# GLOBAL INFORMATION SOCIETY WATCH 2007

*Focus on* **Participation**

# Global Information Society Watch
## 2007

# BULGARIA

**BlueLink Information Network**[1]
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## Introduction

This report focuses on access and internet penetration as prerequisites for information society advancement. It attempts to depict the national situation in information and communications technology (ICT) development in Bulgaria in 2006 and to sketch the context in which Bulgarian ICT policy is being made. It shows that ICT penetration in Bulgaria has improved, but that it still lags behind other EU member states. Policy development and legislative processes in Bulgaria have followed changes necessary for the country to fulfill its EU membership requirements, and have less to do with more general and voluntary agreements, such as commitments made at the World Summit on the Information Society (WSIS). Bridging the digital gap in underserviced areas is often dependent on international donors. Civil society participation in decision-making processes has not been a formal stipulation. However, non-governmental organisations (NGOs) have paved their way to the policy process through a number of tactics, such as holding meetings with institutional working groups, drafting proposals for the attention of parliamentary commissions, and appealing decisions in court.

The report was compiled from public information sources (e.g. research studies, surveys, media publications, online resources), and interviews with a representative of the state institution responsible for ICT policy development and with civil society observers. It has been prepared by the BlueLink Information Network, with a significant contribution from Nelly Stoyanova from the Bulgarian State Agency for Information Technology and Communications, Dessislava Pefeva from Internet Society-Bulgaria, and Goritza Belogusheva from ABC Design and Communications, co-author of the book *The First Ones in Bulgarian Internet* (Belogusheva and Toms, 2003).

A special mention needs to be made of the recently published annual report *e-Bulgaria 2006* (ARC Fund, 2006) developed by the Applied Research and Communications (ARC) Fund. It provided useful data on Bulgaria's progress in ICTs, and on ICT policy development. BlueLink's work on the Bulgarian ICT Policy Monitor – part of the Association for Progressive Communications (APC) members' network of policy sites – proved equally useful in compiling this report.

## Country situation

### Access and e-penetration

Bulgaria's communication infrastructure is improving, but is still insufficient to offer equal access to all. The ICT market is unregulated, but thriving. Despite a positive trend in ICT penetration in recent years and a rapid increase in investment, overall investment remains low. Bulgaria's research and development expenditures are feeble, and most new innovation is imported. Infrastructure development is hampered by a lack of funds in both the private and public sector.

The main constraints in the sector are a lack of development and infrastructure programmes; poor development of state administrative infrastructure; a low number of successful public-private partnerships; and a lack of sufficient public funding for national research. An absence of training in the use of ICTs and the low purchasing power of Bulgarian households are also impacting negatively on the sector.

Bulgaria has a high density of fixed telephone lines (73.4% according to the *e-Bulgaria 2006* report), but compared to the EU-25,[2] the country has a far lower density of digital fixed lines. According to the Bulgarian Telecommunications Company (BTC),[3] the level of digitalisation had reached 46% as of April 2006. Despite the fact that there has been a recent and dramatic increase in mobile phone density, access levels still lag behind the EU-25.

In general, internet penetration is progressing, but also lags behind the European community that Bulgaria recently joined. Internet use in Bulgarian households is considerably less than that of the EU-25. The share of internet users in the country reached 26% of the population aged fifteen and over in 2006. Projections suggest that as of 2007 some 34% of the population will be using the internet. A key challenge for policy-makers remains the "digital divide" among disadvantaged groups and ethnic minorities. The data suggests that internet penetration rates among ethnic groups are three to five times lower than the average figures for the country.

Broadband internet access improved in 2004 with the introduction of ADSL[4] services. In 2005, 4% of internet users had broadband compared to 10.6% for the EU-25 (although the BTC predicts this will rise to 14% by 2008).

The penetration of new ICTs in the business sector seems to be approaching a level of saturation. Around 27% of employees have access to the internet at their workplaces. In 2006, 90% of businesses had at least one computer, and 75% to 80% had access to the internet. Currently, 24% of enterprises have websites, and 11% of them allow online orders to be placed. The major barriers are technical infrastructure, technical skills and the price of access.

There is a significant effort underway to improve internet accessibility to under-serviced parts of Bulgaria. The Bulgarian State Agency for Information Technology and Communications (SAITC), working together with the United Nations Development Programme (UNDP), has made good progress in making internet connectivity available to schools, research institutions and the general public.

