

A.1. What can be done to reinforce the right to seek and receive information in the online environment?

Seeking and receiving information is a fundamental human right according to international human rights frameworks. Article 19 of the Universal Declaration of Human Right of the 1948 stipulates “that everyone has the right to freedom of opinion and of expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers. Communication is a fundamental social process, a basic human need and the foundation of all social organization. It is central to the Information Society. Everyone everywhere should have the opportunity to participate and no one should be excluded from the benefits of the Information Society”.

As we all know, ICTs, are gradually becoming an integral part of our lives, having a tremendous impact on social, economic and developmental aspects of modern societies. ICTs are not just a medium for communication, importantly they open the door to an enormous, variable and easily accessible source of information and opportunities for all. Access to information is essential for the personal and professional development of all individuals, as well as in exercising their fundamental rights such as the right to education and freedom of expression.

As our world gets more and more digitalized, the right to seek and receive information is inevitably translated as a right to access to ICTs. The number of Internet users keeps growing globally, now counting almost 3 billion. Two thirds of the world’s Internet users are from the developing world. In developing countries, the number of Internet users will have doubled in 5 years, from 974 million in 2009 to 1.9 billion in 2014¹.

However a large part of the world and a majority of its people is still unconnected and therefore without access to means of online communications. It is important that we all work hard on bringing the benefits of ICTs to every corner of the world through promoting higher broadband penetration in developing and least-developed countries and helping build the necessary capacity within the newly-connected communities for an efficient and secure use of information technology.

During the 2014 ITU Plenipotentiary Conference (PP-14)² held in Busan, South Korea, ITU launched its **Connect 2020 Agenda**³ for Global Telecommunication/ICT Development. The Connect 2020 Agenda sets out an ambitious vision for the telecommunication/ICT sector for year 2020, highlighting the role of ICTs as a key enabler for social, economic and environmentally sustainable growth and development and is further complemented by a set of four goals and related targets to be achieved by 2020.

- Goal 1: Growth – Enable and foster access to and increased use of telecommunications/ICTs
- Goal 2: Inclusiveness – Bridge the digital divide and provide broadband for all
- Goal 3: Sustainability – Manage challenges resulting from telecommunication/ICT development, including building confidence and security in the use of ICTs

¹ For more information on the statistics please can be found at <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2014-e.pdf>

² <http://www.itu.int/en/plenipotentiary/2014/Pages/default.aspx>

³ <http://www.itu.int/en/connect2020/Pages/default.aspx>

- Goal 4: Innovation and partnership – Lead, improve and adapt to the changing telecommunication/ICT environment

Enabling and fostering access to and increasing the use of telecommunication/ICTs, as well as extending their benefits to all countries and regions of the world, including vulnerable groups such as women, children, persons with disabilities etc. have been identified as key priorities in this Agenda.

Through the Connect 2020 Agenda ITU and its Member States committed to work towards this common vision and invited all stakeholders to contribute with their initiatives and their experience, qualifications and expertise to its successful implementation.

A3. How can greater progress be made as regards inclusive strategies for women and girls as well as marginalized and disabled people?

ITU encourages its Member States to support the following steps to make greater progress towards inclusive strategies for women and girls as well as persons with disabilities..

1. Include digital solutions in national strategies to promote the empowerment of girls and women and persons with disabilities.

For women and girls in particular:

2. Teach vital STEM studies to girls and young women.
3. Encourage young women to take up ICT careers including by supporting International Girls in ICT Day (www.girlsinict.org). In this way, women and girls become the creators of ICT solutions to their daily challenges.
4. Encourage ICT companies to recruit, retain and promote women in tech careers.
5. Include digital skills in school curriculum and adapt curriculum to incorporate collaborative ways of acquiring ICT skills such as mobile app competitions, hackathons and maker faires.
6. Update concepts of digital literacy to move beyond merely reading the web to developing the necessary skills to write the web.
7. Recognize that there are ever growing numbers of free online training resources for women and girls to obtain the skills they need for jobs or to launch their own businesses. Encourage schools to make use of growing array of free materials available online. (See ITU *Digital Opportunities: Innovative ICT Solutions for Youth Employment* at [Youth/Resources/">http://www.itu.int/ITU-D/sis>Youth/Resources/](http://www.itu.int/en/ITU-D/Digital-Inclusion/Youth-and-Children/Documents>YouthReport_2014.pdf). ITU has created a database of free online resources at <a href=)
8. Support skills development for out-of-school women and girls in telecentres, libraries and community technology centres and train staff to serve as curators of free online resources noted in number 7.

