection systems is the result of a statistical assessment.

Municipal waste is the waste resulting from the activities of people at home and in administrative, social and public buildings. This also includes the waste from commercial outlets, crafts, resort and entertainment facilities when being non-hazardous, and at the same time its quantity or composition will not prevent its treatment together with the household waste.

Figure 7. Share of population served by systems for organized waste collection





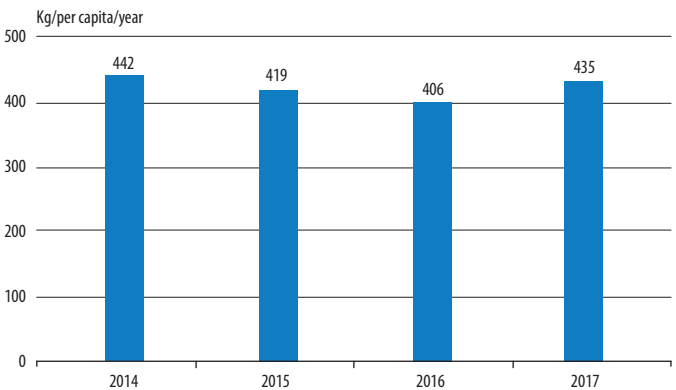
## 6. Municipal waste

|  | 2014 | 2015 | 2016 | 2017 |
|--|------|------|------|------|
| Total generated municipal wastes <sup>1</sup> - thousand tons                      | 3193 | 3011 | 2881 | 3080 |
| Generated municipal waste per capita - kg/year                                     | 442  | 419  | 406  | 435  |
| Settlements served by municipal waste collection systems - in numbers              | 4578 | 4593 | 4616 | 4642 |
| Share of population served by municipal waste collection systems - %               | 99.6 | 99.6 | 99.7 | 99.7 |
| Landfill sites for municipal waste - in numbers                                    | 147  | 134  | 125  | 104  |
| Municipal waste landfilled - thousand tons   | 1297 | 1856 | 1383 | 1142 |
| Delivered for recycling municipal waste <sup>2</sup> - thousand tons               | 1598 | 1002 | 1418 | 1789 |
| Submitted for preliminary treatment <sup>2</sup> - thousand tons                   | 298  | 153  | 81   | 149  |
| Collected construction waste at landfill sites for municipal waste - thousand tons | 534  | 466  | 435  | 561  |

<sup>1</sup> Data are resulting from statistical estimate. Calculation does not include the temporary stored municipal waste. Data from administrative sources on recycled waste are included.

<sup>2</sup> Data from administrative source - Executive Environmental Agency.

Figure 8. Collected municipal waste per capita of served population



## Protected natural scenery

The data on protected natural scenery are provided by MOEW. Protected areas in Bulgaria is a generalized concept covering all parks, reserves, landmarks and protected areas. They are designed to conserve biodiversity in ecosystems and the natural processes occurring in them, as well as characteristic or remarkable sites of non-living nature.

Figure 9. Area of protected natural scenery

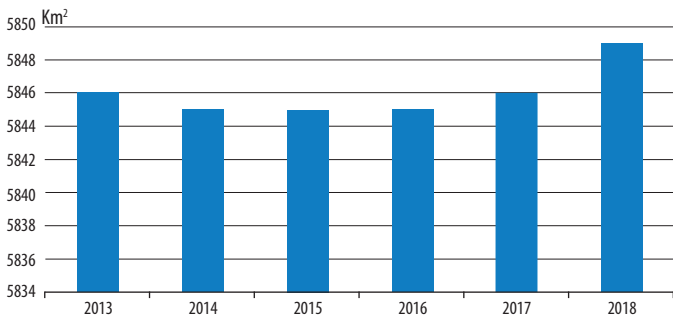
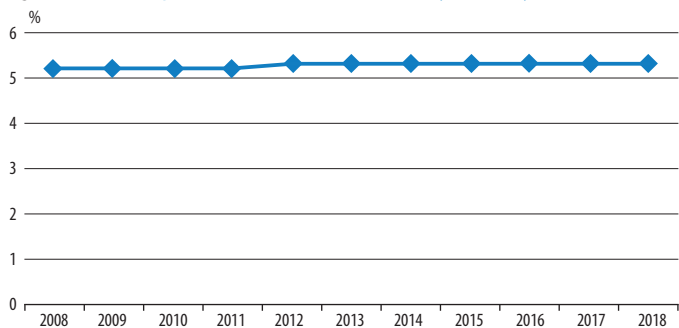