Their work attempts to address the following goals:

- Getting computers into schools and networking schools

- Establishing distance-learning platforms and standards

- Establishing a national network of public internet access points (telecentres, libraries etc.)

- The provision of high-speed national and international internet connectivity to universities and research institutes in Bulgaria

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1  <www.bluelink.net>.

2  The 25 member states of the European Union before the accession of Bulgaria and Romania on 1 January 2007 raised the total membership to 27.

3  <www.btc.bg/en>.

4  Asymmetric digital subscriber line (ADSL) allows data transmission over existing copper telephone lines.

- The integration of the Bulgarian scientific research and development community into the European Research Area (ERA).[5]

In the last two years the Telecentres Project has built a network of about 95 public telecentres which provide internet services to users in small and economically underdeveloped areas. In addition to telecentres, the project has created technical training facilities and a training programme for instructors and civil servants. The SAITC and the UNDP are implementing the project in partnership with the Ministry of State Administration and Administrative Reform (MSAAR), and the Institute of Public Administration and European Integration (IPAEI).

While 1,000 schools have been connected to broadband internet, the process has not gone smoothly. The public procurement for the communication network was brought to court by a consortium that lost the bid. The result was a major delay in the project. Recently the SAITC announced that the dispute was resolved and that soon the number of schools with internet in Bulgaria will be 3,200.

If the solution succeeds, the Bulgarian government will carry out its WSIS promise. In a statement at the Summit, Bulgarian representatives declared that the country must emphasise ICTs in education by investing in computer and communication infrastructure in schools around the country, thus giving virtually all students access to computers and the internet.

Accessibility to institutional websites for visually impaired people is still receiving little attention, and has been criticised by organisations. Only the Ministry of Transport's website is adapted for disadvantaged groups, and it has already drawn a lot of interest. Currently 500 visually impaired people use Bulgarian language screen-reading software (SpeechLab), distributed by the Bulgarian Association for Computational Linguistics.

For 25.4% of internet users, language is also a barrier. A recent poll among users indicates that 87.2% use the internet mainly for information enquiries and 34.5% would like better Bulgarian language search engines.

## ICT policy and legislation

At international forums, such as the WSIS, the Bulgarian government has declared that its information society development activities are carried out in line with world trends, EU policies and specific national conditions. "Our main challenges are related to the full implementation of the EU electronic communications regulatory framework, the i2010 initiative[6] and, more specifically, the development of network and electronic services, adoption of ICT by businesses, strengthening competitiveness, and the inclusion and development of public electronic services," stated SAITC chairman Plamen Vatchkov (SAITC, 2005).

The most powerful influence that has shaped Bulgaria's ICT policy is the country's accession into the EU on 1 January 2007. The development of Bulgarian ICT legislation benefited significantly from its synchronisation with the respective regulatory acts in the EU. The annual monitoring reports of the European Commission were a primary incentive to ICT legislative progress in the country.

Bulgaria is now generally meeting the commitments and requirements arising from the accession negotiations. However, the European Commission noted several weak points regarding its legislative and administrative ICT tasks. For example, the Commission said that the national regulatory authority needed more capacity and independence, better coordination and proper resources. The new Electronic Communications Law also needed to be implemented.[7]

At home the information society was earmarked as a priority by the current incumbents during their electoral campaigning in 2005. But this priority was quickly forgotten and was neglected in the final National Development Plan (2007-2013). Information technology accounts for less than 1% of the overall budget for activities in the plan (AEAF, 2005).

Additional ICT policy documents were developed by the SAITC, such as the Operational Programme on the Information Society and the State Policy on Accelerated Development of the Information Society, but so far both have failed to win the approval of the Bulgarian Council of Ministers (ARC Fund, 2006).

The supreme document on ICT policy in Bulgaria – the Strategy on Information Society Development – was drafted in 1999[8] and updated two years later. In accordance with its stipulations, several regulatory acts were adopted, setting a framework for the development of the information society. These regulations include the Telecommunications Law, the Electronic Document and Electronic Signature Act (National Assembly, 2001), and an update to the Criminal Code regarding cybercrimes. However, other measures were not defined, resulting in a lack of uniform rules for the development of a common information and communication environment in state institutions, and a lack of a legislative basis for privacy and security issues, among other issues. In addition, the Law on Electronic Commerce was accepted by parliament despite public criticism of its flaws and its lack of compliance with existing legislation.