9. Scale promising solutions -- like digital literacy training and mobile app competitions -- that have been pioneered by NGOs, foundations, local governments, international organizations, and the private sector. ITU partnered with NGO Telecentre.org Foundation to train 1 million women at the bottom of the development pyramid to become digitally literate (<http://www.itu.int/en/ITU-D/Digital-Inclusion/Women-and-Girls/Pages/Digital-Literacy.aspx>). Education and ICT ministries could collaborate to replicate such digital literacy training in schools and community ICT centres for women and girls who are out of school.
10. Promote and support collaborative innovation spaces such as co-working spaces, tech hub and hacker/maker spaces as both business incubators and skills development centers.
11. Fund app contests and hackathons to help fund young women entrepreneurs and develop their skills.

For persons with disabilities

1. Ensure accessible ICTs are available in country so they can be used for inclusive education and decent employment of persons with disabilities.
2. Adopt accessible ICT policies in line with the ITU-G3ict Model ICT Accessibility Policy Report at <http://www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Documents/ICT%20Accessibility%20Policy%20Report.pdf>.
 - a. This requires action by ICT policy makers and regulators but also government agencies that procure ICTs.
 - b. If government agencies procure accessible ICTs they not only ensure that accessible ICTs are available to citizens using digital government services and persons with disabilities working for the government, they also create positive market dynamics which lead to lower development costs and greater affordability of ICTs and widespread availability of accessible ICTs for everyone.
3. Train persons with disabilities to use accessible ICTs.

Noteworthy that Connect 2020 Agenda for Global Telecommunication/ICT Development, adopted by at the ITU Plenipotentiary Conference 2014 includes the following targets:

- 1) Target 2.4: Worldwide, 90% of the rural population should be covered by broadband services by 2020;
- 2) Target 2.5.A: Gender equality among Internet users should be reached by 2020
- 3) Target 2.5.B: Enabling environments ensuring accessible telecommunications/ICT for persons with disabilities should be established in all countries by 2020

Member States committed to work towards these targets and invited all other stakeholders to contribute with their initiatives, and experience, qualifications and expertise to the successful implementation of this agenda.

A.4. How can accessibility be facilitated through increases in locally produced and relevant content in different languages?

- a. For persons with disabilities and illiterate populations, the use of text to speech engines in local languages is essential. Text to speech (TTS) engines exist in major languages. UNESCO could investigate if TTS is available in all languages and promote development where it does not yet exist.
 - i. TTS can be used to translate, create captions, translate audio description, interpret, take minutes of meetings, do data mining, analyze bid data, etc.
 - ii. ITU is developing training materials for broadcasters on how to develop Audio Description for the blind and closed captions for the deaf.
- b. There is also Speech to text (STT) which can be used to transcribe spoken language. Once it is in writing it can be used for machine translation.
 - i. The challenges are expense, especially for small languages, and quality, which is increasingly improving. The more it's done the better it gets.
 - ii. Large companies may be less interested in developing technologies for STT in small languages since there is a small market.
 - iii. SST has been developed in some small languages due to language policies (e.g. Danish and Flemish) where governments have decided to invest in them. A large corpus is needed to develop SST, which can come from different sources, e.g. parliamentary hearings.
- c. ITU would be pleased to introduce UNESCO to professionals working on language technologies.

C.13. What is the relationship between privacy, anonymity and encryption?

Enhancing trust in cyberspace is essential for ensuring a broader use and further development of ICTs. A holistic approach that preserves human rights and fosters balance (as well as mutual reinforcement) between security and privacy, while dealing with cyber threats, is key for maintaining an open and safe online world, that empowers its users.

Security technologies, such as encryption tools, aim to provide a level of privacy protection, where sensitive, personal data are transmitted or stored online and could fall prey to ill-intentioned people, causing potential financial or personal harm to their owners.

An example of technical work within ITU includes the work by ITU's Standardization Sector, Study Group 17, which looks into standardization matters of ICT security, included the topic of encryption procedures for Internet of (IoT) device security in its work programme.

C.16. How can openness and transparency of data be reconciled with privacy?

Within the UN System, the need for human rights protection online, including privacy, has been highlighted by many different instruments, including the UNHRC Resolution 20/8 and UNGA Resolution

68/167, as well as the WSIS+10 Statement on Implementation of WSIS Outcomes and the WSIS+10 Vision for WSIS Beyond 2015 endorsed in June 2014⁴.

The UN System Internal Coordination Plan on Cybersecurity and Cybercrime, which was endorsed by the UN CEB in November 2014, as a guide to internal coordination activities for UN system organizations in the area of cybersecurity and cybercrime, includes a dedicated section on “Agency requirements for balancing privacy and transparency when conducting their work”. This sets the ground for future internal coordination work among UN agencies towards the development of internal policies that promote the right to information, as appropriate, while also taking into account questions of privacy.

C17. What may be the impact of issues relating to Big Data on respect for privacy?

