

## **WSIS+10: OVERALL REVIEW OF THE IMPLEMENTATION OF THE WSIS OUTCOMES**

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### **WSIS 10 Year Country Report by BULGARIA**

#### **"Digital Bulgaria"**

It is undisputable that information and communication technologies (ICT) and Internet are one of the main drivers for building a competitive economy based on knowledge and innovation as well as high quality of life for citizens. ICT accounts for 20% of overall productivity growth of the European economy and 5% of EU GDP. Expanding distribution of Internet access has led to the evolution of both the ICT and innovation and to more open, dynamic and inclusive ecosystem. The introduction of fast and ultra fast broadband speeded up this evolution by providing new opportunities for content providers, applications and platforms that are able to compete, innovate and collaborate, regardless of the place they are located. Innovations in ICT happen faster and in a direction that is difficult to predict exactly. This is due to the rapidly changing technologies, consumer preferences and cost reduction. Fast broadband and wireless access enable people to take advantage of new digital tools, e-commerce and e-business, geographic information and mapping systems, cloud computing, telemedicine, virtual reality, supercomputers, mobile health, e-learning, citizen participation in governance, intelligent transport systems and smart energy networks.

Today, when the EU economy is still marked by the recession and expected annual GDP in 2013 is to shrink to 0.1% in the EU and 0.4% in the euro area and unemployment especially among young people is at unacceptable levels in many countries, including Bulgaria and when governments are under pressure to reduce government public spending, there are several potential sources of growth and jobs and one of them is the development of ICT and its widespread adoption and use of ICT, so called digital growth. ICT uptake and adaptation of business to new technologies is a key factor for the competitiveness of any organization. Innovative use of ICT improves public services and reduce costs by making access easier for citizens and businesses from a distance. Despite the high overall unemployment, a shortage of specialists in the field of ICT in the EU is expected to reach 900,000 unfilled jobs by 2015. Similar is the situation in Bulgaria where the Bulgarian ICT sector, which in recent years has increased constantly, also suffers from a shortage of highly qualified professionals.

In formulating and implementing policies for digital growth, it is necessary to keep in mind the dual role of ICT - as a horizontal factor for the development and growth of other sectors, while it is sector itself. Broadband connectivity and electronic infrastructures lay the basis for innovation in ICT, but allows for the development of innovation in other sectors. These technologies increase the opportunities for influence of other factors for the development of modern and efficient services and applications that meet economic and social needs and requirements.

At European level, the priorities in ICT and the Internet are outlined in the Digital Agenda for Europe (DAE) - one of the flagship initiatives of the strategy for smart, sustainable and

inclusive growth, Europe 2020, which is to prepare the EU economy for the challenges of this decade.

Digital Agenda for Europe aims to catalyze the European economy and contribute to addressing major socio-economic challenges facing the European Union by exploiting the potential of ICT. Successful implementation should contribute to the development of a genuine digital single market and e-commerce to improve quality of life by providing better healthcare (e-health), better social inclusion and modernization of education (improving e-skills), more efficient public administration (e-government) and better dialogue between citizens and government (e-participation), more secure and efficient transport solutions (Intelligent Transport Systems), a cleaner environment and more efficient smart grids, intelligent transport and smart cities, new media and opportunities for easier access to cultural content.

**Prerequisite for achieving these ambitious goals are open data and secure high-speed Internet access.**

Digital Agenda identifies specific actions of European Commission and EU Member States in seven areas: digital single market, interoperability and standards, trust and security on the web , fast and ultra fast internet access , research and innovation ; digital literacy , skills and social inclusion and ICT-enabled benefits for EU society , which should lead to achievement the main objectives of the program until 2020 . Progress is monitored through a set of indicators and published periodically in the Scoreboard of the program

Recent data suggest that some indicators **Bulgaria** performs well , but for the others there are concerns.

- Bulgaria is among the most advanced Member States in terms of speed of delivery broadband - more than 99.4% of the lines are with a speed above 2 Mbps (91.8% in the EU), and more than 74.1% at a speed between 10 and 30 Mbps ( much higher of the EU average), which makes them ready for the future internet applications (eg high-resolution TV and high-quality video calls). This allows Bulgaria to be among the EU countries with very good position in the field of ultra-high-speed broadband and it is a good basis for the widespread deployment of **next generation access networks (NGA - Next Generation Access)**.