The newly forged ICT laws in Bulgaria transpose the provisions of the EU directives. In 2006, besides the Law on Electronic Commerce, the Law on Electronic Communications was also accepted by parliament and scheduled to enter into force on 1 January 2007. The draft Law for Electronic Governance is expected to be voted on by parliament in 2007.

## E-government

An e-government strategy in Bulgaria was implemented in 2001 with parliament accepting the Electronic Document and Electronic Signature Act. Over three years were necessary for the government to establish an administrative framework for the strategy, allowing ministries and related executive institutions to start working with electronic documents and provide services to citizens using e-signatures. In an attempt to evaluate the progress of the e-government initiative, the Institute for Market Economy conducted an empirical survey in 2006. The survey asked whether it was possible for citizens to exercise their right to access public information and government services electronically. Only one out of five Bulgarian ministries appeared to be capable of coping with simple administrative electronic services. E-signatures crippled access to state administration, instead of helping the process.

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5   The ERA is a European Commission initiative. It seeks to increase pan-European cooperation and coordination of national research activities.

6   The "i2010 – A European Information Society for growth and employment" initiative was launched by the European Commission on 1 June 2005 as a framework for addressing the main challenges and developments in the information society and media sectors up to 2010. (EC, 2005).

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7   The Electronic Communications Law aims at protecting the rights of consumers, including disadvantaged groups; encouraging competitiveness; stimulating investment in infrastructure and innovations; ensuring universal service; and assisting integration with the EU ICT market, among others.

8   See: <www.bild.net/iscalenden.htm>.

The ARC Fund (2006) asserts that e-government could boost information society development. Yet its *e-Bulgaria 2006* report shows weak political commitment to implementing e-government services, inefficiencies in public IT procurement and little horizontal coordination among the various government agencies.

Another challenge was the government's requirement that Microsoft software be used for the e-government gateway. The controversial step to use proprietary software appeared to be in conflict with the proclaimed vision at the WSIS for overcoming the "digital divide". It resulted in a heated debate in the Bulgarian administration, which started as the Bulgarian e-government gateway was launched (its effects were also felt at WSIS).[9]

However, the SAITC has confirmed that there are open source e-government projects underway – among them e-Government in Bulgaria[10] and the lengthily titled Support for e-Government Initiatives Based on the Use of Free and Open Source Software (FOSS) at the Local Level in Southeast Europe. Both projects are UNDP-sponsored initiatives.

### FOSS in Bulgaria

A major campaign issue for civil society organisations (CSOs) in Bulgaria is the introduction of FOSS in the administration and encouraging the use of open standards more generally. CSOs say software development using FOSS is a necessary state priority and acknowledge the need for more highly qualified ICT university graduates.

There are several initiatives that have paved the way for FOSS in the country.[11] The Support for e-Government Initiatives project assists in harnessing the potential of FOSS to increase the use of successful e-government tools in local governance practices. The UNDP and the Internet Society of Bulgaria (ISOC-Bulgaria) have launched the project to help municipal governments use the internet to better respond to citizens' needs. The project was deployed in nine municipalities from the Balkans region – Kardjali, Vratza, Mezdra, Peshtera, Belovo, Dryanovo – and Kostenetc (in Bulgaria), Gevgelija (in Macedonia), and Klina (in Kosovo).

The initiative may be considered a pilot project that lays down the groundwork for the wider implementation of FOSS at other levels, both in public administration (including the central and regional administrations) and in businesses. The project is unique in the sense that it uses the public-private partnership model to benefit local economies and to build local skills and capacities. The partnership between the UNDP and ISOC-Bulgaria was also seen to directly contribute to the achievement of Millennium Development Goals (MDGs),[12] which have been adapted to Bulgaria's transitional context.

Another project in this regard involves the development of a set of web-based FOSS applications that can be used to increase the effectiveness of local labour and social departments, and enhance their coordination with other departments and partnership initiatives, as well as with the labour bureau.

