## **SUMMARY**

The summary presents the basic features and specific problems of the demographic, social and economic development, R & D and environmental and energy conditions in the country. The statistical analysis is oriented mainly towards 2009 and comparisons with the preceding 2008 and 2000 (taken as a base year) are made. Tendencies of the development and the structural changes are being analyzed.

The **first part** of the analysis considers the main demographic processes in the country: number and age structure of the population, crude birth rate, crude death rate and natural increase of the population, marriages and divorces, regional development and distribution of the population in the country.

The number of Bulgarian **resident population** by the end of 2009 is 7 563.7 thousand persons. Due to the negative natural population increase and negative net international migration, the population decreased by almost 43 thousand persons or by 0.6% in comparison with the previous year. Women continue to predominate in the total number of the population (51.6%).

Regarding **the age structure**, the process of population ageing continues. The relative share of the population under 15 years of age in 2009 is significantly low - 13.6%, whereas that of the population over 65 years is constantly increasing and now is 17.5%. The process of population ageing is typical for most of the countries in the EU. Besides Bulgaria, in Europe Austria, Belgium, Estonia, Latvia, Portugal and Sweden have the same relative share of the population aged over 65 years (17 - 18%).

The number of **births** and the crude birth level continue to increase. In 2009 in the demographic statistics are registered 81 572 born children, 80 956 or 99.2% of which are live-born. In comparison with the previous year their number increases by 3 244 and in comparison with 2001 - by almost 13 000 children.

In 2009 can be noted a decrease in mortality in comparison with the previous year. In Bulgaria the number of **deaths** in 2009 is 108 068, which is by 2 455 less than 2008, and the mortality rate (14.2%) decreases by 0.3%. The male crude death rate (15.5%) continues to be higher than the female crude death rate (13.1%). The level of the total crude death rate of the population in Bulgaria is considerably higher than in other European countries. For most European countries the crude death rate is in the range between 9.0 and 10.5%.

Since 1990 the **natural increase of the population** is negative and as a result the number of the population is constantly decreasing. In 2009 the absolute number of the natural increase is minus 27 112 persons. This is the smallest decrease of the population due to the natural increase since 1993.

The tendency of decrease of the number of **marriages** continues. In 2009 the number of de jure marriages is 25 923, which is by 1 800 less than the previous year. The

decrease of the number of marriages also leads to a decrease of the crude marriage rate - from 4.0% in 2001 to 3.6% in 2008. In 2009 this indicator is 3.4%. This is the lowest level of the marriage rate in the country.

The decrease of the number of de jure marriages is due mostly to the increasingly spreading among the young people cohabiting/partnership.

There are 16 662 **divorces** registered in 2009 or 2 442 less than in 2008. Mutual agreement is the reason for divorce for nearly 56% of the total number of divorces, incompatibility of temperament - for 29%, and virtual parting - for 8%.

The main social characteristics and living standards in the country are considered in the **second part**: labour force (employed and unemployed persons); wages and salaries; income, expenditure and consumption of households; pensions and social transfers; health services; education and training; culture; information and communication technologies used by enterprises and households; criminality and jurisdiction.

In 2009 the tendency of increase of **the economic activity rate of the population** observed over the period 2003 - 2008 is disrupted. The economic activity rate in the age group 15 - 64 years (67.2%) is by 0.6 percentage points lower than in 2008, even though it is still higher than all of the other years in that period. The male activity rate continues to be significantly higher than the female, as over the last year the difference is 9.5 percentage points - 72.0% for the men and 62.5% for the women.

After a long period of increase of the **employment** in the country in 2009 a decrease is observed. The number of employed persons aged 15 - 64 years decreases in comparison with the previous year by 3.1% and the employment rate for the same age group - by 1.4 percentage points, as it reaches 62.6%. However in comparison with 2003 the employment rate is significantly higher (by 10.1 percentage points).

In 2009 for the first time since 2003 an increase of the number of unemployed persons and the **unemployment** is registered, as they approximately return to their values from 2007. In 2009 the number of unemployed persons is 238.0 thousand or by 19.2% more than the previous year.

