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

SRI LANKA

Information and Communication Technology Agency of Sri Lanka (ICTA)

World Summit on the Information Society (WSIS) – responses to the questionnaire e Commission on Science and Technology for Development (CSTD) questionnaire vis-à-vis progress under key principles established under the Geneva Declaration:

Background:

The Information and Communication Technology Agency of Sri Lanka (ICTA) has been given the key role of providing leadership in the application of ICT to achieve major economic and developmental improvements in Sri Lanka through implementation of the *eSri Lanka Development Program*. ICTA is the apex ICT institution of the Government. The Information and Communication Technology (ICT) Act No. 27 of 2003 (ICT Act) established ICTA. Through the eSri Lanka Development Project, ICT was to be used to develop the economy of Sri Lanka, reduce poverty and improve the quality of life of the people of Sri Lanka.

The strategy was to provide affordable access and opportunities by improving ICT infrastructure; improve the secure delivery of public services and governance using ICT**;** enhance the quality of education, learning and research through use of ICT**;** build a strong ICT industry**;** proliferate access to ICT and use of ICT applications in rural areas for rural socio-economic development; and create the institutional leadership to carry forward eDevelopment in Sri Lanka.

Q1. The extent to which the "people centered inclusive and development oriented Information Society" envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles been developed in the ten years since WSIS and implementation of specific WSIS outcomes:

The progress in implementing the WSIS outcomes is assessed below with regard to the indicative targets under the Geneva Plan of Action. Sri Lanka has developed and met almost all the criteria as detailed below:

a) Infrastructure, connecting villages with ICT and establishing community access points:

The basic foundation for an information society is the availability of ubiquitous information and communication infrastructure.

Broadband access: In this regard Sri Lanka has embarked on a new initiative to promote and accelerate high speed broadband (HSBB) development. The National Broadband Initiative (NBI) is an initiative under the Telecommunications Regulatory Commission of Sri Lanka (TRCSL), which was formed for implementing the broadband policy proposals.

The target is to make broadband affordable and ubiquitous and provide access speeds equal or greater than 25 Mbps so that all citizens could access the Internet irrespective of their locality by 2019. The goal for end 2019 is to provide 20% of households and other premises with 25 Mbps HSBB Internet access on fiber (FTTx). Another 30% of households and other premises will be

provided with minimum of 10Mbps broadband connections (Invariable bandwidth) using an alternative technology. Satellite, wireless or hybrid technology will be used.

Sri Lanka has achieved its preliminary goals in broadband development. Prior to taking broadband to rural areas, the quality has been improved and charges reduced to an affordable rate. This permits widespread access to high quality, high speed broadband services irrespective of income levels.

To ensure access to all, the introduction of a low cost satellite service is also being planned. At present Sri Lanka has advanced broadband technologies from 4G LTE to FTTH (Fiber to the Home). Since most targets in this regard have been met, the next challenge is to find a way for transforming broadband development to a sustainable model.

Implementation of the specific WSIS outcomes have been achieved significantly with connectivity being ubiquitous and affordable throughout the island; Fiber optic cabling has been established now linking the Jaffna peninsula – which was inaccessible previously - with the rest of the country, offering high-speed communication.

The Internet Society of Sri Lanka promotes the use of the Internet in Sri Lanka, facilitates research into last mile connectivity to the Internet in rural areas in Sri Lanka and conducts training and awareness sessions in network connectivity in rural areas in Sri Lanka.

Nenasala Centers: ICTA has established common access points (termed Nenasala centers or Wisdom centers) throughout Sri Lanka. The first center was launched on 1st January 2005. These multi service centers addressed a lacuna as affordable access is provided through different means, to communication, to the Internet, and thereby to information, relevant content, services and knowledge. Centers are set up in places commonly accessible to all communities. 805 Nenasalas have now been established throughout Sri Lanka[1].

