WSIS
FORUM 2023

13-17 March 2023
Virtual Workshops in April & May

High-Level Track Outcomes and Executive Brief

Organized by

In collaboration with

ITU

unesco
United Nations
Educational, Scientific
and Cultural Organization

**UNITED NATIONS
UNCTAD**

**UN
D
P**

WSIS Forum 2023 – High-Level Track:
Summaries of the High-Level Policy Sessions

Table of Contents

WSIS Forum 2023 – High-Level Track:
Summaries of the High-Level Policy Sessions

Introduction

At the WSIS Forum 2023, moderated High-Level Policy Sessions of the High-level Track took place on the 14th and 15th of March. These 11 sessions, moderated by High-Level Track facilitators nominated and identified by WSIS stakeholders, gathered High-ranking officials of the WSIS Stakeholder community, representing the Government, Private Sector, Civil Society, Academia and International Organizations.

Chairperson Summary

- *WSIS Forum 2023 Chairperson:*
H.E. Dr. Emilija Stojmenova Duh, *Minister, Ministry of Digital Transformation, Slovenia*

The topics you have discussed during last two days address very well the current challenges: bridging digital divides, enabling environment for digital technologies, inclusiveness and access to knowledge for all, digital economy and trade, ethical dimensions of ICT, climate change, knowledge societies and capacity building.

It is my pleasure to hear that you have contributed many interesting ideas and insights at different panels. You were concrete in presenting good practices and bold in providing ground-breaking solutions for the demanding challenges we face.

I would like to point out three main take aways:

1. Access, availability and affordability should be the driving forces of digitalization.
2. Digital education and digital skills play a crucial role in the adoption of digital technologies. They not only enable population to use the ICT for good, but also prevent harm and decrease risks.
3. Trust in digital is of key importance. We can only reach it by developing a human-centric and human rights-based approach to digital technologies with full inclusion of everyone, regardless of their gender, age, location and race.

The road ahead vision for an inclusive digital society demands a concerted and collaborative effort from all stakeholders, including governments, the private sector researchers, academia and civil society.

Challenges that stand before us are numerous:

- lack of access to high-speed internet, particularly in rural and remote areas
- inadequate investment in ICT infrastructure development
- limited availability of affordable devices
- lack of digital literacy among marginalized populations, such as older adults, women, and those in low-income communities
- limited access and low adoption of e-services due to inadequate infrastructure, connectivity, or digital literacy

For overcoming these barriers, we need:

- to expand network coverage and increase investment in ICT infrastructure, in particular public-private partnerships
- to implement universal service funds to ensure connectivity in underserved areas
- to encourage manufacturers to develop low-cost and high-quality devices
- to develop comprehensive digital literacy programs targeting marginalized populations and bridging the digital gaps (women in STEM education, initiative for including silver age population, etc.)
- to integrate digital literacy into school curriculums and adult education programs
- to invest in the development and promotion of user-friendly e-services for health, education, and public administration

- to accelerate digital transformation in the public sector to improve service delivery
- to consider spectrum as a major enabler of the growth of the digital economy, especially with the promotion of 5G and next-generation services.

WSIS Forum 2023, bringing together over 1400 participants, has been an amazing opportunity to exchange numerous good practices from all around the world.

I was amazed at the example of Somalia, working on a universal access plan and e-government policies, Georgia building user confidence through digital literacy campaigns, Zimbabwe expanding telecommunications infrastructure across the country, India's project on digital identity destined to provide digital authentication to the entire population, Lithuania's partnerships with schools, public libraries and NGOs to fight against online child abuse, Comoros plans on National Digital Strategy and accessibility of Zambia's government services online.

Indeed, we are all facing numerous remaining challenges. Unequal access to digital services, gender, age and geographical digital divides persists. Risks to safety online, especially for the groups in situations of vulnerability such as children and older persons, is of utmost importance. Cybersecurity and cybercrime threats must be taken most seriously, and international cooperation is needed to work on a common framework in this regard.

Our "to do" list is long.

But international cooperation and multistakeholder engagement are the key.

Therefore, processes as WSIS are an immense contribution. They bring us together to meet and build meaningful partnerships. And they are of immense help on our way towards achieving sustainable development goals.

I would like to thank you all for your active participation and wish you success in your future activities.

Thank you.

HLPS 1:   Bridging Digital Divides

High-Level Track Facilitator:
Meni Anastasiadou, *Digital Policy Adviser, ICC*

WSIS Action Line Facilitator:
Bilel Jamoussi, *Chief, Study Groups Department, Standardization Bureau, ITU*

1.1. Introduction

The session convened a conversation between a diverse group of stakeholders, discussing the current challenges and efforts in addressing the digital divide. Against this background, the panellists provided insights on the state-of-play and progress made under the principle of reaping the advantages and opportunities offered by information and communication technologies. The session showcased the importance of accelerating digital inclusion as a key contributing factor towards achieving sustainable development, while highlighting the multi-layer aspect of addressing the digital divide, thus underlining the importance of investing in collective action and collaborative efforts from all stakeholders.

1.2. Vision and priorities

The session highlighted priority areas in bridging the digital divide, including (i) investment, competition, and innovation in the development and deployment of broadband services and connectivity devices, with the aim of expanding affordable access and end user choice for broadband connectivity (ii) investing in digital literacy and skills development, and supporting multi-sectoral initiatives (iii) accelerating gender inclusion with regards to access to digital technologies, (iv) prioritizing marginalized and low-income communities.