For its part, the "Yes to FOSS" project aims to stimulate the adoption of open source software and open standards in the Bulgarian administration, as well as other sectors. It also hopes to encourage the use of FOSS in the home. It is an informal initiative that has attracted the attention and participation of Linux experts in Bulgaria. The project follows EU requirements and reviews suitable open standards for the current status of the administration. The objective is to prepare the migration from current software platforms to recommended EU open source technologies. A free CD is already available and will be followed by a special beginner's migration guide.

NGO adoption of FOSS in Bulgaria became possible due to an Interspace Media Art Centre initiative which started the first FOSS project in the country. By assisting NGOs to switch to open source software, the project helped save the NGO sector funds that could be used for worthy causes, rather than buying commercial products. "After two years of work on supporting the migration of Bulgarian NGOs to FOSS, we can say that they are positive about using FOSS in their daily work. Moreover, they became independent from proprietary software and self-confident enough in their own resourcefulness to start their own FOSS projects," Interspace announced (i-Space, 2003).

More good news for civil society was the adaptation of the Creative Commons licences into the Bulgarian language in 2006, thanks to the efforts of ISOC-Bulgaria.[13]

## Participation

Until 2006, Bulgaria was characterised by insufficient institutional stability and poor coordination of the ICT policy implementation process. A significant number of administrative bodies did not have real governing power and financial security for implementing state policy in the ICT arena. Responsibilities were spread among the Ministry of State Administration; the Coordination Centre for Information Society Development and the Agency for ICT Development, both in the Ministry of Transport and Communications (MTC); and the Coordination Centre for ICT and Coordination Council for Information Society Development (CCIS), both in the Council of Ministers.

In 2006, to a large extent, the responsibility for the elaboration and implementation of ICT policy in Bulgaria rested with two state bodies – the newly established SAITC and the Ministry of State Administration and Administrative Reform (MSAAR). It is expected that the CCIS will also play a significant role in specifying roles and functions of governing bodies in order to minimise doubling-up on work and institutional confrontation.

The SAITC is in charge of state ICT policy and ensures that it is in line with the social and economic development goals of the country. The statutory and regulatory framework for information technologies is being drawn up as part of the activities of the CCIS, which is responsible for the operational coordination of state bodies, public organisations, institutions and the private sector. The MSAAR is responsible for e-government implementation in the country.

Another state actor in ICT policy implementation in Bulgaria is the Communication Regulation Commission (CRC). It is an independent regulatory body responsible for implementing sectoral policy and deals with issues such as the control and licensing of telecommunication services, radio frequencies management, and postal services regulation.

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9 For instance, Veni Markovski, the head of the Bulgarian branch of the Internet Society, was quoted during WSIS by the *International Herald Tribune* saying that he had approached the UNDP for help and that he was shocked by the outcome of several government contracts involving Microsoft products (Schenker, 2003).

10 The project's particular goals include: the establishment of a Coordination Centre for ICT – a one-stop government focal point for the ICT sector; the development and implementation of a national e-government strategy and national strategy for the information society; and the design and implementation of e-government pilot projects.

11 See: <www.foss.bg>.

12 <www.un.org/millenniumgoals>.

13 <www.cc.isoc.bg>.

According to the SAITC, the decision-making process regarding ICT policies and strategies is transparent and involves the principal stakeholders from government institutions, industry and civil society. "ICT advocacy efforts by civil society and other relevant actors appear to be very effective in impacting on the decision-making process. Regular information on national priorities is being published on government websites and in specialised media," said Nelly Stoyanova from the SAITC (BlueLink, 2006a).

The Bulgarian government has stated that it supports the implementation of the WSIS Declaration of Principles and Plan of Action adopted at the first phase in Geneva, and shares the Tunis Commitment and the Tunis Agenda for the Information Society. "We look forward to the process of enhanced cooperation among governments, the private sector, civil society and the relevant international institutions, for effective implementation of the agenda set forth by the Tunis Summit," said an official statement (SAITC, 2005).

However, the scope of stakeholders' participation shows that some significant issues exist. For instance, despite civil society's impact, business associations seem to be more effective in advocating for their causes. The participation of representatives of Bulgarian businesses in the CCIS is formalised, with a Council decree to this effect in its founding document, while civil society is not mentioned at all.