Figure 10. Share of protected areas in the total country's territory





## 7. Protected natural scenery in 2018<sup>1</sup>

|                                | In numbers       |                  |                  | Area <sup>2</sup> - ha |                  |                  |
|--------------------------------|------------------|------------------|------------------|------------------------|------------------|------------------|
|                                | As of 31.12.2018 | Included in 2018 | Excluded in 2018 | As of 31.12.2018       | Included in 2018 | Excluded in 2018 |
| <b>Protected natural areas</b> | <b>1014</b>      | <b>3</b>         | <b>1</b>         | <b>584563.2</b>        | <b>64.1</b>      | <b>2.2</b>       |
| Reserves                       | 55               | -                | -                | 77092.7                | 9.7              | -                |
| Natural landmarks              | 345              | -                | -                | 16841.0                | 0.1              | -                |
| Protected areas                | 565              | 3                | 1                | 79304.4                | 53.2             | 2.1              |
| National parks                 | 3                | -                | -                | 150362.3               | -                | -                |
| Natural parks                  | 11               | -                | -                | 256441.4               | -                | -                |
| Maintained reserves            | 35               | -                | -                | 4521.3                 | 1.1              | 0.1              |
| Protected plant species        | 574              | -                | -                | x                      | x                | x                |
| Protected animal species       | 483              | -                | -                | x                      | x                | x                |
| Protected venerable trees      | 1581             | 3                | 39               | x                      | x                | x                |

<sup>1</sup> Source: Ministry of Environment and Water.

<sup>2</sup> Because of rounding some totals do not exceed or are less than the sums of their components.

## 8. Protected natural areas<sup>1</sup>

| Years | Area - ha | Share of protected areas as % to the total country's territory |
|-------|-----------|--|
| 2012  | 583876    | 5.3  |
| 2013  | 584587    | 5.3  |
| 2014  | 584499    | 5.3  |
| 2015  | 584530    | 5.3  |
| 2016  | 584501    | 5.3  |
| 2017  | 584563    | 5.3  |
| 2018  | 584862    | 5.3  |

<sup>1</sup> Source: Ministry of Environment and Water.



**XXIV. RESEARCH AND DEVELOPMENT ACTIVITY  
AND INNOVATION ACTIVITY**



## Research and development activity (R&D)

Research and development activity (R&D) comprises creative and systematic work undertaken in order to increase the stock of knowledge - including knowledge of humankind, culture and society - and to devise new applications of available knowledge. R&D activity covers basic research, applied research and experimental development.

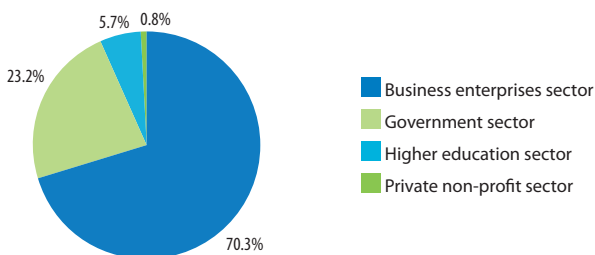
Gross domestic expenditure on R&D (GERD) comprises current costs and capital expenditure.

R&D expenditure as a percentage of GDP is an internationally comparable measure of the intensity of R&D.

R&D personnel comprise two categories - researchers and other R&D personnel. The personnel employed on R&D can be measured both in full-time equivalent (FTE) on R&D and in headcounts. Personnel in FTE are calculated on the basis of working time spent on R&D activity during the reference year.

GERD and R&D personnel are distributed in four institutional sectors: business enterprises sector, government sector, higher education sector and private non-profit sector.

