



**EXECUTIVE FORUM ON
NATIONAL EXPORT STRATEGIES**

**EXPORT OF SERVICES: HYPE OF HIGH POTENTIAL?
IMPLICATIONS FOR STRATEGY- MAKERS**

**5-8 October 2005
Montreux, Switzerland**

The Bulgarian ICT Sector – Challenges for Foreign Investors

**A paper contributed by
Boriana Mintcheva
Head of Division
Bulgarian SME Promotion Agency
Bulgaria**

THE BULGARIAN ICT SECTOR – CHALLENGES FOR FOREIGN INVESTORS

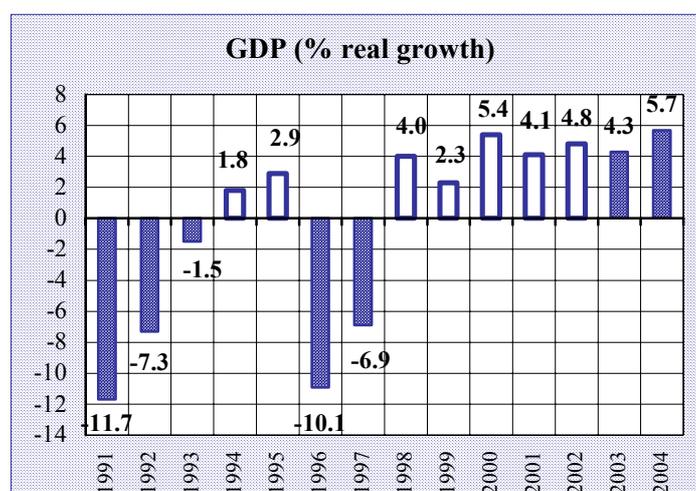
I. General Overview of the Economy

Following the severe economic crisis in 1996/97, the currency board arrangement introduced in July 1997 and economic reforms have been crucial for stabilizing the economy on a continued growth path. Following negative real GDP growth in 1996 and 1997, the economy kept on growing between 1998 and 2003. Inflation decreased significantly from more than 1,000% in 1997 to 2.3% in 2003. The improved business climate is reflected in a rising share of private investment in GDP and substantial net inflows of foreign direct investment with a record high in 2004.

The established economic stability in the last few years and the preconditions for growth, together with the membership of the country in NATO and the expected membership in EU (2007), are sufficient proof of the secure and predictable economic and political environment in Bulgaria.

The Government Program defines the general economic priorities that are to lead to sustained and real growth. These priorities are both a factor, which, if absent, would impede many of the suggested measures, and an impact as all program targets are designed to create prosperity. Moreover it is an indispensable condition for ensuring a new quality of life and raising the standard of living. Generation of conditions for rapid economic growth leads to job creation and higher income.

The IT environment as one of the most dynamic tools of the new economy plays a substantial role in the creation of qualified jobs and directly favors the GNP growth.



Macroeconomic stability/main macroeconomic outputs for 2004

- **Sustained economic growth** (5-7% on average per year in 2002-2005). The nominal amount of GDP reached BGN 38 008,4 mln. or EUR 19433,7 mln. in 2004. Calculated per capita, it amounts to BGN 4 885 or EUR 2497,5. For 2004, GDP growth is 5,7%.
- **Value added created** in the national economy amounts to BGN 32 941,9 mln. The industry activities, within the economy structure, have increased their production activity by 5,4%, forming 30% of the value added in the economy in 2004. Services have created in the same period 59,1 of the value added, with real increase of 6,0% compared to 2003. The agro-sector has increased its production in the same period by 2,2% compared to previous year.

- ***Inflation well under control by fiscal policy instruments*** (The inflation rate for 2004 is 4.0% compared to 11,4% in 2000). *Anchored Lev/Eur exchange rate (BGN 1= EUR 0.5113) through a currency board arrangement in place.*
- ***In 2004 the unemployment rate counted its lowest levels*** in comparison with the previous years At the end of December 2004 the unemployment rate was 12,16% in comparison with 17,88 at the end of 2001
- ***Investor-friendly environment for both Bulgarian and foreign investors and balanced development of small, medium and big business.*** The FDI in the country for January – December are 1957.7 million EUR/10.1% from GDP/ compared to 1850.5 million EUR /10% from GDP/ for the same period of 2003. For the last three years Bulgaria has attracted 3.1 billion EUR, which is 45% from the overall level of FDI for the period 1992-2003, according to the data form BNB. With 2004 FDI/GDP ratio of 9.2% Bulgaria exceeds all CEE countries.
- ***Improved trade balance via combined bilateral, regional and multilateral governmental initiatives, offering better opportunities to Bulgarian industries and aimed at helping Bulgarian exporters enter new markets.*** An aggressive export promoting policy and making Bulgaria a big exporter of high value-added products are key priorities of the Government in limiting the trade deficit and the current account deficit. In 2004 exports continued to perform well. A lower trade deficit, higher receipts from a booming tourism sector, and lower interest payments on debt, have contributed to a significant reduction in the current account deficit in the last three years.
- ***Stable and predictable business environment; Bulgaria credit rating for the last year has been upgraded 12 times by all major internationally recognized credit agencies.*** The Report on Global Competitiveness, presented at the World Economic Forum 2004 in Davos, upgraded the ranking of Bulgaria by 8 positions in the category of “good business climate”;
- ***Some of the lowest direct taxes in the region*** (corporate profit tax - down to 15% - one of the lowest in the world!);
- ***Sharply decreasing corruption, transparent privatization.***

