Republic of Bulgaria
ECONOMIC
AND SOCIAL COUNCIL

O P I N I O N

on

LISBON STRATEGY OF THE EUROPEAN UNION AND THE POLICY OF THE REPUBLIC OF BULGARIA FOR THE ACHIEVEMENT OF COMPETITIVE AND PROSPEROUS ECONOMY

(on its own initiative)

Sofia, 30 January 2006

On 28 October 2005 the Plenary Session of the Economic and Social Council took decision to develop and adopt on its own initiative an Opinion on: “The EU Lisbon Strategy and the Policy of the Republic of Bulgaria for the Achievement of Competitive and Prosperous Economy” with Rapporteur Bojidar Danev.

The President of the Economic and Social Council nominated the Commission on International Cooperation and European Integration (CICEI) for working up the opinion.
The work of the Plenary Session related with the debate and approval of the draft started with a public discussion on 14 December 2005 and continued till 30 January 2006 by approving the Opinion.

This document has been prepared in relation with the general policy of the government of the Republic of Bulgaria for the economic development of the country and from the standpoint of publicizing the position of the civil society with respect to the enhancement of Bulgaria's competitiveness on macro and micro level and raising the welfare and prosperity of the population.

I. INTRODUCTION

1. In 2000 in Lisbon[1] the Council of Europe adopted a strategy for the development of the European Union which by 2010 would turn the Union into the most dynamic and competitive knowledge-based economy in the world, capable of achieving sustainable economic growth with more and better jobs, greater social cohesion, concern and care for the environmental protection.

2. The discrepancy between the planned and the real achievement of the objectives in the strategy finds expression in the mid-term assessment for its realization and the report of the European Commission summit group under the guidance of Wim Kok. Mutually related initiatives and structural changes are recommended in the report, which have to be performed in coordination and thus they will contribute to the utilization of the potential of the European Union.
As a result from the conclusions made in March 2005 "A new start for the Lisbon Strategy" has been announced. The accent was laid on the attainment of practical results by focusing on the national priorities, renovation of the operation programme and better management. The efforts are directed towards the execution of three main tasks:
- **support for the innovations and raising knowledge;**
- **realization of higher lasting growth turning Europe into a more attractive place for investments and work, and**
- **creation of more and better jobs.**

3. The employers' and trade union organizations in the EU countries are the organizers of national initiatives for competitiveness and they urge the governments to the realization of the national operation plans. **The Lisbon Strategy basic reforms are performed on national level**.
Globalisation as an objective tendency reflects the growing inter-dependence of the different sectors of the world economy because of which the development and stability of a single national economy is impossible without the development and stability of the other economies.

4. The Republic of Bulgaria as a future member of the European community as of January 2007 will have to apply the Lisbon Strategy criteria for competitiveness. The lagging

[1] "Strategy for Economic and Social Renovation of Europe", adopted at the Extraordinary European council, held in Lisbon on 23 – 24 March 2000.

behind from the EU countries will have to be cut down in relation with productivity and competitiveness, revenues and consumption, technological renovation, infrastructure, education and science, regional development.
The mid-term review of the execution of the Lisbon targets and the renewal of the Lisbon Strategy of March 2005 set new requirements to the state apparatus, civil society and the population of the Republic of Bulgaria.

II. OBJECTIVES AND PRIORITIES OF THE LISBON STRATEGY

1. The objectives of the Lisbon Strategy have to bring about the transformation of the European Union into the most competitive and leading economy in the world. These goals are expressed in raising the economic welfare of the population provided an employment increase and smoothing the differences in the economic development of the single layers and states.
The actions will be directed to five areas of the European policy:
Knowledge society – promoting the attractiveness of Europe before researchers and scientists doing scientific research and development in priority zones, and encouraging the implementation of the information and communication technologies;
Domestic market – development of the domestic market for free movement of commodities and capitals and urgent measures for the setting up of an independent and autonomous market of the services;
Business climate – reducing the common administrative burden, improving the legislation quality; enabling the start-up of new enterprises; creating an environment that will support the business;
Labour market – execution of the requirements of the European Commission for the development of the labour market; working up of strategies for life-long learning driven to growth and employment;
Sustainable environment – dissemination of the innovation practices and leadership in the field of eco-building; pursuing policies directed to long-term and sustainable improvement of productivity including also by eco-efficiency.

2. The realization of the Lisbon Strategy goals is based on the following priority zones:
- Expansion and strengthening of the domestic market;
- Provision of open and competitive market;
- Improvement of the regulatory framework on European and national level;
- Development and improvement of the European infrastructure;
- Increase and betterment of the investments structure in the research and development activities;
- Facilitation of innovations, implementation of information and communication technologies and advisable use of the resources;
- Assistance for the strengthening of the European industrial base;
- Promotion of employment and modernization of the social model;

- Adaptability improvement of the employed and the enterprises and raising the flexibility of the labour market;
- Increase of the investments in the human capital through better education and skills.

III. STRUCTURAL INDICATORS

The measurement of the attainability and progress of the operation frame and objectives of the Lisbon Strategy and the corresponding position of the single countries is made by means of fourteen structural indicators[2].

1. Referring to **the two common economic indicators** Bulgaria is in unfabourable position both in relation to EU – 15 and in relation to the enlarged composition of the union with 25 members. Regardless the stable average annual growth of GDP generated by the restructuring of the economy during the last several years (5.4% in 2004; 4.3 % in 2003 and 4.9% in 2002[3]), **GDP per capita in purchasing power parity** is hardly 30 percent in comparison with the EU 25.
On the basis of the GDP value per capita by the purchasing power parity the candidate member countries have been classified in the following groups[4]:

126% and over the mean for EU 25[5]	101% - 126% of the mean for EU 25	76 % - 100% of the mean for EU 25	51% - 75% of the mean for EU 25	50% and less than the mean for EU 25
Switzerland, Ireland, Luxembourg, Norway	Austria, Belgium, Germany, Denmark, Finland, France, Iceland, Italy, The Netherlands, Sweden and the United Kingdom;	Cyprus, Spain, Greece and Slovenia;	Czech Republic, Hungary, Malta, Portugal and Slovakia;	Estonia, Lithuania, Latvia, Poland, Romania and Turkey, Bulgaria.

In 2003 the GDP physical volume indexes within the EU-25 varied from 41% (for Latvia) to 215% (for Luxembourg. For the three candidate member countries they are as follows: Bulgaria 30%, Romania 30% and Turkey 28% compared to the average index for the EU-25.

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[2] On 8 December 2003 the Council of Europe approved fourteen structural indicators, which allow obtaining comparability of the measurements by achievability of the Lisbon goals. The indicators are as follows: 1) GDP per capita in the purchasing power parity; 2) labour productivity; 3) employment rate; 4) employment rate of older workers; 5) youth education attainment (age 20–24); 6) expenditure on scientific research and development; 7) comparative price levels; 8) private investments; 9) at risk-of-poverty rate after social transfers; 10) long-term unemployment rate; 11) dispersion of the regional employment rates; 12) greenhouse gas emissions; 13) energy intensity of the economy; 14) volume of freight transport. Indicators 3, 4, 5, 9, 10 и 11 are also disaggregated by gender. http://europa.eu.int/comm/eurostat/structuralindicators

[3] Source: NSI 2003 recalculated relative to EU 25.

[4] Source: Eurostat.

[5] With all rates and indicators EU 25 = 100. If the source is not specified in the text, data come from Eurostat.

Labour productivity *in Bulgaria remains the lowest one in comparison with the EU-25 and the candidate countries (compared to EU-25 in 2004 the indicator for Bulgaria is 31.8, for Romania - 35.9, for Turkey - 41.8, and for Croatia - 57.0).* It is necessary not only to increase the volume of production but also to change its structure by manufacturing products (goods and services) of higher value added to them.
The indicator depends also on the demographic characteristics of the Bulgarian population. *With the foreseen aging of the nation and a decrease of the population of work capacity and the workforce, a reduction in the number of the employed should be also expected in the forthcoming decades.*

2. Indicators related with employment

In spite of the good results achieved in reducing **unemployment** during the past years and the mean statistic value of this indicator at the amount of 12.16% in 2003, 13.52% in 2004 and 10.77% for August 2005[6], the unemployment rate in 67% of the municipalities in Bulgaria is over 10.77%, and in 29% of the municipalities it is higher by more than 50% over the average. The improvement of the average value of this indicator is due mainly to the stable development of the economy and the opening of new jobs by the private business and this tendency has a long-term effect. The temporary governmental employment programmes have short-term effects. .
Employment rate (for the age group of 15 to 64) in Bulgaria during 2004 is 54.2 percent or it is by 9 percentage points lower than the average indicator for the EU-25 – 63.3%, which is far below the goal set by the Lisbon Strategy for raising the employment to 70% by 2010 and against the interim goal for raising the employment to 67% in the year 2005. By this indicator Bulgaria is placed in the group of Italy (57.6), Hungary (56.8), Malta (54.1) and Poland (51.7) of the EU member-states, but falls behind the candidates Slovakia (57.0), Croatia (54.7) and Romania (57.7).
The employment rate for the females in Bulgarian repeats the structure model of the employment in the European Union. Employment for females is less than for the males and is far below the goal set of 60% by 2010.