1.3. Key challenges

One of the key challenges illuminated through the interventions, was the need to advance inclusive digital opportunities, through a global cooperation approach, aiming to contribute to bridging the gender digital divide holistically.

1.4. Links to WSIS Action Lines and SDGs

Connection of the session to the WSIS Action Lines:
- C1. The role of governments and all stakeholders in the promotion of ICTs for development
- C2. Information and communication infrastructure
- C3. Access to information and knowledge
- C4. Capacity building
- C5. Building confidence and security in use of ICTs
- C6. Enabling environment

Connection of the session to the sustainable development goals:
- Goal 3: Ensure healthy lives and promote well-being for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation
- Goal 17: Revitalize the global partnership for sustainable development

1.5. Case examples

1) Argentina's launch of Centre of Genders in Technology, with the aim of promoting a more equal labour inclusion and the training of women in STEM, through public-private collaboration as the main pillar of the Centre;

2) Promote a collaborative program with local authorities in order to eliminate barriers to telecom infrastructure deployment for rural, remote and hard-to reach areas in Colombia;

3) IFT's digital literacy courses and talks focused on targeted groups, such as children, teenagers, as well as recommendations of safe browsing, the use of devices for elderly women and indigenous people in Mexico;

4) Poland's auction for 5G frequencies to provide consumers with the highest quality internet;

5) Alzheimer's collaborative and global health initiative modelled and created by the World Economic Forum in 2021, partnering across sectors to ensure that the health innovations, technological and beyond, are able to be accessed, regardless of geographical location;

1.6. Road ahead

With a mutual understanding of the role of ICTs and digital technologies in accelerating sustainable development the panellists aligned on the need for a multistakeholder approach in bridging the digital divide. Such efforts will bolster social and economic growth for the achievement of the SDGs and the acceleration of digital transformation for all.

HLPS 2: Enabling Environment

High-Level Track Facilitator:
Anja Jeanette Haga Engen, *Policy Manager, Access Partnership*

WSIS Action Line Facilitator:
Stephen Bereaux, *Deputy Director, Telecommunication Development Bureau, ITU*

2.1. Panellists

- **H.E. Jama Hassan Khalif**, Minister of Communications and Technology, SOMALIA (Federal Republic of)
- **Stephan A. Lang**, Deputy Assistant Secretary of State Bureau of Cyberspace and Digital Policy, UNITED STATES OF AMERICA
- **Mercedes Aramendía**, President of the Uruguayan Regulatory Unit of Communication Services (URSEC), URUGUAY
- **Dr. Gift Kallisto Machengete**, Director General, Postal and Telecommunications Regulatory Authority, ZIMBABWE
- **Ekaterine Imedadze**, Commissioner, National Communications Commission, Georgia
- **Thomas Coughlin**, 2023 IEEE President Elect, IEEE
- **Andrew Wilson**, Global Policy Director, International Chamber of Commerce (ICC)
- **Sally Wentworth**, Managing Director, Internet Society (ISOC)

2.2. Introduction

High-Level Policy Session 2 entitled "Enabling Environment" – which is WSIS Action Line 6 – had good representation of all stakeholder types and regions across the panellist group, including representatives from Somalia, the United States, Uruguay, Zimbabwe, Georgia, IEEE, ICC, and the Internet Society. Our Action Line Facilitator was Stephen Bereaux, Deputy Director of the BDT.

2.3. Goal & Vision

Session 2 aimed at reiterating the importance of an enabling environment for ICT development through tailored policies and regulations, developed nationally, regionally and internationally, with a view to accelerating economic growth and social development.

During the session, the panellists reiterated the vision of an "Enabling environment" referring to policy, legal, market, and social considerations that interact at both the domestic and global levels to foster ICT-led growth – with a view to create a digital economy that can enhance the role of ICTs in achieving the Sustainable Development Goals (SDGs).

2.4. Priorities

The panellists agreed on several policy priorities that need to be addressed in order to create an enabling environment. These include but are not limited to: (i) Safety and confidence in the use of ICTs, (ii) consumer protection, (iii) privacy and data protection, (iv) competition and market entry, (v) balanced spectrum ecosystem, (vi) connectivity and universal service and access, (vii) energy sustainability, and (vii) an open, safe, inclusive and affordable internet.

The session emphasized that these policy priorities need to be based on multistakeholder collaboration to ensure that the voices of industry and civil society are heard.

2.5. Case Studies

The panellists provided examples of how their country/organization is putting efforts in creating an enabling environment. Some examples include:

- The Ministry of Communications and Technology of Somalia works to implement the Telecommunications Act, prepare universal access plan, and e-government policies. The ministry is also implementing a digital literacy campaign, which educates almost 20,000 individuals in the field of digital and ICT development.
- The National Communications Commission of Georgia has been assigned to developing media literacy among the Georgian society, with a view to building user confidence in their interaction with information and communication technology. The Commission has implemented awareness programs on the internet and its use and online child protection programs associated with the educational system and in public-private partnerships.
- The Postal and Regulatory Authority of Zimbabwe has implemented:
  - A convergent licensing framework that caters for different types and level of licences that reduces barriers to entry for small players.
  - Telecommunication tower construction projects through the Universal Service Fund. From 2016 to date, a total of one thousand and fifty-eight (1058) telecommunication towers are shared in Zimbabwe.
  - An innovation programme that has seen young people coming up with innovative solutions to achieve the SDGs related to no poverty, good health, quality education, affordable and clean energy, industry and infrastructure, reduced inequalities, decent work and economic growth, and sustainable cities and communities.
- The IEEE has implemented standards to enhance the circular economy, for example by extending the storage product life cycle.

