

**UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY
FOR DEVELOPMENT (CSTD)**

**Contribution to the CSTD ten-year review of the implementation of WSIS
outcomes**

Submitted by

ARMENIA

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QUESTIONNAIRE

1. To what extent, in your experience, has the “people centered, inclusive and development oriented Information Society”, envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed in ten years since WSIS.

The development of information society and knowledge-based economy within the last years has been a vital lever for the improvement of the competitiveness and productivity of economy, as well as for development of management, innovation and R&D systems and corresponding infrastructure in Armenia.

In 2008, the Government adopted a new industry development 10 years strategy focused on infrastructure, workforce, education, venture financing, e-society, and other areas. The main goal of the document is to outline the vision and goals for the development of IT sector (the IT industry and information society) in the Republic of Armenia, as well as the challenges, their strategic solutions and implementation stages. The visions of the strategies are:

- Sustainable information society with advanced ICT infrastructure, high-level computer literacy, high level of computer saturation and internet access, extended use of e-services systems, existence of large local IT market and progressive knowledge-based industry,
- Developed and internationally recognized Information Technology sector, with companies creating big surplus value and providing complex engineering solutions and services, local IT products competitive in international markets.

The given Concept Paper is an action plan based on strategic approaches with clearly defined focus designed to stimulate the development of information and communication technologies (ICT) in the country thus providing a leading position for Armenia in the world and development of information society in country.

The Action Plan of the Concept Paper aims to achieve the following key milestones:

- 1) Short-term (1-3 year period): build world class ICT infrastructure to support Armenian IT industry and information society development.
- 2) Mid-term (3-5 year period): strengthen Armenia’s ICT infrastructure and ensure the presence and penetration of the “Armenia IT brand” in the global market.
- 3) Long-term (5-10 year period): achieve full “Armenia IT brand” penetration in global markets and, particularly, in targeted high-growth market segments. Contribute to the growth of ICT,

increase in sector revenues and development of knowledge-based economy through ICT infrastructure and information society development.

For elaboration of concrete measures of formation Information Society in Armenia, in 2010, the RA Government approved a roadmap for the next 3 years on forming an e-society in Armenia. The roadmap has several stages: provide Armenians with high-speed internet access, increase population's computer penetration, implement some activities on cybersecurity and develop new e-government services (see the outcomes in the answer of 3-rd question).

2. How far do you consider the implementation of specific WSIS outcomes to have been achieved?

All activities towards Information Society formation undertaken by the Government of Armenia are continuously by their nature, and new measures are being undertaken for further development in the area formatted electronic society. A new project on Transactional e-Governance Development launched in Armenia on 3 December 2013 with support from the European Union. The new e-Armenia initiative aims to create transactional electronic services, assist the digitalization of the Armenian civil registry and provide Armenian citizens with a new way to communicate with their Government.

The project will also digitize the national archives, create an electronic statistics system and an email system for government contacts. The overall efforts are expected to strengthen public sector reform in Armenia and introduce new systems for e-Governance, leading to a positive impact on democratic development and good governance, as well as transparency and anticorruption measures.

3. How has the implementation of WSIS outcomes contributed towards the development of a “people-centered”, inclusive and development oriented Information Society?

The development of information society and knowledge-based economy within the last years has been a vital lever for the improvement of the competitiveness and productivity of economy, as well as for development of management, innovation and R&D systems and corresponding infrastructure in Armenia.

The overall efforts have been strengthened public sector reform in Armenia and introduced new systems for e-Governance, leading to a positive impact on democratic development and good governance, as well as transparency and anti-corruption measures.

In the area of high-speed internet access, it is worth to mention that almost all cities and towns/settlements are connected to the network (wireless/wire communication channels), three wholesale (ADC, Beeline, GNC Alfa) and about 45 retailer companies, U-com and GNC Alfa

deliver triple play services (until the end of 2013 those services covered the 80% of the Armenian region), and the RA Government integrated into one network.