Indicator	EU 25 in 2004	EU 15 in 2004	Bulgaria in 2004	EU goal by 2010
Employment of females	55.7%	56.8%	50.6%	60%
Employment of males	70.9%	72.7%	57.9%	

Source: Eurostat

Positive is the permanent tendency for an annual increase of the employment percentage in the country manifested since 2002 (from 50.6, 52.5 in 2003 to 54.2 in 2004). The potential for using the workforce in Bulgaria is considerably bigger in comparison with the EU 25 from the standpoint of economic activity and employment.

6 Source Employment Agency at the Ministry of Labour and Social Policy.

Tendencies of aging and decreasing of population are unfavourable. *Since the beginning of the 90-ties of last century the natural population growth has been negative, and in 2004 the average age of the population for the country was 41.0 years. An additional factor, aggravating these trends is the continuous immigration process – leaving Bulgaria, as well as the impossibility to compensate those flows by attracting qualified workforce from other countries and regions.*

Employment rate for the population in age group from 15 to 64 in EU (EU 25)

Source: Eurostat. Map: The ESC's INSEE Mission

By the indicator **employment rate of older population at the age between 55 and 64** Bulgaria's value again is lower than the average for the EU (32.5% for Bulgaria and 41.0% for the EU in 2004), as well as in comparison to the objective set for the attainment of 50% employment for the working people in this age group in 2010. The constant tendency of this indicator's increase is favourable, and for the period since 2000 it has gone up by over 50% or from 28.8 to 32.5.

This tendency partly is due to the country's changed policy in respect of the tighter terms (age and length of service) for reaching the retirement age.

3. Indicators for scientific and research activity

The amount of **expenditure for scientific and research activity** in Bulgaria as a GDP share (0.5% in 2004) is four times less than the average level of the indicator for the countries in the European Union (1.99% in 2004) and respectively 6 times less than the level set in the Lisbon Strategy. The innovations and R&D enable to reduce the discrepancies in the technological development of the countries and they are needed in order to attain sustainable economic development.

Expenditures on R & D as % of GDP (2001-2002) for the EU (EU 25)

Source: Eurostat. Map: The ESC's INSEE Mission

According to the index[7] of UNCTAD[8] for the innovative power, Bulgaria falls in the group of countries with high rates of this index, which record the potential and the capabilities of the human capital for scientific work and innovations. *However, Bulgaria's position has dropped down for 6 years from 35 (1995 - 0.671) to 38 (2001 - 0.665) in the classification of 117 countries for which it was computed.*

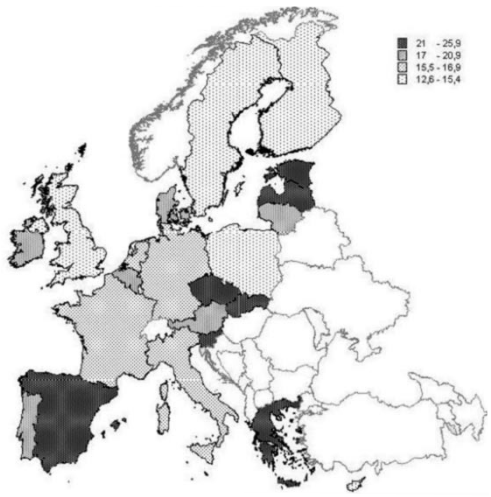
The quantitative indicator of **educational attainment (for the youth in the group at age 20 – 24)** for Bulgaria was 76.0% in 2004, which is slightly below the indicator's level for EU 25 EC 25 (76.7), but it is higher than the level of the same one for EU 15 (73.8). *It does not record the quality of the educational system and programmes neither the extent of non-conformity between the qualification of the persons and the vocational education.*

4. Indicators for integration of the markets and the economic renovation

The index of **comparative price levels** for the end users in Bulgaria compared to EU 25 has moved up gradually from 37 per cent in 1998 to 42.1 percent in 2003. We stand comparatively close to the newly accessed EU member-states: the Czech Republic (55.2%), Latvia (55.1%), Lithuania (54.4%), and Poland (53.3%). Upon the accession of the Republic of Bulgaria to the EU the consumer's prices in the country will increase in their attempt to catch up with the price levels in the community.

The private investments, as gross capital formation in the equity from the private sector as percentage of GDP, are one of the few indicators by which Bulgaria has higher values than the average for the EU. In 2004 the indicator for the country was 17.8%, while for the EU 25 it was 17.1%. The tendency for the constant increase of the private investments is growing in the course of seven consecutive years. Main contribution in this relation has the inflow of foreign investments, the restructuring of the economy and the change of ownership in the state assets privatisation process.

Private investments as % of GDP in 2003 for EU (EU 25)



Source: Eurostat. Map: The ESC's INSEE Mission

[7] World Investment Report 2005, UNCTAD, p. 114.
[8] United Nations Committee on Trade and Development – UNCTAD

5. Indicators for social cohesion

The indicator for the **population at risk-of-poverty** in 2001 for Bulgaria was 16% or by 1% higher than the average for the EU 25. This places the country in a median position among the countries of the most favourable values of this indicator (Czechia - 8%; Sweden - 9%; Denmark - 10%, Finland, Slovenia and Hungary - 11%) and those where the highest degree of inequality is witnessed (Ireland - 21%; Greece and Portugal - 20%;.Great Britain and Spain - 19%).

Population at risk-of-poverty in 2001 (%) for EU (EU 25)

Source: Eurostat. Map: The ESC's INSEE Mission

The indicator for **long-term unemployed persons** (persons who have been unemployed for a period exceeding 12 months) was 7.1% in 2004 for Bulgaria, which was almost a twice bigger value than the average one for the EU25 - 4.0%. Since 2001 (11.9) this indicator has marked a stable tendency towards dropping down.

With values of 6.8% **dispersion of regional employment rates** in 2003 Bulgaria fell in the second group of countries from the European continent, with comparatively slight discrepancies in the employment rates in the different regions of the country. For comparison the value of the rate for the EU 25 is 13.0%.

This favourable statistic value reflects rather the almost equal correlation of the employed and unemployed in a single region than the interregional discrepancies in the employment and unemployment in the country.

6. Environment indicators

The greenhouse gas emissions, covered by the Kyoto Protocol, and the targeted level of these emissions are different for the separate EU countries. Bulgaria has chosen1988 to be the base year since it is more typical for the industrial development of the country in comparison with the transition years to market economy. Bulgaria performs stocktakings of the greenhouse gas emissions by sources on an annual basis. In 2003 their level was 50% of the fixed targeted value. The same year only Sweden, Great Britain and France from EU15 achieved their national objectives for reducing the greenhouse gas emissions by 2010.

Greenhouse gas emissions in 2002 for EU (EU 25)

Source: Eurostat. Map: The ESC's INSEE Mission

The energy intensity of the economy, no matter the reduction tendency, keeps on maintaining extremely high levels, reaching over seven times the average for EU 25 (209.49 koe per 1000 EUR in 2003 for the EU and 1756.21 koe per 1000 EUR for Bulgaria). By this indicator Bulgaria has the most energy-consuming economy in comparison with the countries in the European Union and the membership candidates, exceeding almost 1.3 times the relevant indicator of Romania (1368.46 koe per 1000 EUR).

The tendency for decreasing the energy consumption is comparatively favourable when increasing the GDP nominal volume as a result of more effective usage of the resources, market liberalisation, the increased investments in the sector and the development of the gas supply.