- Broadband coverage is above the EU average, but there is imbalance between densely populated areas - 63%, average settlements - 41.6% and sparsely populated areas - 38.8 %. This puts small towns and remote, sparsely populated and rural areas in disadvantaged position.

- There are still low levels of broadband penetration. Although broadband is available at 90% coverage, the uptake is low. In 2013 only 19% of the population use broadband.

- Regarding the use of eGovernment services by citizens there is a certain gap with the average for the EU27. In Bulgaria 27% of citizens interact electronically with public authorities, 11% by submitting application forms , while the EU average is 44% and 22% respectively. On the other hand, the share of SMEs in Bulgaria interacting with public authorities online is 83% - close to the EU average of 87% and much higher (three times above) than the proportion of citizens.

- ICT sector in Bulgaria is very viable and demonstrates steady growth even during the global economic crisis. The sector has significant potential for innovation and export-oriented growth. From 2006 to 2010 there is a constant growth in terms of revenues (14%) and profits (83 %) sustained increase in export of ICT goods and services ( 14 times) , reached 2 billion in 2011 ( 47% of total export of business services).

- The development of e-commerce lags behind the average EU27. Only 6.1% of businesses make purchases of goods and services on-line to the average for the EU27 - 19.1% and only 3.2 % sell online ( EU average 13%).

- Although ICT is one of the most developed sectors in Bulgaria , 40 % of citizens have never used the internet. As a major barrier is indicating the lack or low level of computer or Internet skills . Just over 10% of the population of Bulgaria have high computer skills compared to the EU average of over 25% and less than 10 % of the population have high internet skills , compared to the EU average of over 10% , indicating the regularity of Internet usage.

The main strategic planning and programming documents that outline strategic policy framework for the development and usage of ICT in Bulgaria are consistent with key strategic planning documents of the " Europe 2020 " and " Digital Agenda for Europe " .

They are:

**1.National program "Digital Bulgaria 2015 "**, which defines the parameters (measures , responsible institutions , deadlines, budget) to develop the information society (IS ) in Bulgaria and aims to support the implementation of European priorities and objectives set out in the Digital Agenda for Europe :  
<http://www.mtict.government.bg/page.php?category=604>

**2.National Strategy for Broadband Development 2012 -2015** and National Operational Plan updated and supplemented with an extended time horizon to 2020 and thematically focused most closely to ensure fast and ultra - fast Internet for all citizens:  
<http://www.mtict.government.bg/page.php?category=505&id=4580>

**3.Common strategy for e-government in the Republic of Bulgaria 2011 - 2015** , focused on making the administration of fragmented and bureaucratic structure an integrated , efficient single system by providing modern high quality public e-services for citizens and businesses: <http://www.mtict.government.bg/page.php?category=462&id=4698>

**4.Under preparation is Innovation strategy for smart specialization** - Smart specialization is a strategic approach to economic development through targeted support of research and innovation ( R & I ) . This will be the basis for investment of Structural Funds in the R & I as part of the contribution of Cohesion policy to achieve long-term objectives for growth and jobs strategy " Europe 2020 " .

These strategic documents highlight the following key policy priorities for digital growth in the period 2014-2020 selected as to provide balanced support for the demand and supply of ICT to deliver sustainable economic and social benefits from their extensive application.

*Our vision is by 2020 Bulgaria to be a country with a knowledge economy and information*

*society developed through widespread use of information and communication technologies*

**Our first priority is to provide 100% broadband coverage throughout the country and high-speed and ultra high-speed internet access, so that by 2020 over 50% of households and businesses can use the Internet at speeds higher than 100 Mbps.**

To achieve this ambitious goal, first we have to decide the issue of coverage of small towns and rural areas. This will be achieved through investment projects in remote, sparsely populated and rural areas and regional projects to build wireless broadband in municipalities, as well as high-speed connectivity to community centers, medical facilities, town halls. These projects will be funded through public-private partnerships and new operational programs for the period 2014 - 2020

The measures that we have planned for a phased increase the speed of internet access include:

- Releasing radio frequency spectrum, currently used for national security and military needs and providing for development of wireless broadband applications (eg, 2.5-2.69 GHz, 800 MHz, etc.).