As the amount of personal data and global digital information grows, so does the number of actors accessing and using this information. Assurances must therefore be given that personal data will be used appropriately, in the context of the intended uses and abiding by the relevant laws. Standards are very useful for defining requirements in this context. The ITU Telecommunication Sector, together with other standardization agencies are striving to enhance the technical capacity to secure online privacy. ITU’s standardization activities address individual infrastructure requirements, noting existing work in domains including optical transport and access networks, future network capabilities (e.g., software-defined networks), multimedia and security. A review of this work from the angle of data-driven applications could yield significant results in the big data context⁵. The study of a new Recommendation, titled “Requirements and capabilities for cloud computing based big data” has been initiated to address the relationship between cloud computing and big data in view of requirements and capabilities⁶. With two approved Recommendations, ITU has further been accelerating its efforts to increase interoperability in electronic health applications, in areas such as the exchange of health data⁷ and the design of personal health systems⁸.

C. 19. How can Media and Information Literacy be developed to assist individuals to protect their privacy?

In the digital world we live in, where people are exposed more than ever to an enormous flow of information, whose source and legitimacy is hard to verify, it is important that ICT users are empowered with the right tools and competencies that will enable them to make the most of this online experience. Especially as Broadband rollout expands to unconnected areas of the world and the global digital divide becomes narrower, the need for effective capacity building frameworks arises, to ensure the provision of necessary guidance for a fruitful and safe interaction in cyberspace.

⁴ <http://www.itu.int/wsisis/implementation/2014/forum/dam/documents.html>

⁵ http://www.itu.int/dms_pub/itu-t/oth/23/01/T2301000160001PDFE.pdf

⁶ http://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=9853

⁷ http://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=9637

⁸ http://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=9636

The ITU Development Sector runs several programmes in all regions of the world that address issues of cybersecurity and aim to enhance awareness of the risks borne in cyberspace, as well as of ways to remain protected. In that sense security is not limited to blocking malware and other malicious software, but aims at the promotion of a conscious cyberspace culture, that allows ICT users to control their digital footprint and manage their own safety.

Among the groups that are most in need of such measures are children and teenagers. Today's children are digital natives using ICTs from a very early age. The Internet has proven to be one of the most powerful forces for learning and knowledge sharing, however it also bears significant risks for younger and more vulnerable users. ITU's Child Online Protection (COP) Initiative, comprising partners from all sectors of the global community, organizes trainings and educational workshops in a number of countries and has also developed Guidelines for Children, Parents & Educators, Industry and Policy makers, aiming to create awareness on the risks involved in the use of ICTs by minors and suggest ways, in which each of the respective groups could contribute to reducing their negative impact.

Given the vast distribution of relevant awareness building activities, especially those by different UN Agencies, based on their mandates and responsibilities, an internal coordination mechanism is considered important. In this regard, the endorsement of the UN System Internal Coordination Plan on Cybersecurity and Cybercrime by the UN CEB in November 2014 constitutes a successful starting point for UN-internal coordination activities in this area.

D.22. How does ethical consideration relate to gender dimensions of the Internet?

There are various ethical considerations to explore with regards to gender and the internet. Let's define gender as:

"Gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys. These attributes, opportunities and relationships are socially constructed and learned through socialization. They are context/time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or man, in any given context. In most societies, there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Other important criteria for socio-cultural analysis include class, race, poverty level, ethnic group and age."

Given the above definition, there is a correlation between ethical consideration and gender dimensions of the Internet as the general school of thoughts of ethics is based on the moral principles that govern a person's or group's behavior. This linkage is more pronounced when it comes to women and men, and boys and girls where ethical principles in many developing countries disadvantage women and girls compare to men and boys. Traditional, cultural beliefs and negative ethical reasoning exacerbate discrimination and inequality since childhood.

- To reverse this school of thoughts, and deliver in an efficient manner governments must create an enabling environment and should be an early adopter of ICTs to spread through social media for

example how women and girls can have access to internet, to enter the knowledge society and empowered through the use of new transformative technologies, and broadband;