Nenasala centers act as catalysts for increasing the ICT literacy rate in rural Sri Lanka because most Nenasalas offer ICT training as one is one of the primary services. The training is provided in these villages at affordable rates. Training is customized to citizens of varying capabilities and to the needs of specific communities. Nenasala centers expand the choices people have and have contributed towards changing livelihoods, alleviating poverty and facilitating social inclusion by providing ICT facilities and ICT training required to find job opportunities, both locally and overseas

Assessing the implementations have been more human centered in Sri Lanka, in addition to measuring in terms of growth in the infrastructure, number of Internet connections, teledensities etc.

[1] Nenasala Outcome Survey, ICTA, 2013

The Bill and Melinda Gates Foundation has presented its 2014 Access to Learning Award to ICTA's eLibrary Nenasala Program. This is in recognition of the work done to provide free access to computers and the Internet to those living in remote and rural areas.

Access to Government information: Access is also provided through various communication resources, particularly the Internet, to Government information; The Government Information Center (GIC) provides information through multiple channels; through the phone, online (www.gic.gov.lk) or through mobiles. GIC now represents over 291 organizations.

b) Connecting universities, secondary schools, primary schools and research institutions with ICT:

SchoolNet: The SchoolNet, a wide-area network of the Ministry of Education of Sri Lanka, connects senior secondary schools and other organizations, such as the National Colleges of Education, zonal and provincial education offices, etc. SchoolNet is nation-wide infrastructure that brings all organizations related to the school education system online and provides a mechanism for e-learning and an original learning and teaching environment for students and teachers.

A program has been launched jointly between Telecommunications Regulatory Commission of Sri Lanka (TRCSL) and the Ministry of Education to minimize the digital divide and to promote Internet use in schools. This provides high speed broadband services with speeds up to 100 Mbps to school computer labs. Under this program the existing 128 kbps SchoolNet network will be upgraded. (to speeds between 5Mbps-100 Mbps per school lab, which may mean several connections per school if the school has several labs). Implementation of a pilot project has commenced in the city of Colombo. The initial target is to provide for 4000 schools throughout the island within two years. Thereafter all 9000 schools throughout in the country will be provided.

The Lanka Education and Research Network (LEARN) interconnects Universities and research institutions across the country, and has a direct connection to SchoolNet. It supports IPv6 and multicast addressing.

***c)* ICT in health centers and hospitals**

Sri Lanka undertakes provides free health care services to every citizen in the country. The Medical Supplies Division (MSD) is the central organization which makes available all pharmaceuticals, surgical items, laboratory items, printed material etc needed by Government hospitals and healthcare institutions throughout the country. Implementation of a centralized information management system for managing the supply chain of medical items, implementation of an e-tendering system and a web portal for MSD is underway.

d) Connecting all local and central Government departments and establish websites and email addresses:

Connecting Government: Lanka Government Network (LGN) is an IP VPN solution which ICTA established and it connects Government organizations for providing broadband Internet, email and

IP based voice services. Hardware and networking facilities, broadband connectivity and centrally managed Internet access are provided to Government organizations. Centrally managed email access (with web based email access) is also provided. 550 central and provincial Government organizations are connected to the LGN, providing citizen services through secure electronic communications**.**

ICTA established a subsidiary "*Lanka* Government Information Infrastructure Pvt. Ltd*.*" to manage LGN Operations.

Websites: ICTA has facilitated the development of 495 tri-lingual Unicode compliant Government websites. These can be accessed through the Government portal www.gov.lk. Web hosting facilities free of charge are provided to Government organizations at the Government Internet Data Center (GIDC) located in the LGN hub. Government staff have been trained on managing content and maintaining websites.

Communication between Government organizations is secured with digital signatures provided by the LGN Certification Authority.