- Synchronizing the laws and regulations to ensure the sharing and deployment of different types of technical infrastructure, and thus, reduce the costs of construction works and quickly building next-generation networks.

- Technological innovation and upgrade of existing old broadband networks in order to achieve the required parameters, ensuring the opportunity to provide new, modern electronic services with significantly higher rates in the period 2014 -2020

- Gradual building of broadband new generation networks (NGA-Next Generation Access) in the period 2015 -2020. These networks are crucial and indispensable technology prerequisite for successful cross-border electronic services provision of high economic and social interest within the EU: cross-border e-procurement, cross-border registration of companies, cross-border healthcare etc.

To provide greater broadband penetration, in other words, to stimulate demand and use of broadband services are planned:

- Training of central, regional and local administration
- Demonstration projects for broadband in remote locations across the country
- Communication campaign to raise awareness and skills of the population and business for using broadband services.

**Our second priority is the accelerated development of eGovernment services**

Several major projects in the field of e-governance are completed currently in Bulgaria. Renovated eGovernment portal is already functioning. There are uploaded about 200 electronic or directory services, as well as links to specific institutions. By the end of 2013 it is foreseen as a trial period of the new vision and functionality of the site, and by 2014 it will be possible to use real electronic services.

The Digital Agenda for Europe calls up to 2015 the use of eGovernment services to increase by 50 percent among the citizens and 80% among enterprises. The main challenge for the

Bulgarian government is to significantly stimulate broad demand for e-Government services, especially by citizens.

This will be achieved through:

- Improved interoperability and information security of the information systems of the executive and the judiciary, which will ensure their efficiency and reliability and increase confidence in public electronic services;

- Front offices and cloud structure of e-government building

- Development of new integrated public e-services for citizens and business, including transborders.

- Full transition to e-procurement and e-invoicing. Orders made by the central and local authorities and agencies represent a significant proportion of GDP and if implemented electronically they have great potential to boost e-commerce –indicator showing that Bulgaria is lagging behind.

- Administrative capacity building, especially in the local administration for the delivery of electronic public services.

- e-Justice implementing to ensure efficiency of the judicial authorities and their administrations in exercising their competencies.

Measures under this priority will be funded primarily through the state budget and the new Operational Programme "Good governance"

**Our third priority is to support the development of the ICT sector that has the greatest potential for innovation and growth, and support for large-scale adoption of ICTs in other economic sectors**

Measures that are planned include:

- Development of ICT based infrastructure (technology parks, business incubators, clusters, excellence centers, e-infrastructure, etc.).

- Branding and positioning of the ICT sector in national and global markets.

- Voucher schemes to support high-tech enterprises

- Support for the implementation of ICT-based product, process and organizational innovations or those related to improving energy efficiency in the enterprises in other economic sectors, especially in small and medium enterprises.

These measures will be implemented primarily through the new Operational Programme "Innovation and Entrepreneurship".

**Our fourth priority is improving digital competences and skills, which is essential for ensuring of demand and the widespread use of ICT based applications and services**

Measures under this priority aim to modernize the education system and lifelong learning through the wider introduction of ICTs in particular by:

- Providing high-speed connectivity to universities and schools;
- Equip schools with computers and more technology
- Provision of electronic educational content with open access at all levels of the education system to provide opportunities for wider introduction of e- learning.
- Modernisation of curricula and assessment of learning outcomes and professional development of teachers to build ICT professionals with competencies to meet the requirements of the labor market.

These measures will be implemented primarily through the state budget and the new Operational Programme "Education and Science for smart growth."

**The last, fifth priority is to encourage the widespread use of ICT to address some major economic and social challenges**

These include actions related to the provision of:

- Accessible interactive online services and digital inclusion for people and disadvantaged groups;
- Development of eHealth;
- Provision of ICT-based health and social services to ensure a dignified and independent life of older people;
- Development of intelligent transport systems for effective environmentally friendly and energy efficient transport and improved mobility.
- Extending the use of ICT in the activities for environmental protection and monitoring;

The first two priorities are essentially within the competence of the Ministry of Transport, IT and Communications and can be successfully implemented with the assistance of other government institutions. In the realization of others leading role are to play other state institutions with relevant expertise.

5th December 2013

Ministry of Transport IT & Communications

Directorate "Information Technology & Electronic Governance"

Sofia, Bulgaria