By **volume of freight transport**[9] Bulgaria was in the most unfavourable position in comparison with the EU 25 and the 35.0 ton km/GDP freight transports realised in 2003. *Some of the factors that have led to similar negative values of the freight transports performed are: the interrupted transportation routes to the European Union through former Yugoslavia during the military actions in the country; lack of national strategy for the development of transport infrastructure; the destroyed transport infrastructure in the country; abdication of the state from one of its main tasks – provision of transport infrastructure and admission, which will guarantee and ensure the development of the economic subjects; waiver from presenting state guarantees when crediting the construction of the transport infrastructure – public state ownership; the delayed regulatory reform (sub-laws, technical standards for the infrastructure, construction codes, and etc.).*

[9] Measured in ton km relative to GDP at comparable prices in euro for 1995, 1955 = 100.

IV. COMPETITIVENESS AND SUSTAINABLE DEVELOPMENT

1. Competitiveness

1.1. Potential for competitive growth

Referring to the current ranking as per competitiveness of the countries, the competitiveness indicators of the World Economic Forum in Davos are the most popular ones.

By the indicator for ***potential for competitive growth*** reflecting the potential of the economy to attain stable growth in mid- and long-term perspective, Bulgaria stands in the middle of the list of the countries studied: in 2002 – it occupied 58 position, in 2003 – 64 and in 2004 – **the 59th position**. Romania, Turkey and the slow developed countries follow Bulgaria at bottom in the list of the advanced and medium advanced countries.

1.2. Trade turnover

The high economic growth is achieved as a result of the greater consumer's, state and investment demand, including also by forestalled increase of the ***export ahead of import***. The real picture in Bulgaria is absolutely different: the rate of the import increase gets ahead of the rate of the export increase.

% of GDP	1999	2000	2001	2002	2003	2004
Current account	-4,8	-5,6	-7,3	-5,6	-9,2	-8,5
Trade balance	-8,3	-9,4	-11,7	-10,2	-12,5	-14,0
Export FOB	30,7	38,4	37,6	36,7	37,8	41,1
Import FOB	39,0	47,8	49,3	46,9	50,2	55,1
Direct investments in Bulgaria	7,1	8,1	5,9	5,9	10,5	11,7

Source: BNB

The main partners in the foreign trade and the investors in the Bulgarian economy are decisive in outlining the appraisal for the competitiveness of the country.

The table below displays the share of the main commercial partners of the country in the foreign trade compared to the percentage portion of the direct investments from the relative countries and their positions by competitiveness and innovation capacity.

The 10 biggest investors and Bulgarian partners in foreign trade in 2004

Counties	Export, %	Import, %	Direct foreign investments, %	Position by competitiveness Davos Forum 2004, Bulgaria – 59th position	Innovation capacity for 2004, Bulgaria – 59th position
Italy	**13,1%**	**9,8%**	**6,6%**	**47**	**50**
Germany	**10,2%**	**14,6%**	**8,3%**	**13**	**12**
Turkey	**10,0%**	**6,0%**	**1,4%**	**66**	**52**
Greece	**9,9%**	**5,7%**	**9,8%**	**37**	**38**
Belgium	**6,0%**	**1,4%**	**4,5%**	**25**	**31**
France	**4,5%**	**5,3%**	**2,0%**	**27**	**30**
USA	**4,5%**	**2,3%**	**4,9%**	**2**	**1**
Romania	**3,5%**	**0,4%**	**0,0%**	**63**	**47**
Spain	**3,4%**	**2,1%**	**1,3%**	**23**	**20**
United Kingdom	**2,5%**	**2,4%**	**3,5%**	**11**	**18**
TOTAL:	**67,9**	**52,5**	**42,4**		

Source: BNB, BAI, and World Economic Forum - Davos, own calculations.

The main trade partners and investors in Bulgaria are first of all countries whose index in the ranking is close to the one of the country. Germany, United Kingdom and USA make an exception, occupying positions among the first 15 countries in the world by competitiveness of their economies and innovation capacity.

Unfortunately **the import is not a bearer of technological progress** for Bulgaria since it is oriented to countries of comparatively low general competitiveness. Inputs and raw materials and not investment products and technologies prevail in the import product list of the country.

Bulgaria **exports commodities of high capital-consuming, energy-consuming and inputs-consuming, low extent of processing, low value added and innovation potential[10].** Examples can be given with: the production of clothing, - ***the apparel industry*** where the production with the clients' materials prevails (c.t.m.), and designer's production is not developed; ***metallurgy*** where products of additional processing and higher value added are not made; ***agriculture*** where prevail the low productivity technologies for cultivating the land and of the ecologically clean and biologically manufactured products have a minimum share. The quality of the Bulgarian export comprises mostly a physical volume that does not bring sufficient revenue to the producers/exporters and the country.

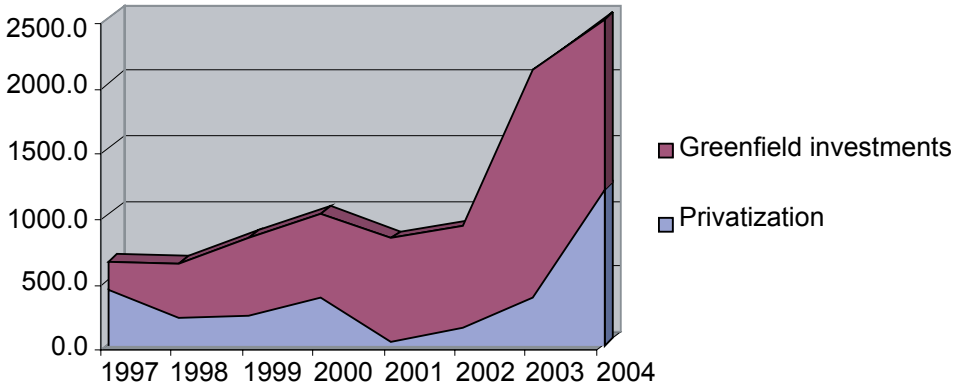
[10] The export of high technology products as a share of the total export of Bulgaria for the period 1999-2003 is within the limits of 1.6% to 2.9% at average level for EU 15 of 19%.

Share of total export, %	1999	2000	2001	2002	2003
Export of high technology products	1,7%	1,6%	1,8%	2,6%	2,9%

1.3. Foreign investments

The factors for accelerated economic growth in the country during the past several years have been the investments and the trade turnover. The direct foreign investments continue to grow up for a fifth consecutive year. In 2004 *Telekom Austria* bought the mobile telephone operator *MobilTel*, and the American company Viva *Ventures* bought the majority share of the Bulgarian Telecommunications Company (BTC). The same year Austria, Germany and Czechia made also considerable investments in the energy sector. However the positive trend in the growth of the real GDP rate is insufficient for bringing the standard of living closer to the one in the EU.

Direct Foreign Investments from green field investments and privatisation deals in the period 1997 - 2004

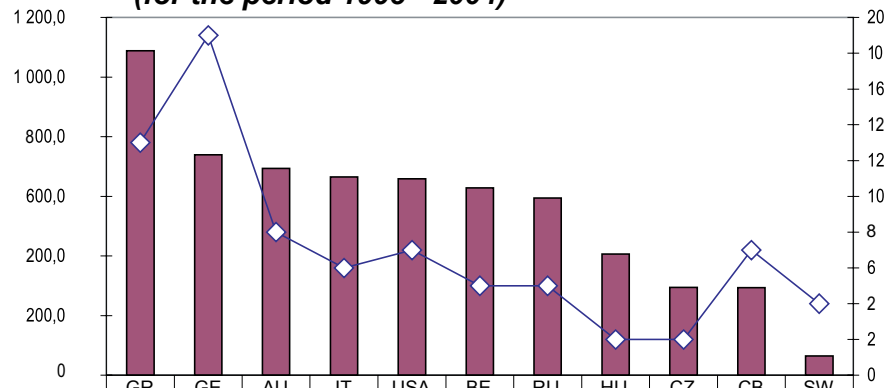


Source: BNB

Since mid-90-ties of the last century a tendency of stable rise in the direct foreign investments (DFI) has been observed. The increase of the green-field investments is positive. The main risk facing the maintenance of volume of the DFI flow is the dependence on the slight number of large-scale investments.

Main investors in Bulgaria are the countries in the European Union. The predominant types of investors comprise the “opportunist” investors who rely on high profitableness of the investments and projects single by their kind with high return.

The hundred biggest investors by volume and number of investments (for the period 1993 - 2004)



	GR	GE	AU	IT	USA	BE	RU	HU	CZ	CB	SW
Ovolume of investments in MUSD	1 088,5	739,7	693,8	665,2	658,5	628,7	594,4	406,3	294,9	293,4	65,2
Number of investments	13	19	8	6	7	5	5	2	2	7	4

Source: BNB, IBA, Delloite Bulgaria

The most favourable from point of view of marketing and fast return are the possibilities for attracting investments in the sectors: Information and communication technologies (ICT) and tourism. The processing of agricultural products, machine-building and electrical engineering have also a significant potential.