In 2009 the average annual **wages and salaries** as a total for the country reach BGN 7 094 as the nominal increase is by 1.8 times in comparison with 2005. The highest increase of the average wages and salaries in 2009 in comparison with 2005 is registered in the economic activity groupings "Administrative and support service activities" - 2.2 times, "Real estate activities" - 2.1 times, "Construction", "Public administration" and "Electricity, gas, steam and air conditioning supply" - 2.0 times.

There is a permanent tendency of increase of the nominal households' **income** over the last 10 - 11 years. During the period 1999 - 2009 the average gross income

per capita increases from BGN 1 502 to BGN 3 693 or 2.5 times.

The real households' income also increases during that period - by 28.1%. During the new millennium the highest growth of the real income in comparison with 2001 is registered in 2009 - 43.4%. In comparison with 2008 the growth is by 2.6%.

The real households' income from wages and salaries over the last 11 years has been following the variation in the gross households' income. In 2009 the income from wages and salaries is BGN 1 928 on average per capita and increases by 3.1 times in comparison with 1999.

In 2009 the amount of **social transfers** (compensations, pensions, grants, benefits, family allowances) increases in nominal terms 3.7 times in comparison with 1999 and their relative share in the total income increases by 10.1 percentage points. The pensions dominate in this income group. In 1999 the real income from pensions is BGN 266 and in 2009 it increases in nominal terms to BGN 1 020 on average per capita or almost by four times.

During the period 1999 - 2009 the **expenditures** of households follow the tendency of dynamic income changes.

The total household expenditures for the satisfaction of their needs in 2009 are in nominal terms by 2.6 times higher than in 1999 and by 1.0% higher than in 2008.

Over the period 1999 - 2001 the relative share of expenditure for food in the total expenditure has been slightly increased. Over the next years a process of gradual decrease of this share began and it reached its lowest value in 2009 - 36.5%.

As of 31.12.2009 the **health network** in the country disposes of 310 hospitals with 46 769 beds. 162 of them are multi profile hospitals with 33 250 beds and the specialized hospitals are 148 with 13 519 beds. In comparison with 2008 the number of beds increases by 3.1% which is due mostly to the increased number of beds in the multi profile hospitals (by 4.0%). In the specialized hospitals the growth rate of the number of beds is 1.1%.

By the end of 2009 there are 28 696 practicing physicians and 6 542 dentists. The indicators on the number of physicians and dentists as of 31.12.2009 are respectively 37.9 and 8.6 per 10 000 persons. The medical specialists on health care are 48 182, 32 186 of which are nurses.

The number of people per physician as a total for the country in 2009 is 264. More favorable values than the average are registered in the regions Sofia (capital) (189), Varna (202), Pleven (223), Plovdiv (236) and Stara Zagora (246).

The largest number of people per 1 physician is in the regions Razgrad (425 persons), Silistra (400) and Kardzhali (385).

Over the period 2000 - 2009 the educational structure of the population in the age group 25 - 64

years continues to improve, as there is a stable tendency of increase of the number and relative share of the population with tertiary and secondary education and respectively a decrease of the number and relative share of the population with primary and lower education.

Over the last 3 years there has been an increase of the number and relative share of children in preprimary age (3 - 6 years). The number of children in kindergartens also increases, as over the period 2000 - 2009 the increase is by 8.7%.

The visits of the **cultural institutions** - libraries, museums and theatres decrease in 2009. In comparison with of 2008 the visits of the libraries are less by 14 thousand or by 0.5%, the visits of the museums are less by 258 thousand or by 5.6%, and the visits of the theatres - by 68 thousand or by 4.1%.

In 2009 the radio stations in the country (which are 104) emitted 726.8 thousand hours of programs, which is less by 8.9% in comparison with 2008 and 1.5 times more than in 2000. Of all the programs in the country the musical ones have the highest share - 42.3%.