Lanka Gate is the gateway for electronic information and interactions in Sri Lanka. This country portal (www.lk or www.srilanka.lk) is a key access point and serves as a primary interface that connects users to the eServices provided within the Lanka Gate concept. A Public Finance circular has been accepted on the acceptance of online payments including mobile payments for delivering Government services via the Internet. As per this circular, online payment using any electronic device can be accepted. Government organizations can use the facility to perform the reconciliation for online payments through a single interface without using multiple backend systems.

e) Target H: access to television and radio:

These are ubiquitous throughout Sri Lanka. Even in 2004, over 78% of the population had access to these[2]. (Since licenses are no longer required statistics for later periods are not collected.)

f) Putting in place technical conditions to facilitate the presence of local languages on the Internet and development of local language content: Cultural diversity and identity, linguistic:

Multilingualism of the Internet in a number of areas including domain names, email addresses and keyword look-up, and the necessity for developing countries to access e-content in their own language, and the fact that such multi-language approach is a central element of a multilateral, transparent and democratic process:

Enabling ICT in local languages: The two National languages in Sri Lanka are Sinhala and Tamil. ICTA with stakeholders, such as the Sri Lanka Standards Institution assessed all projects that needed to be implemented to ensure that ICT can be used in Sri Lanka's two local languages in the same way that English is used, i.e. the use of ICT in Unicode Sinhala and Tamil has been enabled; local language scripts

[2] Central Bank of Sri Lanka – Annual Report 2011

are rendered correctly in all key operating systems, Unicode local language fonts and keyboard drivers are available, locale information has been defined.

IDN Top Level Domain Names (ccTLDs) for Sri Lanka, equivalent to .LK in Sinhala and Tamil scripts have been agreed on through a consultative process. These have been approved by ICANN, and are now implemented in the Internet Root Zone. Thus localization has been satisfactorily carried out and Sri Lanka's computing environment has been adapted to suit local linguistic needs.

Content: Much effort was directed at building local language content and services of relevance to rural communities. Some of these projects are as follows: The tri-lingual information repository *Improving Reproductive Health Information Access through ICT,* www.happylife.lkwas satisfactorily implemented in Sri Lanka and has even been replicated in Afghanistan. Another such successful project is *ImpairedAid* targeted to the visually impaired. This software converts Sinhala text to Braille, and vice versa. National Best Content Awards – the e-Swabhimani event– has been held for several years. e-Swabhimani is an ICTA initiative aimed at recognizing excellence in digital content creation. To disseminate agricultural best practices through eLearning, the website www.goviya.lk of the Department of Agriculture and CIC Agri Business was developed with interactive content, research papers and a discussion forum. The CIC Agri Business site www.navagoviya.org focuses on modern farming techniques and the next generation of young farmers. Government websites are in three languages, and a plethora of local language content, websites and blogs have been developed since the use of ICT in local languages was enabled.

Q2. Achievement of Implementation of specific WSIS outcomes:

The WSIS outcomes comprise the Geneva Declaration of Principles and the Geneva Plan of Action adopted at WSIS I and the Tunis Commitment and the Tunis Agenda for the Information Society adopted at WSIS II.

The progress in implementing the WSIS outcomes with regard to the indicative targets under the Geneva Plan of Action which have been described above is satisfactory.

Further the Tunis Commitment specifically addresses the issue of a gender divide and the necessity to overcome this divide. It is to be noted that ICTA especially encourages women to be owners and operators of the Nenasala access centers so that they can be entrepreneurs and are empowered. This is to ensure that any remaining gender divide which has not yet been bridged in any sector in the country is thereby alleviated.

g) Building capacity, to enable the necessary skills for benefiting fully from the information society:

ICTA has gone beyond the provision of access and has also focused on how Nenasala users use ICT since developing human capacities impact national development. Nenasala operators are given in-depth training on managing the centers successfully. Training on local language computing has also been provided to Nenasala operators, since most people in Sri Lanka are not conversant in English.

One of the primary services Nenasala centers offer to users is training; this includes IT training and training in language skills encompassing local languages Sinhala and Tamil and also English. Training is provided in the villages and at affordable rates. Training is customized to citizens of varying capabilities and to the needs of specific communities.