Broad international acknowledgment of the political and economic changes in Bulgaria was the invitation to start accession negotiations with the EU in December 1999 and their initiation in March 2000. By the end of 2004 Bulgaria fulfilled the pre-accession negotiations with the EU and is expected to sign the accession agreement in April 2005. Starting from January 1st, 2007, Bulgaria may be a full EU member.

Bulgaria is an integral part of the global economic and political environment

- Membership in the World Trade Organisation (WTO) from 1996;
- Expected full European Union membership by 2007;
- Agreement with the European Free Trade Association (EFTA) from 01/07/1993;
- Member of the Central European Free Trade Association (CEFTA) from 01/01/1999
- NATO membership from 2002;
- Bulgaria is a member of UN Security Council;
- Strategic geographic location - a one hour time difference from Continental Europe;
- Effective free trade agreements with most countries in the region; liberalized access to a regional market of over 630 million consumers;
- 55 Agreements on Mutual Protection and Promotion of Investments, 45 of which are effective;
- 53 Double Taxation Avoidance Agreements, 48 of which are effective;
- Free Trade Area with Turkey from 01/01/1999;
- Free Trade Agreements signed with Macedonia (01/01/2000), Israel (08/06/2001), Croatia (04/12/2001).

Excellent education and remarkable human potential

- Bulgaria's secondary education is among the best in the world: 5th in the world in sciences, 11th in mathematics (World Bank and The Economist ranking).
- Bulgarians rank second in international IQ tests (MENSA International).
- Bulgarians are among the top university students worldwide (2nd in the world in SAT scores).
- More than 6,000 students majoring in computer science. More than 5,000 graduating in engineering sciences. More than 7,000 IT professionals work in small ICT companies.

Long traditions and sustained IT development:

- 35 years of IT experience: up to 1990, under the Council for Mutual Economic Assistance (CMEA) Bulgaria was the only country in Eastern Europe that specialized in high technologies and therefore was called "the Silicon Valley of Eastern Europe".
- Current early growth of about 35% of the Bulgaria's IT sector (according to research of the IDG group).
- Third place in Europe and eight position worldwide according to the absolute number of certified IT professionals (third place worldwide according to percentage of certificates!).
- High quality personnel. A combination of software and hardware skills.
- Excellent labour quality/labour cost ratio.
- Competitive pricing for IT expert manpower - 1:4 difference in salary level.
- Strong traditions of Bulgarian R&D sector - Bulgaria, according to official surveys (end of 2000), is very close to Slovakia in % of scientists and engineers per capita.
- The Technology Achievement Index (TAI) ranks Bulgaria 28th ahead of economies, such as Poland and Malaysia, and is also considered being among the potential leaders in the field of information and communications technology.
- Customers of Bulgarian firms include Canadian government agencies such as the Department of Transport, Department of Environment and others, as well as global blue chip firms such as: BMW, Boeing, Ford, Lockheed Martin, Nortel, Hasbro, Siemens, PricewaterhouseCoopers, Xerox, Telesis Technologies.
- Well-developed fixed network infrastructure (telephone density 36%) and high rate of growth of the mobile subscribers (more than 1,600,000 for a period of 9 years) are a solid precondition for future development of the Internet services and wireless applications.

2. ICT Sector Development - A Priority for the Bulgarian Government

The Government has identified the ***development of communications and high technologies*** as one of the pillars for sustainable economic growth.

The program of the government is built on the following premises:

- Enhanced competitiveness and innovation will result from the wide implementation of cutting-edge technologies, particularly in the areas of IT and telecommunications, from ensuring high standards in education, and from modernizing the economy and constructing a modern infrastructure;
- ICT investments are viewed as a factor stimulating investments in other fields;
- ICT is becoming a major engine of economic growth.

The government has set the following strategic objectives:

- Promote investments in the ICT sector and the development of R&D networks;
- Create a competitive, export-oriented software industry;
- Capitalize on Bulgarian strong educational traditions;
- Encourage the small and medium enterprises in the ICT sector;
- Encourage young graduates to start their own businesses in Bulgaria.