2.6. Links to WSIS Action Lines and the SDGs

The conversation touched upon the following WSIS Action Lines:

- The role of governments and all stakeholders in the promotion of ICTs for development – Action Line 1
- Information and communication infrastructure: an essential foundation for an inclusive information society – Action Line 2
- Access to information and knowledge – Action Line 3
- Capacity building – Action Line 4
- Building confidence and security in the use of ICTs – Action Line 5
- Enabling environment – Action Line 6

2.7. The Road Ahead

The road ahead to ensure "an enabling environment" include the following:

I.   Stronger collaboration between public and private sector entities on policy and regulatory development, nationally, regionally and globally. This means:

a. Adopting a people-first approach which strikes a balance between promoting innovation and protecting consumer's rights and interests.
b. Promoting competition and facilitate market entry as markets are still developing. Competition enables consumer choice, innovation and investment.
c. Considering spectrum as a major enabler of the growth of the digital economy, especially with the promotion of 5G and next-generation services.
d. Promoting an open, safe, inclusive and affordable internet.
e. Enhance digital literacy and skills to ensure an inclusive Information Society.
f. Ensuring that the digital economy is fuelled by sustainable power, which means:
    i. Using renewable energy by utilizing sources of energy that are naturally replenished, such as solar, wind, and geothermal power.
    ii. Developing energy storage mechanisms to collect and save energy for current and future use.

HLPS 3:   Building confidence and security in the use of ICTs

High-Level Track Facilitator:
Karen Mulberry, *Senior Manager, Public Affairs, IEEE Standards Association*

WSIS Action Line Facilitator:
Preetam Maloor, *Head of Emerging Technology Division, ITU*

3.1. Panellists

- **H.E. Ousman A. Bah**, Minister, Ministry of Information and Communications Infrastructure, GAMBIA (Republic of the)
- **H.E. Prof. Isa Ali Ibrahim Pantami**, Minister, Federal Ministry of Communications and Digital Economy, NIGERIA
- **H.E. Chaiwut Thanakamanusorn**, Minister, Ministry of Digital Economy and Society, THAILAND
- **H.E. Dr. Nizar Ben Néji**, Minister, Ministry of communication technologies, TUNISIA
- **Dr. Mohamed Al Kuwaiti**, Head of the Cyber Security, Cyber Security Council, UNITED ARAB EMIRATES *[WSIS Forum 2023 Platinum Partner]*
- **H.E. Dr. Jenfan Muswere**, Minister, Ministry of ICT, Postal and Courier Services, ZIMBABWE (Republic of)
- **H.E. Henri Verdier**, Ambassador for Digital Affairs, Ministry for Europe and Foreign Affairs, FRANCE
- **Dr. Velislava Hillman**, Founder and CEO, EDDS
- **Stéphane Duguin**, CEO, CyberPeace Institute
- **Prof. Salma Abbasi**, Chairperson and CEO, eWorldwide Group
- **Dr. Olga Cavalli**, Director, South School on Internet Governance SSIG

3.2. Executive Summary

Security and addressing the risks and impacts of cyber threats is an ongoing challenge as the need to protect everyone as well as to maintain trust and confidence in digital platforms and information is critical as we all move further into the digital age. As more information, services and knowledge are online, access to a safe environment is important to building a better ICT environment for all.

The High-Level Panellists identified that addressing the issues and challenges of security requires both government policies, strategies and regulations and a public private partnership to develop approaches to meet growing cybersecurity threats. In addition, the High-Level Panellists identified actions that are being undertaken to establish collaborative efforts to raise awareness of the need for online security, noting growing cooperation with other countries, international organizations, and global partners in addressing and resolving cybersecurity threats.

The High-Level Panellists emphasized that in the digital age, security and trust are crucial to ensuring online access and the exchange of trustworthy information.

HLPS 4: Inclusiveness – access to information and knowledge for all / Bridging Digital Divides

High-Level Track Facilitator:
Dr. Alessandro Caforio, *Doctor of Psychology, Head of Research and Innovation, Università Telematica Internazionale UNINETTUNO*

WSIS Action Line Facilitator:
Dr. Tawfik Jelassi, *Assistant Director-General for Communication and Information, UNESCO*

4.1. Panellists

- **H.E. Dr. Emilija Stojmenova Duh**, Minister, Ministry of Digital Transformation, Slovenia [*WSIS Forum 2023 Chairperson*]
- **H.E. Paweł Lewandowski**, Undersecretary of State for Digital Affairs, Chancellery of the Prime Minister, Poland
- **H.E. Ömer Fatih Sayan**, Deputy Minister, Minister of Transport and Infrastructure, Türkiye
- **Kashifu Inuwa Abdullahi**, Director General/Chief Executive Officer, National Information Technology Development Agency, Nigeria
- **Eng. Napoleon Gai**, Director General, National Communication Authority, South Sudan (Republic of)
- **Eng. Gilbert Camacho Mora**, Council Member, Superintendence of Telecommunications, Costa Rica
- **Rafael Eduardo Muente Schwarz**, Chairman of the Board and CEO, Organismo Supervisor de Inversión Privada en Telecomunicaciones, Peru
- **Mashael Al Hammadi**, Acting Assistant Undersecretary of Government Information Technology Affairs, Ministry of Communications and Information Technology, Qatar (State of)
- **Tatyana Kanzaveli**, CEO, Open Health Network
- **AHM Bazlur Rahman**, CEO, Bangladesh NGOs Network for Radio & Communication (BNNRC)

4.2. Session Summary

Access to digital infrastructure is a key factor for inclusive information societies: digital inclusion encompasses individuals, communities, and vulnerable groups being able to have access and digital skills to use internet technologies and therefore to be able to participate and benefit from today's growing information society. Digitalization is also one of the greatest means to fulfil Sustainable Development Goals (SDG).