Over the period 2000 - 2009 the number of TV operators increases 1.3 times and the number of TV programs - 1.8 times. The fictional programs (cinematographic films, television or video works) have the highest relative share - 34.2% of all programs, which is by 3.3 percentage points more than in 2008.

The data of the survey on **information technologies** in the enterprises report on the wide usage of internet by the business; over the period 2004 - 2009 the share of enterprises with access to internet increases by 22.1 percentage points and in 2009 it reaches 83.9%. The broadband connection increases even more quickly over the last 6 years (41.2%) and 69.6% of the enterprises have high-speed internet in 2009.

ICT usage in households increased significantly over the last few years. A clear growth tendency is observed which is supported by the share of households who have access to internet at home, which in 2009 increased by 4.3 percentage points in comparison with the previous year. The share of persons who regularly use the internet is 39.7% in 2009 and the average growth rate for the period 2004 - 2009 is 6.5 percentage points.

The most active age group which regularly used the internet in 2009 is the one from 16 to 24 years, as the share of individuals spending time in the global network has increased by 41.7% over the last 5 years, thus reaching 75.1% in 2009.

The general characteristics of the **criminality** in the country in 2009 do not differ essentially from the previous years. The police registered 123 196 criminal and 10 318 economic offences. In comparison with 2000 was registered a decrease of 10.6% and in comparison with 2008 - an increase of 8.8% was reported.

The crimes against the property take the first place in number and relative share in the punished criminality. The number of persons convicted of these crimes is 16 598 or they constitute 40.2% of the total number of

persons convicted. A decrease of 10.7% in comparison with 2000 is observed and in comparison with the previous year - an increase of 6.1%.

The generally dangerous crimes take the second place in number and relative share in the punished criminality. In 2009 the number of persons convicted of these crimes is 15 883. In comparison with 2000 a significant increase (by 4 times) can be observed, while in comparison with 2008 the increase is by 16.6%. Their share in the punished criminality is 38.5% (against 12.3 and 37.7% in 2000 and 2008 respectively).

In 2009 2 654 persons are convicted of crimes against the person. In comparison with 2000 and 2008 an increase of 24.0 and 29.5% respectively is registered.

The **third part** considers the main economic characteristics: gross domestic product, labour, labour productivity, investment, inflation, financial market and international transactions.

The **gross domestic product** (by preliminary data) in 2009 amounts to BGN 66 256 million at current prices. The current volume decreases by BGN 472 million in comparison with the 2008 product.

GDP (at previous year prices) is BGN 63 370 million which is less by 5.0% in comparison with 2008. Since 1997 this is the 1<sup>st</sup> year with a negative GDP growth rate. In 2002 for the first time GDP exceeds the 1995 level by 3.9%; in 2009 despite the registered drop its level increases by 39.5% in comparison with 1995.

In 2009 the **labour costs** of employers per hour worked reach BGN 5.11, as they increased by 8.7% in comparison with 2008. The share of expenditures for wages and salaries is the highest - 80.3%, followed by the share of expenditures for social and health insurance - 15.7% and other social expenditures - 2.1%.

In 2009 (by preliminary data) one employed person in the national economy produces BGN 17 797.5 of GDP at current prices on average.

The relationship between the changes in the volume of GDP and in the labour force in comparison with the previous year shows a decrease of 2.2% of the national **labour productivity** per employed person in 2009. The national labour productivity per hour worked decreases by 2.1%.

The decrease of GDP is determined by the influence of intensive and extensive factors in the process of labour force usage. The average annual values in the period 2005 - 2009 show that the labour productivity per hour worked takes 53.8% of the structural contribution to GDP and the labour productivity per employed person - 43.2%.

After the continuous tendency of increase of the **investment** in the economy, in 2009 a decrease in comparison with the previous year of 30.2% at constant was observed. By preliminary 2009 data the expenditures on acquisition of tangible fixed assets are BGN 21 128.1 million.

In 2009 the relative share of investment in the "Service" sector is the highest - 57.7%. The share of investment in "Industry" is 39.5% and in "Agriculture and forestry" - 2.8%.