Sri Lanka has addressed the need for building capacity of Government officers. In this regard over 15,000 Government officers have been trained in basic ICT skills, ICT technical skills and in leadership skills. In order to improve the ICT literacy, ICTA also implemented a project targeted to low-income citizens and rural school children. 50,000 citizens from among Samurdhi (a comprehensive development program which targets disadvantaged groups) beneficiaries and rural school children were selected as beneficiaries. Over 700 computer training centers joined the project to provide ICT literacy training island- wide.

ICTA has also addressed private sector development and has conducted training courses to the private sector in subjects identified as being advantageous to the industry under its *Domestic Learning Seminars/ IT-ITES Industry Training program* which assisted the ICT industry in building capacity in areas of priority requirement. Industry professionals were trained in priority areas. *The Training Voucher Scheme/ IT/ITES Vendor Certification Program* assisted in building an internationally qualified workforce. Training of recruits was supported through the *ITES Training Grant/ ITES Recruits Training Program* which was implemented in order to make recruits properly oriented for the work they carried out. *The In-House Training Grant/ In-House Training Program* built capacity within companies based on the company's capacity and skill requirements

The Tunis Commitment emphasizes empowering young people as "key contributors to building an inclusive Information Society". This is an aspect that Sri Lanka is addressing so that Sri Lankan school children, even in rural areas are given the stepping stones towards achieving skills for jobs which may not be at present in existence; IT is available in the A' Level curriculum. A project which has been especially successful in Sri Lanka is the "One Laptop per Child" project. In Sri Lanka, the operating system of these laptops was localized and activities were developed in Unicode Sinhala and Tamil, so that these would be accepted by the children.

h) Creating an enabling environment and increasing confidence and security in the use of ICT:

ICTA has been addressing the issue of formulating and incorporating into the country's legal system, the suitable measures relating to ICT for creating an enabling legal environment.

- Sri Lanka has addressed the issue of cyber crime; The Computer Crimes Act no. 24 of 2007 of Sri Lanka provides for the identification of computer crimes and provides the procedure for the investigation and enforcement of such crimes.

- For strengthening the trust and security framework ICTA established Sri Lanka Computer Emergency Readiness Team | Coordination Center (SLCERT|CC) in 2006, to protect the information infrastructure of the country.

- The e-Transactions Act No. 19 of 2006 of Sri Lanka facilitates domestic and international electronic commerce by eliminating legal barriers and establishing legal certainty; to encourage the use of reliable forms of electronic commerce; and to promote public confidence in the authenticity, integrity and reliability of data messages and electronic communications.

i) ICT applications, e-Services:

ICTA has developed many electronic services (eServices) offered through the Internet, SMS messaging and mobile applications. 48 transactional and informational eServices are being offered by Government organizations.

Some of these services are as follows: the issuance of Revenue Licenses from the Dept of Motor Vehicles; inquiry on reservoir storage details; obtaining copies of certificates from the Dept of Examinations; Bill payments to the National Water Supply & Drainage Board; Purchasing Tender Documents and inquiries on train schedules from Sri Lanka Railways; License issuance and renewal in respect of Shipping Agents, Container Operators, Freight Forwarders and Vessel Wise License Issuance and the payment of property taxes, trade taxes, house rentals, shops and boutique rentals etc to the Colombo Municipal Council.

The Hospital Health Information Management System (HHIMS) developed under ICTA's eSociety program is an open-source database software especially designed for use by hospitals in Sri Lanka to improve the quality of the health services. It stores clinical details of patients and is designed for use by clinical. The system enables hospital staff to refer previous clinical records, print visit slips or discharge letters for patients, print quarterly health statistics and prepare notifications of infectious diseases for the local Medical Officers of Health.

Q3 the way in which the implementation of WSIS outcomes (through the eSri Lanka Development Project) contributed towards the development of a people-centered, inclusive and development-oriented information society?