1.4. Priority sectors for development

The Bulgarian government has identified **tourism, agriculture, ICT**, **education** to be the **priority** sectors for development. The unsolved issues and problems in each of these sectors are more than the possibilities. Though the number o the foreign tourists in Bulgaria has increase by 5-12% per year for the last several years, general conditions and services for a better orientation and accommodation of the tourists are not offered yet. There is no single national information and reservation system; the transport infrastructure is aggravated and others.

Information and communication technologies. Innovations.

Bulgaria is the country where the **information technologies** enter slowly and with delay, at a higher cost in comparison with the other countries. For the last five years the capacity and quality of the services offered has increase – mobile services and lines for fixed communications, Internet access and etc.

Indicator	2000	2001	2002	2003	2004	2005 пр.
Digitalization of the fixed phone lines, % в at the end-year	14,5%	15,12%	19,7%	27,26%	35%	55%
Share of ISDN phone lines of all telephone lines, %	0,04%	0,19%	0,32%	0,47%	0,62%	1%
Telephone posts in Bulgaria, thousand numbers	3186,7	2922,0	2906,1	2856,1	2770,2	
Fixed and mobile telephony in the households, %			85,80% 17,80%	79,20% 26,70%	77,00% 43,50%	75% 48%

Source: NSI, MTC, Vitosha Research.

The ICT distribution is still slight in Bulgaria. The full potentials of the electronic government and the universal electronic signatures are not used for cutting down the bureaucracy time when servicing the business.

The information publicized in February 2004 at the ministerial conference, organized by the European Commission, is indicative for the situation of the information society in Bulgaria regarding the infrastructure and internet access; electronic trade; electronic education; electronic healthcare and electronic government. Bulgaria and Romania have the poorest indicators for the progress attained in the Information Society and Romania gets ahead of Bulgaria by some of the indicators.

№	Indicator	Bulgaria	Romania	Average for EU-10
1.	**Computers per 100 persons (number)**	**6**	**8**	**10**
2.	**Computer cost compared to average monthly income of household (%)**	**213%**	**196%**	**91%**
3.	**Internet users per 100 persons (number)**	**9**	**11**	**14**
4.	**Cost for 20 hrs dial-up Internet access абонатна линия, compared to average monthly income of household (%)**	**20,7%**	**14,4%**	**9,8%**
5.	**Computers per 100 students in the basic education (number)**	**0,4**	**2,3**	**5,9**
6.	**Computers per 100 students in the secondary education (number)**	**4**	**10**	**6,5**
7.	**Number of public places for Internet access per 1000 persons (number)**	**0,01**	**0,23**	**0,22**
	To the question "Why don't you use Internet?", the answers are (in %)			
8.	**Do not know how work on a computer**	**49%**	**45%**	**23%**
9.	**Do not know what Internet is**	**23%**	**21%**	**11%**

Source: Progress Report on eEurope+ 2003, European Ministerial Conference on the Information Society "New Opportunities for Growth in an Enlarged Europe", Budapest, 26-27 February 2004.

ICT are also important as bearer of Innovation potential. The enterprises dealing with computer technologies, R & D, architecture and engineering are the most innovative ones. **The portion of the innovation enterprises in Bulgaria is approximately one fourth in comparison with the EU analogous indicator**. It is hardly one of every ten enterprises in the country with over 9 employees that has offered a new product on the market, introduced an innovation process or started innovation activity. The low purchasing power of the population and the conservative consumer's traditions, which do not admit broader experimentation or implementation of new products, represent an objective impediment in this relation.

The state policy related with the innovations financing can be illustrated by the fact that the funds in the "Innovations" Fund are times less than the ones in the "Tobacco" Fund.

Education

The development of the human potential is one of the main factors for the realisation of the innovation policy. Bulgaria has entered its transition period to market relations with comparatively high educational level of the population. The restructuring of the economy has led to a decrease and sharp change in the skills demanded at the labour market. On the other hand, the Bulgarian educational system keeps to be one of the most inveterate areas in state sector, after attempts has been made to reform the healthcare.

Net coefficient of enrolling the population in the educational system[11]

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Pre-school education	59.7	64.5	66.2	62.1	65.3	66.4	66.8	73.6	74.2	74.6	73.6
Primary education (I-IV form)	92.8	94.9	95.5	96.0	96.8	96.4	96.3	98.5	99.8	100.3	99.7
Basic education (V-VIII form)	**79.0**	**78.0**	**78.4**	**79.1**	**80.2**	**81.4**	**82.4**	**83.1**	**83.9**	**84.2**	**84.2**
Secondary education (IX-XIII form)	**61.4**	**61.5**	**61.5**	**61.3**	**61.6**	**63.1**	**64.7**	**68.3**	**74.9**	**77.1**	**77.3**
Vocational education following the secondary education	.	.	.	0.5	0.7	0.6	0.6	0.3	0.3	0.3	0.3
Colleges	3.3	3.1	3.0	3.0	2.7	2.4	2.2	2.4	2.4	2.6	3.1
University and specialised higher schools	18.8	20.6	21.4	21.6	23.4	24.0	23.0	22.8	23.9	24.1	25.8

Source: NSI, computed according to the International standard classification of education (ISCED-97).

Lagging behind in the quality of education and in the system for maintaining and raising the qualification is observed. The percentage of the children dropping out from school, being illiterate or semi-literate goes up.

The education development is an intrinsic and main function of the state. Therefore the ensuring of admission to good quality education for all Bulgarian children and youth should be a priority area. **The creation of an "Investments in Youth" Fund** is an opportunity in this respect. The essence of the fund consists in accumulation and use of the funds for raising the educational degree and qualification of the Bulgarian youth. Individual lots of a three thousand BGN initial contribution at the birth of a child should be opened through targeted and budget supported policy. Monthly payments of the child allowances to the Fund by individual accounts at the amount of 15 BGN, for example. The funds of the individual account-holders shall be provided depending on certain conditions:

– becoming at the age of 18 for the youth enrolled to study higher education in Bulgaria;
– coming of age 21 for the youth who have performed labour activity after completing their secondary education.

If the beneficiaries do not complete their secondary education, the funds will remain at the disposal of the state. In case of immigration the funds used shall become payable, and then collectible by the state if the law permits it.

The tendency for the setting up of equality between the state and private educational establishments should be encouraged with respect to their funding. For this purpose it will be necessary to introduce flexible, similar admission systems in the two types of educational establishments, to bring closer the financial terms under which they operate in order to attract qualified teachers and accordingly to better the quality of teaching.

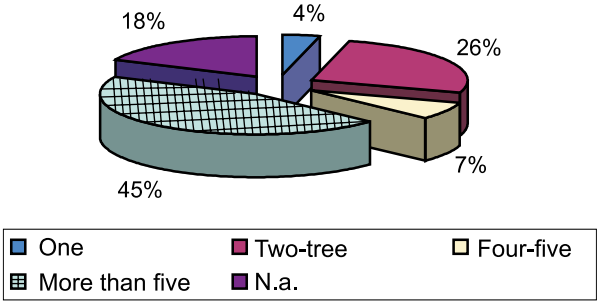
The creation of an equal competitive environment for all the higher and vocational schools via the experimentation of various methods /incl. the development of an adequate mechanism

[11] The group coefficient are calculated in percentage as a ratio of the students by degrees in the age groups 3-6, 7-10, 11-14, 15-18, 19-20, 19-21 and 19-23 to the number of the population in the same age groups.

for the so called voucher system/ can be accompanied by an objective assessment on the quality of the educational opportunities in the individual higher schools. In order to move higher education closer to practice it is advisable to organise trustee boards at the different faculties, which will compose of successful businessmen and representatives of the public sector.
In the higher education clear, transparent and exact rules should be worked up with the participation and involvement of representatives of the state and private segment for competition between the higher and vocational schools of both types.

The drop in the quality of the secondary and higher education can turn into a long-term impediment facing the innovation potential of the economy.
One of the most risky factors in this relation is the qualification and competence of the teachers to use the new ICT in the educational process in an integrated way. The computers at the schools labs are used mainly in the classes of computer sciences and practically they are not used while teaching the other subjects at the secondary schools. This is due to the **poor computer literacy of the teachers**.