By preliminary data in 2009 the acquired tangible fixed assets amount to BGN 16 738.0 million, as primarily these are objects in: "Manufacturing, mining and quarrying and other industry" - 33.0%; "Wholesale and retail trade, transportation and storage, accommodation and food service activities" - 22.9%; "Public administration, defense, education, human health and social work activities" - 10.2%.

**Inflation** in 2009 (December 2009 compared to December 2008) measured by the consumer price index (CPI) is 0.6% which is the lowest annual inflation over the last 10 years.

The two months in 2009 with the highest price increase are January (0.8%) and April (0.7%). Decrease of prices was registered in March and during the period May - August, as the highest decrease was observed in July (-0.6%) and in June (-0.4%).

At the end of 2009 was registered an increase of the prices in 3 of the major consumer groups, as the highest is observed in the group "Catering" (4.4%). The prices of the non-foods have increased by 4.1% and these of the services - by 0.8%. A decrease of prices by 3.2% is registered in the group of foods.

In the field of **finances** is observed a tendency of decrease of the **base interest rate** from 4.6% at the end of 2000 to 2.1% at the end of 2005. Since 2005 the interest rate increases and reached 5.8% at the end of 2008. In 2009 the interest rate constantly decreased and reached 0.6% at the end of the year.

The **exchange rate** BGN against the US dollar decreases during the period 2000 - 2009: it decreased from BGN 2.1019 per 1 US dollar at the end of 2000 to BGN 1.3641 at the end of 2009.

In 2009 the **current account** deficit is BGN 6 251.2 million against BGN 15 167.9 and 16 035.8 million in 2007 and 2008 respectively.

In the **fourth part** is observed the business development of the main economic activities: industry, construction, domestic trade, transport, communications, agriculture, foreign trade and tourism.

In 2009 the output produced by **industrial enterprises** (by preliminary data) amounts to BGN 45 660 million at current prices. The output at previous year prices decreases by 15.3% in comparison with the previous year. A decrease of the output in comparison with 2008 is observed in manufacturing - by 15.9%, in mining and quarrying - by 14.2%, and in electricity, gas, steam and air conditioning supply - by 3.6%.

In 2009 the average annual producer price index on the domestic market calculated on base year 2005 decreases by 4.3% in comparison with 2008. The average annual producer price indices on the foreign market decrease by 10.6% in comparison with 2008.

In 2009 the **construction output** by preliminary data amounts to BGN 13 308 million. The decrease in comparison with 2008 is by 43.8% at constant prices.

Since 2005 the share of building of complete construction exceeds that of the civil engineering as its relative share over the years varies from 59.0 to 69.7% of the total volume of construction.

In 2009 the negative economic tendencies in international and regional aspect significantly influence the **trade sector** in the country. By preliminary data the gross output at current prices is BGN 13 674 million but in comparison with the previous year the real output decreases by 14.4%.

The worsened economic conjuncture negatively influenced the turnover in the sector ,, Trade and repair of motor vehicles and motorcycles". In 2009 its value at current prices is BGN 72 614 million but the real decrease in comparison with the previous year is by 14.5%.

The rates are negative for all 3 of the major trade activities. The highest decrease is registered in the trade of motor vehicles and motorcycles - by 39.8%. In wholesale and retail trade the negative tendency is more moderate, the indices are relatively even and the decrease reaches 12.9 and 8.9% respectively.

In 2009 by preliminary data the retail sales decrease by 13.8% in real terms in comparison with the previous year. The group "Food, beverages and tobacco" increases by 1.7% but the decrease of the non-foods by 19.1% mostly influences the total index.

In 2009 the gross output of the enterprises in the "Transportation and storage" sector at current prices is BGN 7 118 million (by preliminary data). In real terms it decreases by 14.3% in comparison with 2008 but in comparison with 2000 it increases by 31.1%.

In 2009 the volume of international and national carriages of the railway transport decreases by 32.6% in comparison with 2008. The decrease is due almost entirely to the national carriages which drop by 4 496 thousand tons or by 31.8%.