Both stakeholder groups – business and CSOs – exercise their right to influence the legislative process by making proposals to parliamentary commissions. A recent example is a proposal by the Electronic Communications Association (ECA) for changes to the draft Law on Electronic Communications. According to the ECA, important changes should be made to the text to bring it in line with European norms. The changes relate to improving the liberalisation conditions of fixed telecommunications and the creation of a more effective regulator through the increased independence and visibility of the work of the CRC.

Government decisions can be appealed in court. A public scandal erupted in the summer of 2006 when the Bulgarian Association of Information Technologies (BAIT) accused the MSAAR of rigging the public bid for e-government implementation by manipulating the criteria in favour of a single company. Additionally, BAIT criticised the ministry's decision because a large portion of the budget (90%) is intended for hardware, leaving little for software.

The SAITC has actively participated in international forums since its establishment in 2005. Where possible, the government includes civil society members in the governmental delegations to those forums, including the WSIS.

## Conclusions

Despite the initiatives outlined in this report, Bulgaria still lags behind other EU member states in its ICT development. There are several ways in which the situation can be dramatically improved:

*Competitiveness*: According to the government, one of its main goals is to use ICTs as an opportunity for economic growth. Some possible ways of promoting ICT sector growth include:

- Establishing a venture capital fund targeted at small and medium enterprises (SMEs) with an ICT profile
- Developing regional, national and international ultra-high speed network infrastructure
- Improving the cooperation between academic institutions and the private sector
- Supporting public-private partnerships

- Supporting local FOSS development companies
- Encouraging research and development
- Supporting the innovative use of ICTs
- Developing human resources generally.

The rapid and complete implementation of the EU electronic communications regulatory framework, the effective use of the European Structural and Cohesion Funds in 2007 to 2013, as well as better coordination and cooperation between more and less-developed EU regions will also assist in increasing the competitiveness of the sector.

*FOSS and open content*: The Bulgarian government needs to develop a strong policy on the use of FOSS and open content. This means:

- Supporting the use of FOSS at all levels of the administration
- Stimulating the use of open standards
- Stimulating the production of local content
- Publishing the texts of legislation under open content licences.[14]

*School connectivity*: While the government has made great strides in this area, simply providing access to infrastructure is not enough. In its most recent *e-Bulgaria* report, the ARC Fund (2006) states: "The government's large-scale investment in ICTs in schools has dramatically levelled the digital divide, but other important issues remain unresolved – e.g. the need for training teachers in some regions of country."

*Research and development*: More funds need to be made available for local projects. This is one of the least developed ICT areas in Bulgaria, and it is a situation that needs to be improved.

*Participation*: The government needs to do more to publicise legislation, to formalise the participation of the NGO sector in decision-making, and to make processes more transparent in reality.

*Human resources*: The "brain drain" of Bulgarian ICT specialists who leave for lucrative positions abroad or join foreign companies with branches in Bulgaria has become a negative trend. So far the Bulgarian government has not taken any measures to prevent this. At the same time, the capacity and abilities of non-governmental actors working in the ICT field is still not appreciated by the government – both at the policy-development and implementation levels. Perhaps the biggest challenge facing the Bulgarian authorities in general, and those working in the field of ICTs in particular, is the lack of capacity to implement sustainable development principles at the policy level and in practice. Efforts should be made to apply a multi-sectoral and participatory approach in order to overcome this problem. The great knowledge that civil society has in the field of sustainable development should be drawn upon. ■

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**GLOBAL INFORMATION SOCIETY WATCH** is the first in a series of yearly reports covering the state of the information society from the perspectives of civil society and stakeholders in the global South.

**GLOBAL INFORMATION SOCIETY WATCH** has three interrelated goals:

- **survey** the state of the field of ICT policy at the local and global levels
- **encourage** critical debate, and
- **strengthen** networking and advocacy for a just, inclusive information society.

The report discusses the World Summit on the Information Society (WSIS) process and a range of international institutions, regulatory agencies and monitoring instruments.

It also includes a collection of country reports which examine issues of access and participation within a variety of national contexts.

Each year, the report will focus on a particular theme. In 2007 **GLOBAL INFORMATION SOCIETY WATCH** *focuses on participation.*

**GLOBAL INFORMATION SOCIETY WATCH** is a joint initiative of the Association for Progressive Communications (APC) and the Third World Institute (ITeM), and follows up on our long-term interest in the impact of civil society on governance processes and our efforts to enhance public participation in national and international forums.