- Women and girls may refrain from online interactions and access to ICTs because it is believed and accepted that women and girls tech-savvy. This type of thinking may prevent women and girls from having access to information and enter knowledge society that may facilitate an opportunity for prosperity and a better life for them in today's modern and information age;
- Examining ethical dimensions related to gender and access to the internet and ICTs can help redress gender inequities and inequalities in regard to content and digital literacy, reinforce social attitude, and or to bridge gender digital divide;
- In 2013, a report by the Broadband Commission Working on broadband and gender entitled “Doubling Digital Opportunities: Enhancing the Inclusion of Women & Girls in the Information Society” estimates that there are 200 million fewer women online than men; women coming online later. Of the world's 2.8 billion internet users, 1.3 billion are women, compared with 1.5 billion men. In the developing world overall, 16% fewer women than men are online.
<http://www.broadbandcommission.org/Documents/working-groups/bb-doubling-digital-2013.pdf>
- The Convention of the Elimination of All Forms of Violence against Women (CEDAW) known as the bill of rights of women states that when it comes to the access to information, girls and women are at the disadvantage compare to boys and men;
- Several means can be deployed to assist women in preventing them against this injustice such as harnessing the power of information communication technologies/broadband as a game changer, cross-cutting issues, tackling gender equality, and as a catalyst for all three pillars of sustainable development: social inclusion, economic growth and environmental sustainability;
- A country should implement policies to achieve the Millennium Development Goal by 2015 in order to ensure that women and girls being the most vulnerable of society receive fair treatment regarding access to information, to internet, to education programs since lack of education, high illiteracy rates and low primary school enrolment ratios constitute a dimension of poverty;
- Negative ethical considerations to gender and the internet should be prohibited through mechanisms that involve all players , governments, civil society, women/youth association, religious leaders, the community, schools teachers, Human Rights advocates among others for the compliance of human rights norms to protect the rights of women and girls' and achieve gender parity online.
- ITU is working tirelessly to use the power of ICTs broadband to bridge the gender digital divide and promote the digital inclusion of women in line with Millennium Development Goal 3 on gender equality. It is recognized that that all human rights are "indivisible, interdependent, and interrelated. Thus Equal access to internet, to information communication technologies is critical for gender equity and women's human rights;
- Given that the gender definition says that “Gender determines what is expected, allowed and valued in a woman or man, in any given context,” ethical considerations need to be re-evaluated, particularly those that are negative. For example, ethical considerations that prevent women and girls to fully enter in the knowledge society must be fought as ending discrimination against women and girls is indispensable for a just society. Women's human rights are often violated; the foundation of human rights is based in one humanity, just by being a human being regardless of social contingency.

E.27. What pertinent information materials exist that cut across or which are relevant to the four fields of the study (i. Access to information and knowledge; ii. freedom of expression; iii. Privacy; iv. Ethical dimensions).

Information and communication technologies (ICTs) cut across all sectors/areas including the four fields of study. By being the link and medium of information creation, storage, and sharing, ICTs are essential to the four fields of study. Access to information and knowledge is critical in today's modern age. By having a wider access to ICT resources, new communication technologies can be a means to ensure greater accountability and coherence with human rights and other normative frameworks.

F.28. What might be the options for the role of UNESCO within the wider UN system in regard to the distinct issues of online access to information and knowledge, freedom of expression, privacy and ethical dimensions of the information?

The related issues are all multi-faceted and complex topics. The UN System Internal Coordination Plan on Cybersecurity and Cybercrime was endorsed by the UN CEB in November 2014, as a guide to internal coordination activities for UN system organizations in the area of cybersecurity and cybercrime. UN internal coordination plan strives to address the range of issues these topics present as relevant to the work of the UN system, focusing on those that concern the UN system as a whole. In the implementation phase, the active participation of UNESCO, with its relevant mandate in many related areas, would be vital to the plan's successful implementation.

F.30. For each study field, what specific options might UNESCO Member States consider, including for the Organization's Global Priorities of Africa and Gender Equality, shaping the post 2015 development agenda, supporting the goals of Small Island Developing States and taking forward the Decades for Rapprochement of Cultures?

The following options could be considered:

- Considering to use ICTs/Broadband Telecommunications services in all undertakings as information communication technology is a powerful means to advance the Organization's Global Priorities of Africa and Gender Equality, shaping the post 2015 development agenda, supporting the goals of Small Island Developing States and taking forward the Decades for Rapprochement of Cultures.
- ICT underpins everything we do and it is crucial to take advantage of transformative communication technologies and broadband that improves the lives of all, especially in Africa, the LLDCs, LDCs, SIDS and the developing world where the digital divide is even widen.
- Supporting Connect 2020 Agenda, Smart Africa Initiative, as well as the Istanbul Plan of Action on LDCs in regard to ICTs that providing reliable and affordable infrastructure services such as electricity, transport, ICTs and water as well as institutional capacity are critically important for building viable productive capacity in the LDCs'.
- Fostering partnership for the full integration of LDCs and SIDS into the knowledge society and preserving their cultural heritage in the world economy through ICTs connectivity would be valuable.

- Encouraging ITU/UNESCO as well as all UN system and private sector and other stakeholders to commit themselves to support LDCs and SIDS to overcome their unique challenges.
- Delivering and working as one to implement the SAMOA outcome document called “The Small Island Developing States Accelerated Modalities of Action” (Samoa Pathway) to promote coherence and synergies and achieve common goals.
- Collaborating with ITU to work in the same vein with tech companies to provide smarter and low-cost technologies that will fast-track LDCs and SIDS into the Knowledge Society.