The carriages of the road transport in 2009 decrease by 16.0% in comparison with 2008 and the performance - by 25.8%. The decrease is due to the national transport because in the international transport both carriages and performance increase by 47.1 and 42.4% respectively.

The gross output of the **communication services** enterprises in 2009 by preliminary data is BGN 371.8 million (at current prices). The volume index of the gross output is 97.6% as compared to 2008.

The value of the final output in **agriculture** (reduced by the internal turnover) in 2009 is BGN 7 438.1 million at current prices. The contribution of the crops to the final output continues to be the most significant - BGN 3 798.4 million. The second place takes the animal output - BGN 2 286.4 million.

The final agricultural output volume index in 2009 is 99.0% at base year 2005 and 99.6% - at base year 2008. The crop output is 106.0% of the 2005 output and 98.9% of the 2008 output; the animal output is 91.5% as compared to 2005 and 91.2% as compared do 2008.

In 2009 the total producer price index in agriculture increases in comparison with 2005 by 20.3% and in comparison with the previous year it decreases by 18.0%. The prices of the crop output have increased in comparison with 2005 for almost all major crops and in comparison with 2008 they have decreased by 21.7%.

The **foreign trade turnover** of Bulgaria in the period January - December 2009 is BGN 55.8 billion (by preliminary data). In comparison with the previous year the decrease is by 29.2%.

In 2009 the export of goods amounts to BGN 23.1 billion which is a decrease of 22.5% as compared to 2008.

The import of goods decreases in 2009 by 33.3% in comparison with 2008.

In 2009 the external balance of goods and services (export FOB - import CIF) is negative and amounts to BGN 9.7 billion.

The main trade partners for Bulgarian export in 2009 as well as in 2008 are again Germany, Greece, Italy, Romania and Turkey. Exports to these 5 countries account for 45.7% of the total exports.

The main trade partners for import similarly to 2008 are Russia, Germany, Italy, Greece and Romania. They account for 44.9% of the total Bulgarian imports.

The tendency of steady development of **tourism** over the last 15 years was disrupted in 2009. The world economic crisis negatively influenced the tourism in the country and 2009 was one of the hardest years for this sector over the last few years. In 2009 the number of arrivals of visitors from abroad to Bulgaria reached 7 872.8 thousand which is less by 7.7% than in 2008. Visitors from Member States of the EU prevail in the total number of arrivals - 5 458.0 thousand, which is 69.3% of the total number of arrivals of visitors from abroad.

The arrivals of visitors from abroad in 2009 by purpose of visit "holiday and recreation" are 3 809.6 thousand, by purpose "as guests" - 151.5 thousand, "professional" - 1 075.3 thousand, "transit" - 2 133.9 thousand and "others" - 702.5 thousand.

In 2009 there have been 3 533 public and private accommodation establishments in use - hotels, motels, mountain chalets, camping sites and other establishments with over 10 bed-places. The total number of the accommodation establishments has increased by 316 (9.8%) in comparison with 2008.

The **fifth part** considers the main problems concerning the ecological conditions in the country which reflect the economic development as well as the technological structure of production. This section also presents the tendencies of the variations of the indicators

in the overall energy balance sheet which is an important factor of restructuring and adjusting of the Bulgarian economy to the market conditions.

Preserving the quality of the **environment** is a main purpose of sustainable consumption and production. Since 1999 there has been a trend of decreasing the **emissions into the atmosphere**. This tendency may be illustrated by the sulphur oxides emissions which in 2008 have decreased by 14% in comparison with 2007. The emissions of the other major pollutants also decrease.

The comparison between the emissions and GDP shows a sustainable tendency of decreasing pollution per unit of GDP. In 2008 the sulphur oxides emissions per USD 1000 of GDP decrease over 2 times in comparison with 2004 - from 0.039 to 0.015 tons.