Teachers using computers at school, excluding the Informatics teachersa



Source: http://edusoft.fmi.uni-sofa.bg/pollresults.php/pid-26

Another hindrance to the more extensive use of the computers and Internet, i.e. ICT provision of the schools, is the insufficient number of technical devices and the campaign type of equipping the schools with computer technics. It was only the last school year that Bulgaria caught up the level in the new EU member-states in 2001 by indicator number students per one computer.

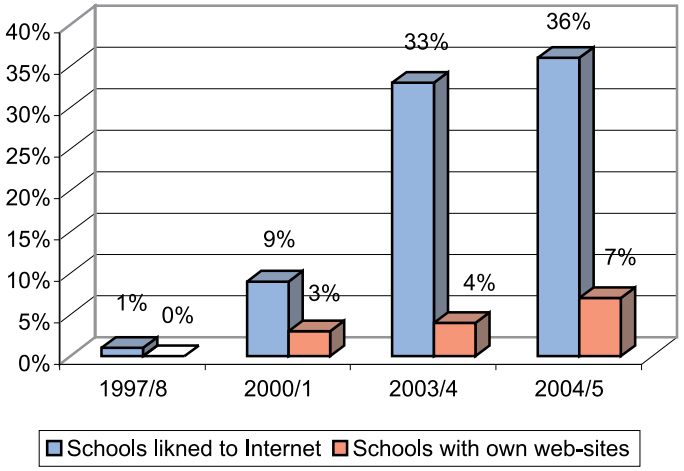
Computerisation of the schools – 2004/2005 school year

School year	Number of computers	Number of students per one computer	Average for EU -10
1996/1997	12 112		
2000/2001	12 199		**24**
2002/2003	10 838		**16**
2003/2004	24 915	**47**	
2004/2005	45 600	**26**	

Source: MES.

A realistic possibility for overcoming this backwardness is to provide teacher for each school where there is a computer class and to work up and offer programmes for basic and specialised computer proficiency. The Ministry of Education and Science (MES) could arrange a hot line and Internet line which would be used for free of charge **technical support of the computer classes and for methodological assistance to the teachers**.
The role of the state in the ICT for education is to ensure high speed internet access for the schools as well as methodological assistance by adopting the strategy of ***obligatory training for working with computers from the fifth form with a follow-up development of this policy up to the integration of the new information and communication technologies in the training starting in the first*** form. It is disturbing fact that hardly ***36% of the Bulgarian schools were linked to Internet during the 2004/2005 school year***..

Internet access and presence of the schools



Source: MES, MTC and ARC Foundation

The situation with the computer provision for the university students is similar. **8 personal computers per 100 students by the average** are directly accessible for the training of the students in the really functioning educational establishments – 42 universities and specialised higher schools and 9 colleges.
The transition to knowledge-based economy of services by using the available natural and human resources in Bulgaria is still a far away utopia.

4.2. Regulations and bureaucracy reduction, creation of adequate climate for entrepreneurship

Any economic system, including also the market economy, needs regulation that will guarantee free competition, will protect the consumers, the environment and the labour resources from unjust practices. The regulation has the reverse effect in most cases.
The insufficient competitiveness of Bulgaria's economy is rooted in:
• Structural problems – ***interference of the state*** in the **labour market, because of insufficiently developed social dialogue between the employers' and trade union**

organisations, intrusion of the state in product market, as well as the slow development of the integrated frame of the capital markets;

- ***Slight investments in the R&D, ICT, education areas***, libralisation and etc.; low extent of protection for the intellectual property rights and industrial property; disproportional high charges for registration of the industrial rights and trade marks at the national patent office;
- ***Absence of an common register for the economic subjects*** and a single number for their registration; lack of electronic cadastre and real property register;
- Lack of proactive ***culture and knowledge for management in the public sector,*** which will lead to the creation of a consecutive and sustainable strategy for the development in the future;
- ***Necessity of better management and regulation*** of the human and financial resources in the field of budgeting and etc.[12]

Competitiveness from this point of view is not directly connected with the size of the state, but rather with **to what extent the public administration can render the needed services with a sufficient degree of effectiveness**. The effects from the work of the administration depend on its capability of innovative thinking and restructuring in the light of the new challenges as well as on its capacity to redistribute the adequate resources for the generation of economic growth and supply of good quality services. It is necessary::

- Better **coordination of the legislative process** between the institutions**;**
- Improvement of **the legislation quality** – process of consultations before adoption, better assessment of the impact (ex ante and ex post), as well as by a more correct and precise wording;
- **Simplifying and reducing** the legislation volume**;**
- Adoption and transposition of the achievements of the community law in the national one but **without useless aggravation in the national legislation**;
- Gradual **decrease of the redistribution role of the state budget** to about 30÷35% of the GDP by restricting the subsidies and the administrative expenditures;
- Restructuring of the subsidized industries stage by stage in order to minimize the budget subsidies;
- Assistance for **the technological renovation of the economic activity** through the "best available technologies", regulated in the EU and development of the information technologies;
- Attainment of **equality** of the state and the business;
- **Reduction of the tax and social insurance burden;**
- Betterment of **transport infrastructure**:
  - o Overcoming the infrastructure misbalance between the central and peripheral regions of United Europe;
  - o Building up modern border check points;
  - o Improvement of the balance in the development of different types of transport;

12 Applying the positive experience of countries that have achieved notable economic development. For example, The Netherlands in the first half of the 20 C after the end of World War Two trained a great number of specialists of all specialities to formulate and manage projects and the final goal was to attract foreign investments.

- o Eliminating the tight places in the transport infrastructure;
- o Introduction of full technological compatibility for movement on the trans-European transport network;

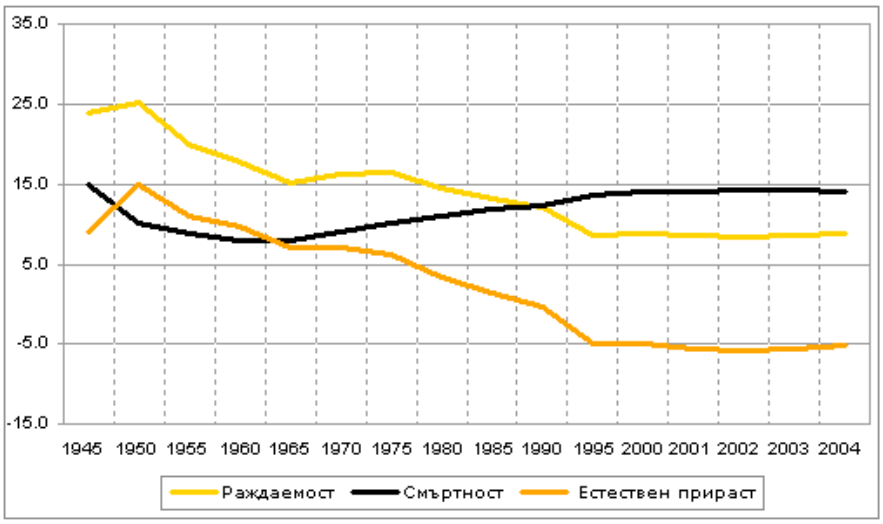
o Implementation of high intelligent transportation systems for management, control and particularly for safety in the transport system.

3. Setting up a flexible labour market for greater social cohesion

The realisation of the goals for sustainable development depends to a great extent also on **the demographic development**. The economic growth demands stable population and integration of a large number of people in labour market. The immigration and the management of the migration process can compensate the stagnation in the natural increase of the population (birthrate) in Europe and Bulgaria, but it cannot fully balance the drop in the birthrate.

The average age of the population in Bulgaria in 2004 was 41.0 years. The aging process manifests itself both in villages and towns, where for towns the indicator is 39.3 years.

Birth-rate, death-rate and natural increase per 1000 persons of the population for the period 1945 - 2004



Source: NSI

The population in work capacity age was 61.6% of the whole population in 2004. The tendency is stable regarding the decrease of the population under the age of fitness for work and over the work capacity age.

Population under, in and over the work capacity age

Year	Total	Age groups		
		Under work capacity age – %	In work capacity age – %	Over work capacity age – %
1990	100.0	21.6	55.5	22.9
1995	100.0	19.1	56.6	24.3
2000	100.0	16.8	58.3	24.9
2001	100.0	16.3	59.2	24.5
2002	100.0	15.9	60.1	24.0
2003	100.0	15.5	60.8	23.7

The coefficient of labour activity, measured as a relation between the work capacity and the whole population, increased in the discussed historical period. Considering the demographic and immigration processes in the past decade, the decrease of the percentage population in labour active age is forecasted. The reduction of the index will influence negatively the potential growth of the gross domestic product if it is not compensated by an increase of the labour productivity, which is to suppress this trend.