According to the distinguished panellists developing the topic during session 4, an inclusive digital society must be built upon the foundation of five key elements: infrastructure and connectivity, affordability and accessibility of devices and equipment, digital literacy for all, e-services provided by governments, and accessibility of information and service provision.

1. Infrastructure and Connectivity:

Challenges:

- Lack of access to high-speed internet, particularly in rural and remote areas

- Inadequate investment in ICT infrastructure development
- Unequal distribution of network coverage

Recommendations:

- Expand network coverage and increase investment in ICT infrastructure
- Encourage public-private partnerships for infrastructure development
- Implement universal service funds to ensure connectivity in underserved areas
- Promote community networks and other alternative connectivity solutions

2. Affordability and Accessibility of Devices and Equipment:

Challenges:

- High cost of devices and equipment, creating barriers for low-income individuals
- Limited availability of affordable devices in some regions
- Insufficient support for users with disabilities

Recommendations:

- Encourage manufacturers to develop low-cost, high-quality devices
- Establish subsidy programs to help low-income individuals purchase devices
- Adopt accessibility standards for devices and equipment to support users with disabilities

3. Digital Literacy for All:

Challenges:

- Lack of digital literacy among marginalized populations, such as older adults, women, and those in low-income communities
- Insufficient digital literacy programs and resources
- Limited access to formal and informal digital education opportunities

Recommendations:

- Develop comprehensive digital literacy programs targeting marginalized populations and bridging the digital gaps (women in STEM education, initiative for including silver age population, etc.)
- Encourage collaboration between governments, NGOs, and the private sector to offer digital literacy training
- Integrate digital literacy into school curriculums and adult education programs
- Provide accessible online resources and platforms for self-learning

4. E-services Developed by Governments for Health, Education, Access to Public Administration:

Challenges:

- Limited access to e-services due to inadequate infrastructure, connectivity, or digital literacy
- Insufficient development and promotion of e-services by governments
- Low adoption of e-services by the public

Recommendations:

- Invest in the development and promotion of user-friendly e-services for health, education, and public administration
- Encourage digital transformation in the public sector to improve service delivery
- Provide training and support to help citizens adopt e-services
- Prioritize accessibility and inclusiveness in the design and implementation of e-services

5. Accessibility of Information and Service Provision:

Challenges:

- Limited access to information and services for individuals with disabilities, language barriers, or low digital literacy
- Lack of accessibility standards for digital content and platforms
- Insufficient awareness of accessibility needs among content providers and service developers

Recommendations:

- Adopt and enforce accessibility standards for digital content and platforms
- Provide training and resources to help content providers and service developers create accessible products
- Promote the use of assistive technologies and alternative formats to improve accessibility
- Foster collaboration between governments, NGOs, and the private sector to develop and share accessible information and services

4.3. The road ahead

The vision for an inclusive digital society necessitates a concerted and collaborative effort from all stakeholders, including governments, the private sector, and civil society. Governments must prioritize policies and regulations that foster ICT infrastructure development, enhance affordability and accessibility of devices, and promote digital literacy. The private sector should be incentivized to develop innovative, cost-effective solutions and to support accessible, user-friendly e-services. NGOs and civil society organizations must continue advocating for digital inclusiveness and providing essential services to marginalized populations.

Collaborative initiatives, such as multi-stakeholder partnerships, can help share knowledge, resources, and best practices to drive inclusive digital development. Moreover, governments should consider integrating digital inclusion targets into their national development plans, aligning them with the SDGs, and regularly monitoring progress. International cooperation is also vital to ensure that countries with limited resources receive support in building their digital capacities.

Ultimately, a truly inclusive digital society must be people-cantered, focusing on the needs and aspirations of individuals and communities. By placing human rights, social justice, and sustainable development at the core of digital policy, we can work collectively towards bridging the digital divide and creating a better future for all in line with the United Nations 2030 Agenda.

HLPS 5:   Bridging Digital Divides

High-Level Track Facilitator:
Pierre Mirlesse*, Smart City Consultant, Managing Director, Partner360.net*

WSIS Action Line Facilitator:
Jaroslaw K. Ponder*, Head, Office for Europe, ITU*

5.1. Panellists

- **Burundi (Republic of):** H.E. Léocadie NDACAYISABA, Minister, Ministère de la Communication des Technologies de l'information et des Médias

  Questions by HLTF:

  o What are the strategies adopted by Burundi to bridge the digital divide and ensure digital inclusion? What are the investments taken by Burundi to achieve that?

- **Timor-Leste (Democratic Republic of):** H.E. Jose Agustinho da Silva, Minister, Ministry of Transport and Communications

  Questions by HLTF:

  o What is Timor-Leste's perspective on the issue of Bridging Digital Divides?
  o How do you tackle the issue of Bridging Digital Divides in Timor-Leste?

- **South Africa (Republic of):** H.E. Phillemon Mapulane, Deputy Minister, Ministry of Communications and Digital Technologies

  Questions by HLTF:

  o The emergence of new digital technologies further exacerbates the digital gap, especially for developing countries. What interventions would you say South Africa is currently working on to address this challenge? There is a need to develop a tech-savvy society if we have to close the digital divide; this is not the work that any single entity can achieve alone, are there any strategic initiatives that your country is doing to skill your nation aggressively digitally?