In 2008 the fresh **water** abstraction for water supply and own use of the enterprises is about 6.4 billion cubic meters. This increase - by about 4% in comparison with 2007, is due to the increased abstraction from the Danube river.

The relative share of the losses of water due to the irrigation systems decreases - from 63.1% in 2007 to 59.7% in 2008. The relative share of the losses due to water supply is relatively stable - about 61%.

The total volume of water used (from self supply) in 2008 is 5.1 billion cubic meters and the major share of it is used for cooling in the energy production. If the waters for cooling are deducted the water used is estimated to be 1 336.0 billion cubic meters. The greatest share is taken by the energy production and manufacturing. The water used by the households has the same share as the water used for irrigation (20%) of the total amount of water used.

In 2008 the waters used for irrigation (12%) and for services increase in comparison with the previous year.

During the last few years measures have been taken to close down old landfills which do not fulfill the ecological conditions and modern equipment for disposal of **municipal waste** is being developed.

Due to the construction of regional landfill sites the total for the country number of landfill sites decreases from 619 in 2000 to 349 in 2008. At the same time organized waste collection systems were implemented in new settlements, which leads to an increase of the population served by municipal waste collection systems - from 78.6% in 2000 to 94.4% in 2008.

By municipal administrations data in 2008 3 369 thousand tons of municipal waste were collected through organized waste collection systems of which 3 359 thousand tons are landfilled.

As a whole for the period 2000 - 2008 a tendency of reduction of the municipal waste generated per capita is observed. While in 2000 the municipal waste per capita amounted to 518 kg, in 2008 the annual volume decreases to 467 kg per capita.

For the period 1990 - 2008 the **environment expenditure** is between 0.9 and 2.5% of GDP, as its highest level is registered in 2008.

The production of **energy** in 2008 is 9 953.0 thousand tons of oil equivalent, which in comparison with 2007 is an increase of 2.2%.

The share of renewable energy resources in the production of primary energy tends to decrease and from 10.6% in 2005 it became 10.2% in 2008.

For the creation of secondary (transformed) fuels and energy in 2008 are used 20 269 thousand t.o.e. of energy resources, as the main shares in the transformation input have the crude oil and feedstocks - 36.4%, the coal - 34.6%, of which 23.4% is a home production, and the nuclear energy - 19.6%.

The gross energy consumption in the country in the period 1999 - 2006 increases. In 2007 it decreases by 2.9% in comparison with 2006 and in 2008 decreases again - by 1.4% in comparison with 2007.

The economy's dependency on energy sources increases and since the shutting down of the 3<sup>rd</sup> and 4<sup>th</sup> unit of the Nuclear Power Plant it is 51.7% in 2007 and 52.5% in 2008.

The **sixth part** considers the research and development activities in the country: intensity and R & D expenditure, personnel engaged in R & D activity.

In 2008 the **expenditure on research and development activity** (R & D) amounted to BGN 325 855 thousand which is an increase by 19.3% in comparison with the previous year, as the tendency of an annual increase of the expenditure over the period 2001 - 2008 is preserved.

In 2008 the R & D expenditure amounts to 0.49% of GDP, which is only 0.01 percentage points higher than the previous year and 0.03 percentage points lower than in 2000. R & D intensity in Bulgaria substantially lags behind the average level of this indicator in EU-27 (1.90% in 2008).

In 2008 the **personnel** engaged in R & D amounts to 17 219 persons (in full employment equivalent), which is an increase by 1.6% in comparison with the previous year and by 12.8% in comparison with 2000.

In 2008 the number of researchers which is the most numerous and highly qualified category of scientific personnel is 11 384 or 66.1% of the personnel engaged in R & D. They also tend to increase, as the growth rate in comparison with 2000 is 20.1%.

The greatest share of the scientific personnel engaged in R & D over the period 2000 - 2008 is employed in the enterprises and organizations from the government sector, which is the major source of R & D funding.

Unlike Bulgaria, in the Member States of the EU the major employer of scientific personnel is the sector "Enterprises", which in 2008 employs 52.0% of the personnel engaged in R & D.