The mitigation of the impact of the population decrease requires much fewer **immigrants**, than the wholesome compensation of the problem. Other problems and challenges in this area are ***the aging of the population, the late penetration into the labour market and the non-linear way in the professional development (the career).*** The birthrate coefficient can increase by means of special policies that will have a positive effect on the structure of the population. The negative consequences from the aging of the population can be compensated by the policies of active aging.

Besides the demographic problem at the labour market there exists a ***strong discrepancy in the supply and demand of workforce as well as a lack of modern professional competencies***. The prevailing part of the permanently unemployed has basic or lower education and insufficient professional qualification. The country's economy can be defined as ***an economy of the low qualified labour***.

Distribution of the registered unemployed by professional criteria

YEAR	Specialists			With worker's speciality			Without speciality		
	Average-annual number	Relative share in the year, %	Rate comp. to previous year	Average-annual number	Relative share in the year, %	Rate comp. to previous year	Average-annual number	Relative share during the year %	Rate comp. to previous year
1999	85 306	16,2	+16,3	123 852	23,5	+14,7	317 961	60,3	+11,5
2000	122 185	17,6	+43,2	166 199	24,0	+34,2	405 097	58,4	+27,4
2001	113 584	16,9	-7,0	155 769	23,3	-6,3	400 257	59,8	-1,2
2002	108 793	16,6	-4,2	149 715	22,8	-3,9	397 490	60,6	-0,7
2003	90 307	17,1	-17,0	116 008	22,0	-22,5	321 726	60,9	-19,1
2004	80 106	17,1	-11,3	99 099	21,1	-14,6	290 018	61,8	-9,9

Distribution of the registered unemployed by educational indicator (relative share during the year in %)

Year	Higher	Secondary comprehensive	Secondary special & vocational	Basic and lower
1999	5,6	7,9	29,3	57,2
2000	6,5	8,1	30,4	55,0
2001	6,4	7,7	29,2	56,7
2002	6,2	7,8	28,8	57,2
2003	6,6	7,9	28,3	57,2
2004	6,8	8,0	27,4	57,8

Source: Employment Agency

The number of the illiterate and those of basic and lower education goes ip, more and more students leave school earlier and they do not complete the basic or secondary educational degree. On the other hand, the higher education system has not been reformed and it does not correspond to the modern requirements for training and demand of cadres from the business.

The penetration of the new technologies and the new knowledge in the economy causes an unprecedented increase in the computation capacity and the information potentials in "real time". **The advantages of the new technologies are to be found in the greater flexibility for the business operations; the improved personal services; the creation of remote work places of flexible working hours, facilitated access and admission to information, knowledge and culture.**

Active measures are needed for limiting the unemployment and increasing the economic activity by switching from temporary to sustainable employment and combining the social goals with the economic effectiveness.

The highly qualified resources are slow-mobile. There are several reasons for that – **the low social status** of the Bulgarian employees who cannot change their place of residence with ease; ***the conservative nature of the Bulgarian in relation with the native place*** and his peculiar mentality; as well the going on application of the system for portability of the length of service and age, which restricts the options of the employers to hire skilled personnel.

The low qualified labour characterizes with greater mobility.

In order to enhance the mobility of the labour market it is necessary to:

- Promote the entrepreneurship and encourage the small and medium-sized business by **reducing the administrative barriers**, including via one-stop servicing;
- Transform **the informal employment into formal**;
- Stimulate **the extension of the labour active life and the policy of active aging** by teaching and training the older workers in the new technologies, raising the retirement age and applying a legal option for the transformation of the employment contract to reduced working time;
- Enhance the adaptability to the changing conditions of the labour market: flexibility of the working hours; regulation of the opportunities for overtime labour and flexibility of the collective labour bargaining;

- Improve the qualitative indicators of the human capital and **life-long learning**.
  - o Education has to be up-to-date and driven to the future needs of the employers;
  - o When training the unemployed the main criteria has to be the quality of the training and the knowledge acquired by the trainees;
  - o Institutional support should be extended to the branch centres for professional qualification, servicing the small and medium-sized enterprises;
- Overcome the regional differences;
- **Adapt the university education to the requirements of the market.**

4. Sustainable development

The attainment of sustainable development – economic, social and ecological, requires the adoption of two main principles:
First, economy should not be considered as an independent closed system of cash flows, floating between the customers and the enterprises. It should be understood and implemented in the economic practice that the economy is a part of the larger ecosystem and what is more – economy depends on and is build of the ecosystem resources.
Second, economic indicators as an end in themselves should not be set as criteria for economic growth instead of the assessment if this will raise the quality of life.
This can find concrete expression in the amendment of the economic instruments by means of a:

- Change in the methodology for computing the basic economic indicators, by taking into account the environmental situation and the main health and cultural parameters of the people in the particular region. For example, the exhaustion of the natural resources should be considered when calculating the gross domestic product. Thus the real and not the imaginary successes will be reported;
- Inclusion in the legislation of green taxes, which will more profitable production, which do not destroy and do not exhaust the natural resources, strong safeguarding system of penalties applying the principle “who pollutes – he pays”;
- New approach in banking directed to environmental investments.

The conscious and targeted implementation of these new economic approaches and instruments as well as their development and enrichment would bring us closer to a stable and strong competitive economy of qualitatively different effectiveness, which will save energy and resources, which will not destroy, but will restore and revive the nature and what is the most important – will ensure the welfare of a demographically stabilized population.
The competitiveness of a part of the newly accessed countries in the EU and of Bulgaria is slight because of **the shortcomings of the economic solutions and due to the lack of strategic approach when identifying the policies related with the competition**. Two countries only of the EU-25 (Finland and Sweden in 2003) have achieved the goal of 3% R&D investments. Even if the other countries attain this goal within a short-term plan, similar achievement in the R&D area will not mean an immediate success for day only. It will take from 5 to 15 years in order to turn the realisation of this objective into a sustainable

development. Progress is impossible without dynamic change and there is no development without taking up risks.

Therefore, **in order to raise the national competitiveness it is necessary jointly with the representatives of the employers' trade union organisations and the civil society to work up a "Road Map for the enhancement of the country's competitiveness". This national action plan has both to be branch-driven and accompanied by an operation schedule and interim assessment**, for which the present report can serve as a starting point.

Matrix of activities and responsibilities

№	Activity	Institution in charge	Time
1.	***Adoption of a national programme for economic growth and jobs 2006 –2008 in execution of the Lisbon Strategy[13],*** incl.	Council of Ministers (CM), scientific circles, business, trade unions	2006
1.1.	Working up strategies for the development of the priority industries and programmes for stimulation, incl. the export-driven sectors	Relative ministries, branch associations and trade unions	2006
1.2.	To prepare a separate Operation programme "Information Society" to the National Development Plan – responsible institutions	Coordination Council of the National Development Plan, CM, universities, business and trade union organisations	February 2006
2.	***Educational system***		
2.1.	Partial introduction of a regulated voucher system: – at the universities and colleges; – at the vocational schools	CM, MES, MF	2006
2.2.	Creation of competitive environment in the educational system by removing the barriers and administrative impediments for the foundation of private universities	CM, MES, MF	2006
2.3.	Autonomy for the state and municipal schools	CM, MES, MF	2006
2.4.	Wide application of the boarding school training	MES, MF, CM	2006/2007

[13] Lisbon National Reform Program for Growth and Jobs 2006-2008

№	Activity	Institution in charge	Time
2.5.	Certification of the teachers in the secondary schools and the lecturers in the higher schools in respect of computer literacy, language competencies and foreign languages proficiency	CM, MES	2006
2.6.	Setting up of a Fund “Investments in Youth”	CM, MF, MES	2007
3.	***Business environment***		
3.1.	Suspend the policy of subsidizing unprofitable and non-perspective industries	CM, MF	2007
3.2.	Legislative changes introducing equality for the state and the business	CM, Ministry of Justice, employers’ organisations, trade union organisations	2006
3.3.	Adoption and execution of the strategy for the infrastructure and the transport accessibility	CM, MTC	2006
3.4.	Development of the information technologies and assistance for the technological renovation of the economic activity by “the best available technologies”	CM, MTC, employers’ organisations, trade union organisations	2006
3.5.	Support for the creation of production networks based on product or geographical principle	MEE	2006/2007
3.6.	Implementation of the principles and options of the public private partnerships (PPP) and attracting private investments	MEE	permanent
3.7.	Setting up a common register of the economic subjects; single cadastre and real property register	MRDPW, MEE, MJ	2006
3.8.	Reduction of the administrative barriers to the business	CM	2007
4.	***Human resources and labour market***		
4.1.	Adoption of a strategy for working with the migration, foundation of a Migration Agency	CM, MF, employers’ organisations, trade union organisations	2006
4.2.	Pursuing policies for encouraging the extension of the active labour life and active aging	MES, MLSP, MF	2006

Appendix

STEEPV analysis of the future development of the country – forecast

In order to classify the trends and the opportunities for the development of a particular country it is suitable to use the STEEPV system – an Instrument for analyses and making decisions, which is used alongside with the SWOT analysis.