For implement the privileges of e-government systems, **e-Gov.am** portal was launched in 2010, which brings together the electronic governance tools and databases of the Armenian state agencies, as well as provides comfortable environment for their use. Currently this website provides e-gov services such as e-license, e-payment, e-cadastre, e-register, e-notification, e-procurement, e-tax, e-visa, e-signature, e-auction system of the compulsory enforcement service, Information Search System of the Intellectual Property Agency etc. Now the Government is taking some activates to develop other e-gov services such as e-health, e-education, e-pension etc.

From 2008-2013 were implemented 15 e-gov systems:

- Legal information system- a comprehensive electronic database of legal acts of the Republic of Armenia. More than 67 000 legal acts, 4 000 visitors every day,
- E-Signature- citizens can visit the electronic filling service center to sign the agreement,
- E-document circulation- more than 40 government agencies have internal and external electronic document circulation, every day 10 000 citizens use this system, 90% of documents are made by computers and 65% of documents are circulated electronically,
- E-Tax- online tax filing, online transferring of tax reports, 59 forms of electronic reports,
- E-Budget- Every day 15 000 citizens enter to the system and study the budget including current fiscal changes by sections, groups, classes and expenditure lines,
- E-Register¹- registering an entity in minutes using the one stop principle, allows users to view information on registered entities. 10% of all kind business are registered online, 65% of Ltd. are registered in less than 30 min, and 35% up to 5 days, more than 8000 online information about the companies have already been provided,
- E-Cadastre- submit an application for registration real property. Real property registration time had been reduced from 7 to 3 days.

¹ There is a clear scope to improve Armenia's investment climate, as measured by the "Ease of Doing Business" survey. The survey provides a rank against the time and cost it takes to perform core business activities. Armenia ranked 55th out of 183 countries in 2012, improving its rank by 6 points compared to 2011.

- E-Payment- online payments charged for the state fees, local duties, the administrative penalties or services provided by state and local self-government bodies.
- E-police- transport resources registration in average 24 minutes, online theory examination.
- E-ID/E Passport- in near future ID card will be used as a medical card and driving license, etc.
- E-Licenses- applying online for a license or submission of licensed persons' reports online.
- E-Procurement- shows procurements made by state agencies.
- E-Visa- simplifies the process of obtaining a visa, visas are issued within two days.
- ISS of IP Agency- databases of industrial designs, brand names, inventions, utility models, and trademarks.
- Filling IP Applications- online submission of patent and trademark applications.
- E-Control- supervisory activities presentation online by The RA Control Chamber.
- E-auction System of the Compulsory Enforcement Service- opportunity for mutually beneficial transaction, restrains possible corruption risks.
- Judicial Information System- the possibility to search similar cases Information about the place and time of court hearings.
- Registers and Tables- In this section you can find some registers of public administration bodies and other information.
- Other services.

Since 2012, the ID cards and electronic passports are provided to Armenian citizens.

4. What are the challenges to the implementation of WSIS outcomes contributed towards the development of a “people-centered”, inclusive and development oriented Information Society?

One of the challenges is limited internet infrastructure in the several rural mountain areas, because of geographic limits, and low-middle level of ICT literacy because of existing economic gap. But due to the special developed approaches of the Armenian Government there have been initiated several projects with aim of resolving the above mentioned issues.

Improving public service delivery in Armenia continues to challenge policymakers, providers, and clients. Systemic problems in public service delivery can be addressed by improving the e-Government infrastructure and policies in Armenia that will support service delivery and enable public service delivery reforms across a range of sectors.

5. How are these challenges being addressed? What approaches have proved to be effective in your experience?

The Government undertook the following projects towards addressing the challenges connected with low level of ICT literacy and infrastructures limits in the rural areas.

- **“Computer for all” project-** the penetration of personal computer and Internet usage, number of people using online services in all regions and also in rural areas of the Republic have been increased (the government created special fund for banks to provide credit with special terms to the citizens with. In addition, project beneficiaries of this project received internet-related special offers, some of them trained in ICT use ICT, a step targeting increased internet access and e-participation). Project duration was 2010-2014. Wireless (Wi-Fi) Internet Access Points project- supply and Installation of Wireless (Wi-Fi) Internet Access Points in Armenian villages located at remote and Bordering Areas, mountainous and high altitude regions and having population of up to 1000 people. The objective of this this project is to increase access to affordable broadband services for citizens, businesses and public institutions, to equip citizens and businesses with a tool for identification and authentication for electronic transactions and to increase access to affordable computers, content and e-services for citizens. The project first phase launched in summer 2014. Establishment of ICT centers in- Technological Centers in Gyumry and Vanadzor, and «mLab» mobile solutions laboratory in Kapan cities will provide training in web-based technologies, computer engineering, mobile solutions e.c.t. The goal is to reduce the ICT literacy gap, as well as to provide job opportunities and economic decentralization in the regions in Armenia.
- Other projects
- Private firms are taking the initiative to close a number of key infrastructure gaps, including in international and intercity connectivity, and are introducing new technologies into the country.