- **Mexico:** H.E. Rogelio Jimenez Pons, Undersecretary of Transport, Secretary of Infrastructure, Communications and Transports

  Questions by HLTF:

  o You've mentioned some key actions that could support the achievement of the SDG. Could you further explain what steps has Mexico taken to attain the SDG?

- **Dominican Republic:** Dr. Nelson de Jesús Arroyo Perdomo, Presidente del Consejo Directivo, Instituto Dominicano de las Telecomunicaciones (INDOTEL)

  Questions by HLTF:

  o What measures or actions has the government of the Dominican Republic, led by INDOTEL, taken to promote the closing of the digital divide, enabling internet access in remote communities with low levels of purchasing power? From your point of view, what has made the difference, beyond investment in infrastructure?

- **Malaysia:** Bawani Selvaratnam, Chief Development Officer, Malaysian Communications and Multimedia Commission

  Questions by HLTF:

  - What are Malaysia's priorities for addressing digital divide? How does Malaysia promote digital adoption to enable equal economic and social upliftment for everyone?

- **Bosnia and Herzegovina:** Drasko Milinovic, Director General, Communications Regulatory Agency

  Questions by HLTF:

  - What are the current challenges in the development of digital society in Bosnia and Herzegovina? What is the importance of international cooperation in reducing the digital divide?

- **Brazil (Federative Republic of):** Carlos Manuel Baigorri, President, National Telecommunication Agency – Anatel

  Questions by HLTF:

  - Beyond the political and regulatory commitments, bridging the digital gap suppose interventions in the market. Could you comment on your vision about that?
  - And once those areas are identified, in a world of tight budgets, how to get funding to connect them? Is connecting enough?

- **GESDA:** Alexandre Fasel, Swiss Special Representative for Science and Diplomacy

  Questions by HLTF:

  - Would you briefly share with us what is GESDA's vision for leveraging anticipatory science diplomacy to ensure the of use of quantum computing for the SDGs? And why should the diplomatic community care/engage?

- **Intel Corporation:** Jayne Stancavage, Vice President, Policy and Regulatory Affairs

  Questions by HLTF:

  - What are some important considerations about the digital divide and some mechanisms to help close it? What role does Intel play in expanding connectivity and digital equity?

5.2. Session Summary:

This session has brought together outstanding contributors to a great panel. Participants shared insights about their progress towards the WSIS action lines in helping meet the United Nations SDGs and bridging the digital divide in their respective countries, sharing best practices which can be used in other countries. It was clear that a lot a progress has been accomplished in the past year, but also that a lot is still to be done. The WSIS process was recognized by all panellists as an essential platform to exchange successful ideas to leverage for the future.

Panellist reminded us that the digital divide refers to the unequal distribution of access to digital technologies, such as the internet and computers, between different regions and populations. Bridging the digital divide is a complex challenge that requires the collective effort of governments, private sector, civil society organizations, and individuals.

Some of the best practices shared were:

1. Infrastructure Development: Governments can invest in the development of infrastructure to provide affordable and reliable access to the internet and digital technologies. This includes building networks of high-speed internet connections, establishing public Wi-Fi hotspots, and expanding mobile phone coverage.

2. Digital Literacy Programs: Governments, NGOs, and private sector organizations must work together to provide digital literacy training to individuals who lack digital skills. This can include basic computer literacy, as well as more advanced training in areas such as coding and digital marketing.

3. Affordable Technology: Governments can work with service provides to make technology more affordable and accessible to low-income communities. This can include the provision of subsidies, tax breaks, or other incentives to encourage manufacturers to produce low-cost devices.

4. Community Outreach: NGOs and community organizations can work to raise awareness of the benefits of digital technologies and to provide training and support to individuals in underserved communities. This can include outreach to schools, libraries, and community centres.

5. Public-Private Partnerships: Governments can form partnerships with private sector organizations to fund infrastructure development and digital literacy program. This can include joint ventures with telecommunications companies or partnerships with technology manufacturers.

Overall, bridging the digital divide was highlighted as a comprehensive approach that involves investment in infrastructure, education and training, affordable technology, and community outreach. By working together, governments, private sector, civil society organizations, and individuals can help ensure that everyone has access to the benefits of digital technologies.

HLPS 6: Digital Economy and Trade/Financing for ICT

High-Level Track Facilitator:
Antonio Luque, *Professor of Electronics Engineering, University of Seville*

WSIS Action Line Facilitator:
Torbjörn Fredriksson, *Head of the E-commerce and Digital Economy Branch, United Nations Conference on Trade and Development (UNCTAD)*

6.1. Panellists

- **Comoros**: H.E. Mr. Kamalidini Souef, Ministre, Ministère des Postes, des Télécommunications et de l'Economie Numérique
- **Zambia** (Republic of): Mr. FELIX C. MUTATI, Minister, Ministry of Technology and Science
- **Armenia**: H.E. Mr. Robert Khachatryan, Minister, Ministry of High-Tech Industry
- **Bahrain** (Kingdom of): H.E. Mr. Mohamed bin Thamir Al Kaabi, Minister, Ministry of Transportation and Telecommunication
- **United Kingdom of Great Britain and Northern Ireland**: H.E. Mr. Paul Scully MP, Minister for Tech and the Digital Economy, Department for Digital, Culture, Media and Sport (DCMS)
- **India** (Republic of): Dr. P.D. Vaghela, Chairman, Telecom Regulatory Authority of India
- **Lithuania** (Republic of): Ms. Jūratė Šovienė, Chair of the Council, Communications Regulatory Authority
- **People-Centered Internet**: Ms. Mei Lin Fung: Chair and Co-Founder

6.2. Introduction

The session dealt with the opportunities that new digital economies present for development through public-private partnerships, research and development, and education. The challenges that have to be addressed and the initiatives that the participants are taking to overcome them were also discussed. The panellists commented on how digital economies and trade can favour integration of underserved communities and also how regulations must be enacted to allow fair access to the benefits that digital trade and financing offer. Different perspectives were shared on these subjects.