The ICT sector development took off in a significant manner in 2005 when ICTA commenced the implementation of the e-Sri Lanka Development Project. Since then the sector has acquired national importance and achieved enhanced ICT access in underserved and rural areas, the ICT/BPM (Business Process Management) industry became the 5th largest foreign exchange earner in the country, ICT literacy dramatically increased from less than 8% in 2005, to 35% by 2012, largely contributed by the establishment over 800 Nenasala centers.

A comprehensive legal enabling infrastructure has also been put in place for ICT. In addition several e-Government initiatives have resulted in the improved efficiency of the public sector and enhanced the delivery of public services online, with over 15,000 Government officials being trained and skilled in ICT. The overall effect of ICT development in Sri Lanka is manifested in the significant improvement in

ranking of Sri Lanka's Networked Readiness Index (NRI) published by the World Economic Forum. Sri Lanka was ranked 72% in 2005 and has now improved to the 50% ranking (2012), with the 2011 report identifying Sri Lanka "*amongst the ten most dynamic countries that have progressed the most*".

Sri Lanka has climbed 41 places in the United Nations e-Government development index (EGDI), from the 115th position in 2012, to the 74th position out of 193 countries in 2014. This is a percentile ranking of 38.5%. Now Sri Lanka is in the top 40% of countries in the world engaged in implementing an e-Government agenda.[3] Achieving such a major leap in the UN e-Government index, is the fruition of all the initiatives implemented over the past years. The total no of users of eGovernment services (cumulative) in 2013 was 16,139,281. Sri Lanka is also ranked 7th globally in the category "High On-line Service Performance, relative to income".

Q3 what are the challenges to the implementation of WSIS outcomes?

Challenges encountered are detailed below:

- Resistance by Government officers to change and transformation of working methods due to the implementation IT and the need for initial comprehensive awareness programs to overcome this trepidation.

- The need for comprehensive awareness and training programs to educate youth and schoolchildren on the safe use of social media.

- The need for policies and procedures on disposing increasing ICT waste and alleviating harmful impact on the environment and also the need for policies to address the issue of outdated ICT equipment being brought into the country.

- The necessity to include ICT in for Small and Medium-Sized Enterprises (SMEs), and providing awareness, training and assistance.

Q5 how have these challenges been addressed?

For the eSri Lanka Development Project to be successful, an ICT literate society and a workforce skilled in ICT, was a necessity. Professionals in Government had to be equipped with ICT leadership skills and capacity; Government employees had to be equipped with ICT, management, and technical skills and competencies; and citizens had to be provided with learning opportunities. Therefore ICTA implemented a comprehensive ICT human resource capacity building program covering e-Leadership capability in Government, training Senior and middle level Government officers, and providing Government officers with basic ICT skills and technical training to ensure that the public sector is equipped with the skills and competencies urgently needed to manage eGovernment systems.

[3] The UN e-Government development index is a comprehensive scoring of the willingness and capacity of national administrations to use online and mobile technology in the execution of Government functions. It assesses the e-Government development status of the 193 United Nations Member States.

ICTA has supported the adoption of ICT among small and medium enterprises through its *SME Development Program/ Domestic IT SMB Linkages Program***.** Exhibitions and knowledge sharing sessions were held in all the provinces in Sri Lanka.

Q6 Important trends in technology and other aspects of ICT which have affected the implementation of WSIS outcomes since the summit

The key emerging trend in technology is the fact that in Sri Lanka there is 100% penetration of mobile devices and increasing use of social networks. This has not affected the use and access of the Nenasala access centers since these centers are mostly for enhancing IT skills and livelihood related use, and also in Sri Lanka most key jobs require at least basic conversance in IT use, and one of the key services provided by these centers is IT training.

Conversely, mobile phones are mostly used for personal communication, entertainment and social networking.

Q7. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account emerging trends?

Priorities should comprise ensuring that the infrastructure is in place, ensuring the "buy-in" of all stakeholders with comprehensive awareness programs at commencement, and alleviating resistance, providing affordable access, ensuring the use of ICT in local languages and developing relevant content etc.