Figure 1. Structure of gross domestic expenditure on R&D (GERD) by institutional sectors in 2017





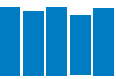


### 1. Gross domestic expenditure on research and development activity (GERD) by type of costs

|   | 2014          | 2015          | 2016          | 2017          |
|---|---------------|---------------|---------------|---------------|
| <b>GERD - thousand BGN</b>                            | <b>664829</b> | <b>850457</b> | <b>734274</b> | <b>760234</b> |
| Current costs   | 587491        | 735207        | 654779        | 691428        |
| Capital expenditure                                   | 77338         | 115250        | 79495         | 68806         |
| <b>R&amp;D expenditure as a percentage of GDP - %</b> | <b>0.79</b>   | <b>0.96</b>   | <b>0.78</b>   | <b>0.75</b>   |

### 2. Personnel engaged in research and development activity (R&D) by category

| Categories          | 2014                 | 2015         | 2016         | 2017         |
|---------------------|----------------------|--------------|--------------|--------------|
|                     | Headcount            |              |              |              |
| <b>Total</b>        | <b>25484</b>         | <b>29591</b> | <b>32306</b> | <b>31221</b> |
| Researchers         | 17795                | 19338        | 21081        | 20971        |
| Other R&D personnel | 7689                 | 10253        | 11225        | 10250        |
|                     | Full-time equivalent |              |              |              |
| <b>Total</b>        | <b>19335</b>         | <b>22492</b> | <b>25060</b> | <b>23290</b> |
| Researchers         | 13201                | 14236        | 16001        | 15094        |
| Other R&D personnel | 6134                 | 8256         | 9059         | 8196         |



### Innovation activity

An innovation is the implementation of a new or significantly improved product (good or service) or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations. Innovations are based on the results of new technological developments, new combinations of existing technology or the utilisation of other knowledge acquired by an enterprise. Innovations may be developed by the innovating enterprise or by another enterprise. The simple resale of new goods and services purchased from other enterprises is not considered as innovation. Innovations should be new to the enterprise concerned. For product innovations they do not necessarily have to be new to the market and for process innovations the enterprise does not necessarily have to be the first one to have introduced the process

Enterprises with innovation activity include enterprises with product, process, organisational and marketing innovation.



### 3. Innovative enterprises as a share of all enterprises in 2016<sup>1</sup>

| Economic sectors   | (Per cent)  |
|--|-------------|
| <b>Total</b>   | <b>27.2</b> |
| <b>Industry</b>  | <b>31.6</b> |
| Mining and quarrying   | 23.7        |
| Manufacturing  | 31.8        |
| Electricity, gas, steam and air conditioning supply                      | 37.7        |
| Water supply; sewerage, waste management and remediation activities      | 25.7        |
| <b>Services</b>  | <b>22.1</b> |
| Wholesale trade, except of motor vehicles and motorcycles                | 18.9        |
| Transportation and storage   | 11.5        |
| Information and communication  | 44.4        |
| Financial and insurance activities                                       | 28.3        |
| Architectural and engineering activities; technical testing and analysis | 21.8        |
| Scientific research and development                                      | 100.0       |
| Advertising and market research  | 18.0        |

### 4. Enterprises that have new or significantly improved products new to the market as a share of all enterprises in 2016<sup>1</sup>

| Economic sectors   | (Per cent) |
|--|------------|
| <b>Total</b>   | <b>8.3</b> |
| <b>Industry</b>  | <b>9.3</b> |
| Mining and quarrying   | 4.6        |
| Manufacturing  | 9.7        |
| Electricity, gas, steam and air conditioning supply                      | ..         |
| Water supply; sewerage, waste management and remediation activities      | ..         |
| <b>Services</b>  | <b>7.3</b> |
| Wholesale trade, except of motor vehicles and motorcycles                | 4.7        |
| Transportation and storage   | 1.2        |
| Information and communication  | 23.5       |
| Financial and insurance activities                                       | 7.9        |
| Architectural and engineering activities; technical testing and analysis | 7.6        |
| Scientific research and development                                      | 49.0       |
| Advertising and market research  | 3.2        |

<sup>1</sup> The data refer to enterprises with 10 employees or more and cover economic activities pointed in table.





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