6.3. Vision and priorities

It was agreed that development of the digital economy is a top priority in all cases. Many examples were shared of initiatives intended to stimulate growth using specific policies, for example liberalizing the telecommunications sector, deploying 5G infrastructure, helping connect the unconnected, implementing digital identity for all population, etc. Also, there was agreement that digital economy presents challenges and threats and that they must be addressed in order to boost trust. For example, actions directed towards fighting internet scams or child pornography were shared. Finally, there was agreement that the digital economy must be inclusive and allow fair access to everyone.

6.4. Emerging trends and opportunities

Everyone sees an opportunity in the new digital economy. It was mentioned that, when devising plans and policies for this new economy, informal economy must also be taken into account, as it represents a significant share of the larger economy in many countries.

It was also mentioned several times that bridging the digital divide is essential in order to fully exploit the benefits that digital trade can bring to everyone.

Access, availability and affordability should be the driving forces of digitalization.

6.5. Key challenges

The main challenges identified were two:

- Unequal access to digital economy by groups of population, for example by gender or geographical location. Several initiatives to address them are launched.
- Threats linked to safety, harmful content, or cybersecurity. In many cases, increased digital education can mitigate these. In others, collaboration between governments, agencies, and private sector is key.

6.6. Links to WSIS Action Lines and SDGs

During the session, several WSIS action lines were mentioned as essential:

1) The role of governments and all stakeholders in the promotion of ICTs for development
2) Information and communication infrastructure: an essential foundation for an inclusive information society
3) Capacity building
4) and above all
5) Building confidence and security in the use of ICTs

6.7. Case examples

A few examples of adapting to new digital economy or preparing to it were shared. Among them we can highlight:

- Digital identity project in India, which will provide a digital authentication tool to the entire population and that has so far managed to open 485M bank accounts.
- Partnering with schools, public libraries, and NGOs in Lithuania to fight against online child abuse.
- Action Plan and commitment in the UK to extend digital access program to 2025 to promote safe and secure development access for partner countries. Connect pledges in which the UK is committed to mobilize resources needed to connect the unconnected.
- Modernization of the private sector of the economy in Armenia through digital platforms and smart solutions, increasing competitiveness.
- National digital strategy 2028 in Comoros.
- Digital inclusion in Zambia by putting all government services online and building access and confidence.
- Rolling out of a nation-wide 5G network providing high-speed technology in Bahrain.

6.8. Road ahead

The near future will see increased confidence and trust in digital businesses if we are able to solve the challenges and provide equal access to connectivity and services. Bridging the digital divide is key for this and the opportunities that will open are worth the effort.

HLPS 7:   Ethical Dimensions of Information and Knowledge Societies / Bridging Digital Divides

High-Level Track Facilitator:
Dr. Caterina M. Berbenni-Rehm, *Founder & CEO, PROMIS@Service*

WSIS Action Line Facilitator:
Dr. Tawfik Jelassi, *Assistant Director-General for Communication and Information, UNESCO*

7.1. Panellists

- **Cambodia**: Mr. Sok Puthyvuth, Secretary of State, Ministry of Post and Telecommunications
- **Portugal**: João Cadete Matos, Chairman, ANACOM
- **Pakistan**: Aisha Humera, Additional Secretary, Ministry of IT & Telecom
- **Organisation Internationale de la Francophonie**: Henri Monceau, Director, Digital and Economic Department, Ministry of Transportation and Telecommunication
- **International Federation for Information Processing (IFIP)**: Moira de Roche, Vice President
- **Global Enabling Sustainability Initiative (GeSI)**: Luis Neves, CEO, Managing Director
- **EC MEDICI Framework**: Prof. Alfredo Ronchi, Secretary General
- **AI&Society (Springer)**: Dr. Karamjit S Gill, Editor-in-chief & Professor Emeritus, University of Brighton

7.2. Vision and Priorities

- Regulators must have a human-centric approach.
- Digital connectivity and Inclusion is key at all different levels of society and for citizens' access to services and their fundamental rights (health, education,) and to enhance new forms of relationship between the State and citizens and businesses.
- to promote greater competition in the market, as well as social and territorial cohesion.
- to identify digital vulnerability criteria and define a global agenda to support the most vulnerable populations. The Global Digital Compact can be an opportunity at the multilateral level.
- One Code of Ethics for all technology-led products and services with focus on and the requirement for standards and framework on the use of Generative AI.
- To make the fight against the digital divide more effective, by better understanding and recognizing its multidimensional character and aspects, like the design of the digital offer ("discoverability"): access to information in several language); IPR ownership; cybersecurity (to ensure trust).

7.3. Case examples

- The project "Sustaining relevant digital inclusive education for young people (5-18 years of age)
- mobile broadband coverage obligations in less densely populated regions, through the establishment of obligations in the renewal of right of use of frequencies and on the 5G auction process
- As for international connectivity, the scope of the EU-Atlantic Data Gateway Platform, cables (the so-called CAM Ring).
- promoting the concept of SMART Cables within the UN system through the ITU.