Q8 what role should information and communication play in the implementation of the post 2015 development agenda?

Sri Lanka, in the post 2015 development agenda, will have deeper focus on Government efficiency, industry growth, competitiveness and employment creation and will support lagging regions with access, technology and local initiatives,

e-Government work will continue and the high citizen impact projects will be further developed. Government efficiency will be further strengthened using technology and communications, and information and multiple services will be offered online in a cheaper and faster manner.

Industry and micro-enterprise development, and innovation, employment and greater income generation will be supported through increased productivity brought about by ICT adoption. The export competitiveness of many sectors will benefit further from technology improvements and communications. The accelerated development of the ICT/BPM sector will also be addressed.

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Q1: **Salutation:**	Mr.
Q2: **First Name, Surname:**	Dhammika Tantrigoda
Q3: **Organisation:**	National Science and Technology Commission
Q4: **Country:**	Sri Lanka
Q6: **Which stakeholder category do you belong to?**	Government

Q7: **To what extent, in your experience, has the "people-centred, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed in the ten years since WSIS?**

In an information society, creation, acquisition and use of knowledge plays an important role in all aspects of economic, social and cultural life. In a truly inclusive information society all segments of society (rich-poor, urban-rural, male female, young and old) should have equal opportunities to access knowledge to be part of mainstream development.The creation of an information led knowledge society depends very much on the ICT competency of its constituents. It is well known that the ICT competency in most developing countries is still at a significantly low level, even though there is an upward trend in recent years in ICT literacy as shown by indicators such as the use of computers, mobile phones and the availability of internet cafes in urban and to a lesser extent rural areas. Due to this reason and many other reasons extent to which the development of an inclusive information society has taken place in the world is still at a lower level.

Q8: **How far do you consider the implementation of specific WSIS outcomes to have been achieved?**

Specific outcomes of the WSIS have been included in its Plan of Action. Main objective of the Plan of Action is to build an Inclusive Society: to put the potential of knowledge and ICT at the service of development;and to put the use of information and knowledge for the achievement of internationally agreed upon development goals. Right now what has been achieved can be measured in terms of the extent to which development of relevant ICT infrastructure has been possible. This development has taken place in different countries at different levels and scales and the situation in Sri Lanka is revealing in this respect. In Sri Lanka, all universities, university colleges, scientific and research institutes, secondary schools and some primary schools, national archives, main public libraries, national museums, post offices, major hospitals, all central government departments and provincial governments, and district and divisional secretariats are provided with and connected to ICT facilities. Many of these institutions have own web sites and can be accessed via email. Furthermore, the entire country is provided with other telecommunication facilities such as land phone services, facsimile facilities and radio and television services.

Q9: How has the implementation of WSIS outcomes contributed towards the development of a "people-centred, inclusive and development-oriented Information Society"?

As a result of WSIS outcomes most States and private sector organizations have become sensitive to the rights of the people to have access to information and be part of an information society. This has led to the improvement of modern ICT infrastructure providing people with opportunities to access many knowledge bases making them better aware not only of rights and privileges, but also of social responsibility. Hence, WSIS outcomes have played both a positive and a facilitative role in paving the way for the development of an inclusive knowledge society.

Q10: What are the challenges to the implementation of WSIS outcomes? What are the challenges that have inhibited the emergence of a "people-centred, inclusive and development-oriented Information Society"?

Main challenges that inhibit the implementation of WSIS outcomes are:
a. Lack of education (more specifically functional literacy) among masses, especially in LDCs;
b. Lack of reliable and efficient ICT infrastructure to access knowledge bases;
c. Unfamiliarity with modern ICT facilities and the ensuing fear and reluctance to use such facilities, especially among the adult population across societies;
d. Adverse publicity given to the internet, highlighting its ill-effects while ignoring potential benefits.