Internet and Services

The support of the Government for the development of the Internet is focused in three directions:

1. *Establishment of appropriate legal and regulatory environment of the Internet and services*

Currently Internet is not formally regulated and does not require licensing, nor even registration. The free regime for Internet services has led to a dynamic expansion of Internet Service Providers (ISPs) and great reduction of prices. Around a dozen big and more than 200 small ISPs are currently operating in the country.

2. *Supporting the development of the telecommunications infrastructure and building up of ATM backbone network*

A highly reliable high-speed backbone, based on ATM technologies, has been established for exchange of information between the administrations in view of the e-Government targets and the ongoing initiative for complete online transfer of the administrative management of the country through ICT implementation on a national level.

Building of a new telecommunication infrastructure on the basis of advanced digital technologies is one of the main priorities for the incumbent operator. The Bulgarian Telecom plans to invest intensively and to reach a 60% digitalization by the end of 2005. The market of mobile telephone services is undergoing a rapid development.

3. *Supporting the investment process*

The state is currently one of the most important investors in this area. At the same time it plays a leading role in the process of attracting foreign investors and the establishment of venture capital funds. As a result, a modern digital transit and international telecommunication infrastructure has been constructed in order to create conditions for the stable Internet Industry growth. However, the insufficient level of investments at present is still a restraining factor to the creation of competitive IT products and there is a huge potential for all foreign investors willing to take substantial share of the future European IT market. Having in mind the overall development of Bulgaria's EU accession process, it is now the perfect time to invest in ICT R&D innovation facilities in order to create a critical mass of competitive products and advanced information services till year 2007.

Bulgaria's long-term ICT strategy is not focused on the current market development and nearest reality, but rather on the advanced technologies and products that will be market leaders in 5-6 years. Educating our most perspective human potential to catch up with the cutting-edge technologies and predict the future trends requires more or less massive and coordinated efforts on behalf of the universities, companies and Bulgarian institutions.

In the e-commerce area Internet accessible virtual shops have been established. The number of online transactions, however, is still small, with consumers still preferring cash payments. Though, the opportunity to make business transactions on the Internet is available through the ePay.bg electronic environment and its use increases with stable rates. A second e-payment system - BGPAY.bg - was launched in mid-2000. Another new service of online payments by prepaid cards, called Net-Card, is rapidly gaining popularity. About 3,000 users have registered for this service in just 3-4 months.

IT companies profile

The high potential of Bulgarian IT resources (well-educated professionals and relatively good basis for development) was the reason for the designation of electrical engineering and electronics industry as a strategic sector and giving this sector priority in long-term development programs. These priorities are also due to the efficient export record of the sector. The relatively

small size of the domestic IT market is the reason for the growing number of IT companies, which are working on assignments entirely for foreign markets.

The IT companies in Bulgaria cover almost the whole spectrum of IT development activities and services. Few specific areas could be mentioned, regardless of the fact that some of the IT companies work in more than one area:

1. Software

Work done in Bulgaria continues to attract investment by familiar “brand name” giants looking for “Greenfield” sites for software development centers and related production sites as well leading niche companies and “boutiques” any of whom could have set up shop literally anywhere.

Either way, Bulgaria has become a technology creative base of choice for investors looking for the hard-to-find combination of technical expertise, innovation, universal language skills, and project closure which represents start-to-finish, “leading edge” development. Virtually all Bulgaria ICT professionals are fluent in another European language -- most in English, German, or French

Current strengths include software specialties such as: customized software development, development of Internet solutions and applications, multimedia development, wireless application development, security solutions development, education software development, quality assurance, computer system software, networking software and Web design, CAD/CAM/CAE software, telecommunications and wireless development software, application software, and firmware.

2. Hardware - Computer and systems assembling, digital and analogue printed circuits design, PCB manufacture, analog mixed engineering.

3. Microelectronics - Design ASIC's, front-end and back-end micro electronic activities.

4. Automation - Systems for industrial automation.

Working for a number of big corporate clients in Western Europe and US has proved that Bulgarians are able to develop not only design work, maintenance and testing but also fully integrated systems and solutions.

98% of the IT companies are private. Most of them are very flexible and innovative and are part of the SME-segment of the industry (with up to 100-120 employees). There are several IT associations incorporating the major IT players - Bulgarian Association for Information Technologies (BAIT), Bulgarian Association of Software Companies (BASSCOM), and the Bulgarian Internet Association (BAI).

All in all, there is a great potential for Bulgaria to emerge as a preferred knowledge and skill base for leading edge ICT product development, systems integration, projects and outsourcing.