The STEEPV abbreviation means:

S Social
T Technological
E Economic
E Environmental or Ecological
P Political
V Values

Each one of the above abbreviations is used in order to make conclusions and analyses in relation with the separate themes. The categories can involve the following factors:

Social	Amendments related to the population	Change of attitude	Change in the customer's profile	Fashion
Techno-logical	Specific technology of the object	Admissible technology	Technology used by the customers	Access to the users through the technology
Economic	New markets	Loss (shrinking) of the markets	Accessible funding	Influence of the Euro
Environ-mental	Impact on the environment	Opportunity to reduce the negative impact on the environment	Country's policy related with the environment	Environmental policy of the financing organisation
Political	Governmental policy	Standards	Terms of financing	Political acceptability
Values	Change of the attitude	Culture of the population	Common values	Private value system

Other themes can be also added in the factors' matrix. The instrument is useful when analysing the present situation and drawing up strategies for further development and action in relation with the analysed object (or country).

General assessment and forecast for the trends and moving factors, which can reflect on the development of the country in the future (STEEPV analysis).

Social	Techno-logical	Economic	Ecolo-gical	Political	Values
Aging population	ICT	"Sustainable production"	Change in the climate	From "leader-ship" to "gover-nance"	Post-mate-rialism
Migration of the population	Genetic modification	Labour market and incomes	Sources of inputs		Indivi-dualism
Education and professional skills	Nano-techno-logies	Geography of the production and distribution of the workforce	Natural disasters		Culture of the population
Labour market and incomes	Sensors	Change in the delivery's chain			
Health and quality of life		Economics of services			

1. Social factors

According to the demographic forecasts an increasingly ***aging of the country's population*** is anticipated. This is a trend that is observed in the EU advanced countries, USA and Japan. This tendency moves forward the issue for the reformation of the social payments, the pension payments and the stability of the economy. It is possible this factor to lead to a change in the labour practices and to ***an increase of the age for retirement pension.*** As a result of the demographic changes ***new consumption models*** are possible to emerge not only in the health and in the social system. The accession in the European Union will cause only a temporary improvement of the general demographic picture because our country has a similar demographic structure to the one of the EU –25. The accession will bring about new migration flows of people inside Europe and towards Europe. From point of view of the demographic picture ***the legal immigration in the European Union will grow up*** though this issue provokes controversial resounds of social, cultural and political nature. The immigration will affect also the new consumption models, the emergence and development of new markets. ***The emigration*** could turn ***into a matter of extreme importance*** and become a source of inconvenience and trouble for the countries in the European Union. Besides this the migration of the population inside the country is a absolutely real perspective, particularly the one of the traditional types: urban – rural regions, rural – rural regions or urban – town regions.

The employment in Bulgaria constantly increases. The number of the full-time employed goes up and they also work part-time in another place. In spite of the expectations for a

greater mobility, which was above described, it is not very probable that this will lead to social, political or organisational changes, which will exercise a substantial influence on the common mobility of the labour resources in Bulgaria – the mobility will be rather inherent to certain social and professional groups. The high technology and science consuming sectors are fast developing. However, the shortage of employees with particular professional skills and qualifications is apparent. Trouble exists that there might be ***intersectoral 'brain drain"*** toward to the wealthier sectors of the economy, for example such as the financial services and mediation, which take up the main groups of technological officers, whose skills are also demanded in other sectors of the economy.

Qualified workers improve their skills incessantly and thus they take advantage of the options for free geographical migration. The in-country "brain drain" is observed to take place from the village to the city and respectively from the towns to the district centres and the capital city. Reverse to the trend for employment of high skilled workers is the growing uncertainty in relation with the employment and the job, which is experienced by the majority of the workers of the different professions. The fast technological and economic changes transform the uncertainty into a natural component part of the labour life and respectively the social system and the regulatory mechanisms should be adapted to the new conditions, which have effect on the training and the social insurance relations. The new technologies can influence the occupational conditions simultaneously in the two reverse directions:

– of releasing: distance jobs, which allows the qualified workers and the brain workers to have better control on their working hours and job, and
– of enslaving when the new technologies raise the requirements and expectations for speed and quality needed for performance both on the part of the low qualified and the highly qualified educated workers.

Contrary to the theories of the 70-ties and 80-ties of the last century about the decreasing qualification, the scientific and innovation portion in the labour productivity goes up and not down. This trend is anticipated to continue also in the future when together with new professional career models that were demanded by the fast technological, market and social changes, it would become the driving force for life–long learning. The educational trends pertaining to the social and political factors involve drawing the attention to the literacy and skills; looking for skills to serve the technologies; policy focussed on the scientific education; awareness and knowledge of the environment and consumption; inter-cultural literacy. All this, including the technological changes and tendencies for the leading role in the private sector that is to provide services for the public including also educational services, could cause changes in the educational categories. This may influence the rural and urban population to a different extent in the context of the growing urbanization. It is possible to emerge specific educational and qualification effects for the workers in the agriculture, food industry and the sectors of increased environmental impact.

Consumption and the standard of living determine to a great extent the quality of life. The socio-economic trends for the aging of the Bulgarian and European society can raise still more the demand of the whole scope of products related with the health and age of the people. The old population use more products connected with the health than the young people though from point of view of the other products, the old people spend fewer funds.

It is anticipated that the demand of services in healthcare area will increase which in turn will have its adequate impact on the financing and on increasing the demand of public and private medical services, scientific specialists in the field of the medical sciences and the pharmaceutical companies.
Other long-term socio-economic tendencies that may cause changes in the consumption and production models point to: the aging society, shrinking of the households' dimensions; changes in the local opportunities for education and jobs for the females, growing mono-culture of the European societies, increase of the leisure time and recreation options. Theses and other tendencies may reflect in a change of the industrial organisation: people could demand better balance of their occupational life, or floating working hours, part-time employment, distance jobs, and etc.
As a whole labeling, marketing and branding will enhance their importance not only in relation with the manufacturers of consumer goods, but also in respect of the globalisation processes. The further development of the production sectors could also influence the future level of the quality of life. The general economic climate (inflation, unemployment, and consumer's income) comprises important determinants of the individual welfare. The consumer's power will increase its significance henceforth including from the standpoint of the consumers' protection; regulations and control on the products and the production.

2. Technological factors

Most conclusions drawn from the main tendencies and driving forces pay attention to the ICT development and their applications as well as on their penetration into all spheres of the economy and society. ICT turns into basic and universal technology, which a number of economic and social processes and systems rely on. ICT are expected to cause continuous economic and social changes, for instance in providing public services such as health and education, or in the deliveries' chains or the consumer-producer-supplier relationships by the development of the electronic trade. The ICT and the communications networks access grows into a political issue both in the country and in the international relations, just the same way as the universal admittance to the telephone services was gained in the past.
Other technological driving forces that can be of importance from the point of view of causing changes and of potential influence are the new genetic technologies and biotechnology as well as the emerging inter-scientific area of the nano-technologies and the nano-materials. Nano-technologies could turn into general use and universal technologies, which will have effect on the economy and the whole society.
A possible way for the three above-mentioned basic technologies to influence the regulatory framework of the business and the scientific researches is through the progress of the sensor technologies, including the biosensors and nano-sensors as well as the applications of the type "one chip laboratories". This could be interfered with the constant opportunities for progress, provided by Internet, as well as by the computer networks that have already caused significant changes in the modes of performing the scientific researches and analysing the results obtained. For example, the wider use of ICT would admit the implementation of the simulations and visualisation in science as well as the formation of strategic plans and policy.