Moreover, people centered, inclusive and development oriented information society is an advanced concept and a higher level of educational and intellectual attainment is needed to understand its importance. Therefore, it is extremely important to raise the educational level of the people, especially of those in LDCs, to make “people-centered, inclusive and development-oriented society” a reality.

Q11: How are these challenges being addressed? What approaches have proved to be effective in your experience?

The following approaches are most effective in addressing the challenges mentioned above:
a. Provision of more educational opportunities for the masses, especially those who live in LDCs. making the masses aware of their intrinsic right to access knowledge for their personal development and for the development of the society they live in.It is also necessary to generalize the concept of life-long learning;
b. Popularizing ICT facilities and making them available to the general public at an affordable price while providing such facilities free of charge to those who are socially and economically marginalized;
c. Illustrate the importance of living in an inclusive,development oriented information society for social and economic betterment, using popular media;
d. Provide more opportunities for children to be involved in ICT based activities from their formative years;
e. Provide broadband connectivity to all schools.

Q12: What do you consider the most important emerging trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit? What has been their impact?

Introduction of broadband technology/high speed internet facilities has had a tremendous impact on the use of computers for educational and other purposes. Recent price reductions of ICT facilities have also encouraged more and more people to use internet for the purpose of acquiring knowledge and information.
Most important impact that has resulted from the above is in inculcating among many people the habit to learn more and more by ‘mining’ information sites. People who normally do not refer sources such as encyclopedias or advanced glossaries have got used to checking internet information sites when they come across a new word or new phrase. Ability to speedily access various knowledge bases will positively contribute towards the creation of knowledge based society.

Q13: What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account emerging trends?

When emerging trends are considered, Datafication and Cloud Computing are two important priority areas that may facilitate achieving WSIS outcomes for an information society.
Datafication transforms huge amounts of information into digital form which can be accessed through the internet. Creation of such an environment provides enhanced opportunities for people to be knowledgeable in a wide spectrum of areas.Similarly Cloud Computing provides environment that is less dependent on ICT infrastructure thereby making information bases accessible to many groups.

Q14: What role should information and communications play in the implementation of the post-2015 development agenda?

Post 2015 Geneva Agenda is an ambitious one which envisages protecting and reinforcing human rights.It recognizes the importance of human rights to realize economic and social development and calls for the enforcement of human rights both online and offline while at the same time encouraging people centered and inclusive governance models and mechanisms and modern ICT based interactions such as e-education, e-governance, e-science etc. Success of such an Agenda much depends on the educational attainments of the people. Now available information and communication facilities can be put to good use to educate and uplift people to the required level especially by encouraging the use of open and distance learning facilities. Further, by using internet and other ICT infrastructure people in different parts of the world can be encouraged to interact,share information and learn from one another and thereby help develop greater understanding for a harmonious and peaceful existence.

Q15: Please add any other comments that you wish to make on the subject of the review that you believe would be helpful.

. In recent times there is a proliferation of knowledge bases that can be accessed through the internet on a given subject. Some may provide accurate information while others may provide partially accurate or even wrong information. The user should be educated on how to distinguish between accurate and partially accurate or wrong information by comparing information from different sources and making a proper assessment of their validity. In the future, development of this skill among children and others should be an important component of their formal education.

Q16: We would also welcome any documents, reports, etc. that you can forward which you think will provide useful evidence for the review. Please send these to cstd-wsis10@unctad.org. It would be helpful if you could list these in this box, together with any URL which enables access to them on the World Wide Web.

The Ministry of Technology and Research of Sri Lanka recently formulated a “R&D Investment” framework for the purpose of aligning S&T activities towards the national development agenda. The framework has identified ten focus areas that need immediate R and D interventions. “ICT and Knowledge Services” is one of the focus areas of the framework and activities proposed under this area may contribute towards the development of an “Inclusive Information Society”. Detailed report and the section on “ICT and Knowledge Services” are available in the website of the National Science and Technology Commission (www.nastec.lk)