7.4. Road Ahead:

The need to find a proper balance between humanities and technologies is omnipresent. Social sciences and humanities must establish a tight cooperation in design and co-creation of cyber technologies always keeping humans in the focus.

The WSIS can play a key role in this process.

HLPS 8: WSIS Action Lines and the 2030 Agenda/ Climate Change

High-Level Track Facilitator:
Prof. Abdulkarim Oloyede, *Associate Professor Department of Telecommunication Science, University of Ilorin, Nigeria*

8.1. Panellists

- **Tanzania**: Mr. Sok Puthyvuth, Secretary of State, Ministry of Post and Telecommunications
- **Tanzania** (United Republic of): H.E. Eng. Kundo Andrea Mathew (MP), Deputy Minister, Ministry of Information, Communications and Information Technology
- **Romania**: Ms. Maria Manuela Catrina, Undersecretary of State, Deputy Director, National Cyber Security Directorate
- **Sweden**: Mr. Dan Sjoblom, Director General, Swedish Post and Telecom Authority
- **Estonia** (Republic of): H.E. Dr. Nele Leosk, Ambassador-at-Large for Digital Affairs, Ministry of Foreign Affairs
- **Huawei**: Dr. Cao Hui, Head of Strategy & Policy, Huawei EU Public Affairs And Communication Office
- **4QT**: Eng. Marc Vetter, Co-Founder, President of the Board and CEO
- **International Commission on Cyber Security Law**: Dr. PAVAN DUGGAL, Chairman
- **The UN Brief**: Ms. Maya Plentz, Director

8.2. Vision

The panellists all have a vision that everyone should be connected to the internet in a sustainable way. This is because today, we live in a world where digital transformation is not only a technical issue, but a fundamental precondition for participating fully in today's society. The COVID-19 pandemic, in particular, has demonstrated the need for connectivity. To realize the full potential of digital transformation, we need to bridge the digital gap and connect the unconnected. It is an important step towards global equality and cohesion, benefitting everyone everywhere. This was specifically mentioned by Sweden and shared by most of the panellist.

8.3. Fresh Priorities

- Romania mentioned that building a secured and trustworthy cyber ecosystem is important and that Romania is committed to ensuring that women and girls are involved.
- Sweden mentioned that we need to ensure a meaningful access for all citizens as today we are seeing that vulnerable groups are not part of the digital society that needs to change.
- Sweden also mentioned that to meet the goals and action lines we need to work together, by building capacity to connect the unconnected to fulfil the UN Sustainable Development Goals, such as building a better future for all by accelerating progress in gender equality, climate change, education etc.

8.4. Emerging Trends

Tanzanian mentioned that they are now enacting the Data Protection Law. On 27 November 2022, the Personal Data Protection Act was assented by the President of the United Republic of Tanzania into law (DPA). The DPA provides for matters relating to protection of personal data and establishes the principles

guiding and conditions for collection and processing of personal data. It was mentioned that the DPA is expected to play a vital part in ensuring the security of data hence increasing user confidence while in the cyberspace.

8.5. Vision

- Huawei mention that the mission of ICT companies is not just about pursuing their own green development, but also about using innovative digital technologies to enable emissions reduction in other industries and drive sustainability across society
- UN Brief mentioned that Technology will play an immense role on the discovery and cataloguing of species, so national programs for innovation must invest in research in the deep sea. It was also mentioned that we need more private and public partnerships like the Tara Ocean Foundation LINK.
- UN Brief also mentioned that We need to address skilling of women and girls in digital tools so they can actively participate in the digital economy and partake of its bounties.
- Un Brief mentioned that We have to stop support for below poverty level jobs being shipped to the Global South and that We need a skilled force in engineering, math, and natural sciences with a broad education in the social sciences, the humanities, the arts.

8.6. Opportunities

Sweden mentioned that how to tackle climate change is a monumental question, and many aspects must be considered. However, ICTs are both the ones who can contribute to solving the climate crises and, at the same time, the ones that have a significant impact on the climate. So, by acting on drivers of climate change in ICTs we can make a difference, but we need to work together, from private companies to government and policymakers

8.7. Key challenges

- 4QT mentioned that closing the gap is a multi-Stakeholder challenge. Policy makers benefit from knowing what is already feasible today, for example by talking to startups. It was mentioned that this allows stakeholders to satisfy demands and promises made. Being close to innovators is especially useful because they are driven and incentivized to grow in a new and challenging regulatory environment.
- 4QT also mentioned that is highly important to set the policies while staying as technology agnostic as possible. He mentioned that we should let the engineers and the market figure out the best technical solutions.

8.8. Links to WSIS Action Lines and Sustainable Development Goals

Huawei mentioned that Digital ICT technologies like AI, cloud computing, big data, IoT, and 5G, will play an important role in carbon reduction, removal, and management. According to a study report, the ICT sector's emissions "footprint" is expected to decrease to 1.97% of global emissions by 2030. Furthermore, the use of ICT solutions can enable other sectors to cut emissions by 20%, nearly 10 times higher than ICT's own expected footprint in 2030.