3. Economic factors

The development of a more sustainable production sector will depend on the innovations for more stable products and process as well as on the innovations in the services related with the basic production. The creation of more sustainable products is connected with changes in the paradigm for the general vision as for the products, which have to be used longer or should have a shorter useful life and have been made taking into account the possibility for their recycling. There is another change also in the paradigm for the products' modularity and the possibility for a great number of combinations and renovation. Depending on the product, technology, characteristics of the market and the social and regulatory environment, where the products will be presented, it is possible to adopt different models or their combinations. The innovations related with the sustainable processes will focus on the waste reduction and raising energy efficiency where the goal is to close the production cycles. This will require a multitude of social and organisational innovations where the extent of developing the close cycle production will depend on the financial terms and regulatory reliefs offered and encouraging measures, as well as on the available models and technologies, which will support the setting up of closed cycle productions. As far as the services are concerned, the innovation development of the concepts for the complex products and sale of life-long services is possible.

The development and the international division of labour and the presumable large-scale shifts of some economic sectors outside the EU are the main cause for trouble. Some manufacturers move their activities to countries having low costs for the labour and the social payments. The EU enlargement by creating temporarily a zone of low labour costs within the very union could retain the geographical production balance in the EU. The location and availability of bases of adequate skills and knowledge will determine the selection of a place for specialised production of science-consuming products with high value added. The development of new industrial clusters, by retaining and enlarging the present ones, should become the principal priority of the economic policy. The key driving forces that define the extent, to which the production and consumption localisation shall manifest itself, involve the policy, changes in the supplies' chain; development of the logistics networks; transportation costs; admission to adequate human resources and labour market and in respect of the local productions – access to the consumer's markets. These issues refer particularly to the food industry.

A part of the producing companies in some industrial sectors do not develop and offer new products because of the expectations of the market to provide packages of products and services. The post-sale service is a part of the profitable activity for many producers. The innovation of the services in the production will acquire several forms:

- o The financial innovations can offer new modes for the payment of the manufactured products;
- o The scientific intensive innovations can manifest themselves outside the knowledge of the producers in relation with their clients (for example when offering consultancy services, planning and modeling).

The trend to creating network productions and integration strengthens the role of the big producers in order to meet the needs of the customers; weakens the independent role of

the subsystems of the complicated system for the production of a particular product. The innovation for the management of the products will probably further develop on the basis of the existing model for post-sale servicing towards providing life-long services (i.e. till the end of the life of the human beings). After all the service that has been built-in the physical product conceptually can be considered as a real "product", presumed and demanded by the consumer. All these innovations, taken as a whole, will lead to a new attendance and supply of the consumer's needs, for instance leasing or rent instead of purchasing the commodity. The innovations of the services in the production will lead to new knowledge and will require new training and practices in relation with the human resources as well as they will change the relationships in the suppliers' chain.

The transformation in the deliveries' chain will lead to considerable changes in the organisation, the competitive positioning and strategic selection of the producing companies, considering and accentuating mainly the dynamics of the demand, and appearance of new products and processes. The more significant factors for the change of the deliveries' chain include:

- o The importance of sharing, common knowledge and communication within the chain, which lays accent on the common training in the chain;
- o ICT influence, including but not limited to the use of electronic trade of the type B2B[14];
- o Consumer's demand – the consumers can turn into the starting point, the initiators of the innovation activities in the deliveries' chain by switching the polarity of some chains and offering a feed-back connection for the development of new models.

The financial and human resources are keynote for the transformation of the deliveries' chains. The prognoses for the growing dominating influence are widely spread in the deliveries' chains of the main producers and wholesale traders opposing the use of new, alternative models of supply managed in electronic environment. The admission and access to reliable and safe technologies is a key factor and raises the more general question of reengineering of the business so that it will meet the demand of new relationships with the suppliers. The regulatory framework and taxation are significant driving forces having effect on the direction and extent of transformation of the deliveries' chains.

4. Environmental/ecological factors

The state should be clear about the existence of the anthropogenic factors as the main reason for the climate change. A number of scenarios have been worked up on international and local levels that explore the possible consequences from the climate change. Regardless the privilege given to whichever of the scenarios, the climate change will have a significant effect on the human activity both in the advanced countries and in the developing countries. The challenges to the international management can continue impeding the attempts to negotiate joint global actions and also to prevent the issue of an equal opportunity for industrial development of the developing and the slightly developed countries to be on the agenda. The social, political and technological development can admit mitigation of

[14] B2B, business-to-business.

the impact, for example by the use of alternative energy sources, reduction of the carbon emissions; technologies that will allow to manage some of the impacts caused by the climate change, and etc.

The main driving force in this area is the supply with natural resources, inputs and energy sources. A clearly expressed generator of the change comprises the supply, use and preservation of the energy sources, connected to a great extent with the responsibility for climate change.

The models for the energy supply and consumption can be influenced by the political, regulatory, social or economic changes, such as changes in the industrial geography and orientation to industrial closed cycle productions where the matter of the supplies' safety is of considerable importance. The safety of the supplies is a key global issue in relation with the fuels, water and foods. Once again the problems and challenges facing the management systems on global, regional and national level come to the fore.

The risk is a basic variable quantity, which is considered in respect of the environment. For example, this is the risk of failure of the deliveries, or the risk generated by the familiar or unfamiliar effect that the climate change may have. Other risks are also applicable such as the natural disasters or those caused by the men and epidemics, which cannot be foreseen and represent acts of God by their nature. Nevertheless, it is possible to improve the readiness to meet different kinds natural disasters or unpredictable events as well as to foresee and study them in order to prevent and avoid their possible negative effects.

5. Political factors

Most statesmen agree that a change from "leadership" to "management" is more and more at hand. This process has three main dimensions:

- ***Transfer of the power upwards*** from the national governments towards the international (over-national) organisations, when the nations chose to give up a part of their sovereignty in order to achieve bigger goal;
- ***Dispersion of the power downwards*** towards the sub-national (regional, local and even municipal) levels of a political organisation;
- ***Dispersion of the power outwards*** via reforms that will hand down activities into the hands of private sector or to the third sector, which have been traditionally the commitment of the public sector.

The expression "multistep management" will be used more and more in order to define the relationships between the international, national and sub-national policies in the light of Bulgaria's accession in the European Union. This complicated dispersion of the political power and resources will make the achievement of a radical change more difficult. The hardships will increase still more when conducting negotiations between the principal trade blocks, foe instance during the talks held with WTO, the adoption of a common agriculture policy by the EU, and etc.

6. Values factors

The “risky society” hypothesis presupposes that it is characteristic for the modern society that the risks, which the society experiences, are the result of its own actions and decisions and not due to natural threats and accidental phenomena and events. This is what makes the main change in the public understanding and awareness of the risk and the expectations related with its minimisation and avoidance.
The risk is a driving force for a change of the public values, which can be explained as a transformation from materialistic to post-materialistic values. They characterise with a priority given to the sustainable development, concern and care for the environment, health and quality of life over the traditional consumer’s values for increasing wealth. This tendency opposes the obvious trend to individualism and the severance from the restrictive group-oriented models of behaviour and identification. Both the growing disappointments in the party model of the traditional representativeness of the democracy and the adequate increase of the independent politicians should be added to this. This seems to be the answer to the exhaustion of the model “leadership” and transition of the state to the “management” model, which can lead to new political regrouping.

It is necessary to speed up the reforms to the benefit of the environmental protection and provision of sustainable development as well as the drawing up of the set of policies and measures for the realisation of this objective. The pursuance and implementation of an environment-driven policy alongside with its adaptation to the technical achievements and the new knowledge should turn into a fundamental goal by the end of the decade.
The possibilities for raising the competitiveness of the country and the companies involve consecutive implementation of the strategies and policies, which can ensure the growth:

- Provide competitive advantages by means of innovations and not on the basis of the prices;
- Restore the connection education – science – innovations;
- Free market of the technologies – increase the transfer of technologies and patents towards the companies. Use the possibilities of the leasing agreements;
- Stronger discipline – in the labour and social relationships;
- Life-long training and humane resources development;
- Raise the qualification and capacity of the company managers;
- Improve the fundamental infrastructure and environmental protection;
- Systematic approach in the adaptation and adjustment of the enterprises and products to the EU requirements and standards;
- Create networks of productions based on product or geographical principle for the attainment of a synergy technological and production effect;
- Balanced and sustainable regional development including development of the agriculture and the rural regions, modernisation of agriculture, amalgamation of the agricultural plots.

The country faces the issues related with the implementation of the common policies of the Union and accordingly the preparation of the business and the society for these processes.

The EU enlargement to the East will lead to an increase in the volume of the investments for the infrastructure projects, which will support the development of the economies of the respective countries.

Bulgaria is faced with the challenge of facilitating the business environment. Reducing the crime-inducing factors, attracting private investments (incl. public-private partnerships).