6. What do you consider the most important emerging trends in technology and other aspects of ICTs which have affected implementation of SWISS outcomes since the summit? What has been their impact?

During last years Armenian society has been heavily influenced by 3G, 4G and fiber network technologies, mobile internet, cloud computing, app and device market. Today there is more than 99% of 3G/4G mobile network coverage in Armenia. The use of these advanced technologies promotes interaction and exchange of information between individuals, business enterprises, and other organizations, as well as the provision of services and access to them. The effective utilization of ICT also boosts competitiveness and productivity, promote social and regional equality and improve citizens' well-being and quality of life of Armenia citizens.

Armenia is well positioned to improve its competitiveness and accelerate its economic growth by leveraging opportunities in information and communication technologies (ICT). Armenia's competitive advantages include strong R&D capabilities in computer science, competitive labor

costs, low operating costs, strong university programs specializing in IT and sciences, solid Government commitment, and support from a Diaspora with a strong presence in the Silicon Valley. The country has a strong level of industry maturity with over 40 foreign companies and 100 local companies present in the market. Some growth constraints do remain, particularly in the availability of ICT and engineering skills, reliable telecommunications infrastructure, policies to attract investments, and limited access to finance and markets, notably for start-up ventures. The continuing development of ICT sector has a huge impact on Information Society in Armenia.

7. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account emerging trends.

Today knowledge is an even more important resource in our society, which, with the help of technology, can be utilized more effectively than ever before. The strategic priority has shifted from being a society that utilizes ICT, to one that generates knowledge-based growth enabled by ICT.

The goal of the Armenian information society development is defined to:

- Increase welfare, and create jobs and income
- Provide equal opportunities for the acquisition and management of information, and for the development of knowledge
- Improve conditions for entrepreneurship and the quality of working life, and promote competitiveness
- Increase opportunities for human interaction and cooperation
- Strengthen democracy and opportunities for social influence
- Improve security and the individual's data protection and status as a consumer
- Develop services and cultural provision and increase international interaction
- Boost Armenia's attractiveness as a location for innovative enterprises
- Alleviate inequality between regions
- Support the objectives of sustainable development

The Government is planning to take the following actions as it seeks to improve service delivery to citizens by using ICTs:

- Addressing issues of interoperability and enterprise architecture throughout the Government
- Instituting policy for information security and privacy inclusive of the use of e-signature
- Assessing capacity and needs for cross-governmental data storage, such as cloud computing or other shared infrastructure
- Delivering mobile services and electronic payment capability that would reach underserved rural populations and would promote e-commerce and SME development.

8. What role should Information and communication play in the implementation of the post-2015 development agenda?

The broad utilization of information can provide the countries with the opportunity to function as a global reformer and develop new skills and business. This will require seamless cooperation between different stakeholders and the development of ideas into products and services. The information must be integrated into effective technology and industry policies, and through successful development of activities it can provide highest developed level of Information society. The post-2015 development agenda should boost competitiveness and productivity, to promote social and regional equality and to improve citizens' well-being and quality of life through effective utilization of ICT. The Information Society Program of the countries should be national and international cooperation needs to be of key importance in the implementation of the program. In addition, the program should build up citizens' confidence in information society services by improving data security and protection of privacy citizens' ability to utilize the information society, working life development, and development utilization of ICT in public administration and in other areas. At the result Armenia will have sustainable information society with advanced ICT infrastructure, IT products and services with knowledge based information society, high-level computer literacy, high level of computer saturation and internet access, extended use of e-services systems, and progressive knowledge-based industry.