8.9. Case Examples

- Estonia mentioned that it is important for stakeholders to come together to pull resources together as it is being done in Estonia. It is important because it would allow countries to learn from each other and execute projects collectively.
- Estonia also shared its experience on digital signature and how the project was a joint project between Estonia and other neighbouring countries.
- Tanzania mentioned that they are ensuring that the remain the gateway and hub for efficient and affordable broadband in east and central Africa. They conducted spectrum auction on 700 MHz, 2300 MHz, 2600 MHz and 3500 MHz. Tanzania also has 3 tier -3 sizable data centre.
- 4QT mentioned that Digitalization enables novel solutions. Which in turn hold the potential for climate action. Startups such as 4QT make daily use of capabilities which have become possible recently. And which our customers benefit from successively. One example is the strong interaction with research, universities and policy makers. This enables us to take legacy equipment from diverse customers, upgrade it, and make it sustainable to use.
- Sweden mentioned that PTS is currently involved in a capacity building program in sub-Saharan Africa. It was mentioned that over the last six years PTS has worked closely together with SPIDER, a project with Stockholm University, funded by the Swedish government through the Swedish International Development Cooperation Agency, SIDA, and the program has contributed to capacity-building to more than 30 countries in the Sub-Saharan region. The project – with resources from PTS – supported regulators on fulfilling their strategic targets, meanwhile, engaging in discussions on joint challenges. By building capacity in countries and contributing to digital development, we help citizens and societies to be part of the global world. Digital development makes people grow, seek information, and help bridge the gaps in digital development and gender equality.

8.10.   Road ahead

- Tanzania has the plan is to have 15,000KM of fibre optic cable to cover administrative and rural areas to increase usage of Broadband internet from 45% to 80% in the year 2025 and thus transforming Tanzania to a digital enabled society with inclusive access of e-services and The Government set a remarkable goal of ensuring Broadband access and services coverage of 80% national wide by the end of 2025.
- Huawei mentioned that by 2030, it is predicted that more than half of our electricity will be generated from renewables. As the transportation industry goes electric faster, there will be 145 million electric vehicles on the road. Better architectural design, energy-saving and environmental-friendly new materials, and renewable energy will mean all new buildings are zero-carbon from 2030 onwards.
- Huawei also mentioned that innovation could address some social challenges we are facing today much more efficiently.
- UN Brief mentioned that private sector partnerships are fundamental for government sector administrators and UN officials to acquire the basic knowledge necessary for them to evaluate the technologies that they employ, deploy, and acquire for their organizations.
- Un Brief also emphasized that the private sector has another role: they can also help scale up commercial opportunities, with governance and policies in place that create shared wealth. But

any of these aspirations cannot take place unless national governments invest in education and digital infrastructure. Both within its institutions and in the programs that they roll-out.

- International Commission on Cyber security Law highlighted the importance of cybersecurity and how important cybersecurity is in this day and age. He mentioned that governments around the world must cooperate with each other to in the global fight against cyber security

HLPS 9: ICT Applications and Services / Climate Change

High-Level Track Facilitator:

Dr. Evelyne A. Tauchnitz, *Senior Researcher and Lecturer, Institute of Social Ethics ISE, University of Lucerne, Centre for International Governance Innovation (CIGI)*

9.1. Panellists

- **United Arab Emirates:** Ms. Mubaraka Ibrahim, Acting Chief Information Officer, Emirates Health Services
- **Indonesia (Republic of):** Dr. Ismail Ismail, Director General of Resource Management and Equipment of Post and Informatics, Ministry Communication and Informatics
- **Mauritius:** Mr. Dick Christophe NG SUI WA, Chairperson, Information and Technologies Authority
- **Islamic Republic of Iran**, Dr. Emamyan, Advisor to the Minister of ICT
- **State of Palestine (*):** Ms. Rania Jaber Naser, General Director of Tech Innovation Center and Entrepreneurship, Ministry of Telecommunications and Information Technology
- **Ukraine:** Mr. Slava Banik, Head of eServices Development, Ministry of Digital Transformation of Ukraine
- **Telefónica SA**: Ms. Laura Fernández, Head of Sustainable Finance
- **CMAI (Association of India):** Mr. NK Goyal, President
- **World Summit Awards:** Prof. Peter A. Bruck, Chairperson

9.2. Executive Summary

The importance of utilizing Information and Communication Technologies (ICTs) to facilitate sustainable development and achieve the United Nations Sustainable Development Goals (SDGs) was a key topic of discussion among high-level panellists. The panellists emphasized the need for sustainable digital development, which encompasses not only economic development, but also social development and is in alignment with nature. Collaboration among all stakeholders, including the public sector, private companies, civil society, and the youth was deemed crucial in achieving this vision. Moreover, the regulation of ICTs was highlighted as necessary to enhance their security, resilience, affordability, accessibility, and data integrity.

Emerging trends in e-government through mobile applications, online education, ICTs for climate change, and AI-enabled platforms for enhancing communication between public service providers and users were noted. ICTs offer numerous opportunities to improve the delivery of public services and government to its citizens, including health, communication, and business opportunities for small and medium-sized enterprises. Furthermore, ICTs can be leveraged to enhance the inclusion of marginalized communities, including women and youth, through inclusive education. Additionally, e-governance has the potential to improve the efficiency and accessibility of public services and enhance the resilience of public services during crises.

Different political views were expressed on platform governance, digital sovereignty, freedom of expression, and the digital divide. Enhancing digital cooperation by focusing on specific thematic issues across political and cultural divisions is key to overcome these challenges. In addition, Cyber threats on public infrastructure and supply chains, as well as data leakages, were identified as new security risks that need to be addressed.

9.3. Vision:

- ICT's for promoting the SDG's and sustainable digital development, with an emphasis on "sustainable", i.e., development understood not only in economic terms, but coupled with social development and in alignment with nature.
- Most high-level panellists agreed that there should be collaboration between all stakeholders, i.e., among the public sector, private companies and civil society in developing digital infrastructure for health, education and climate action.

9.4. Fresh priorities:

- Focus specifically how ICT's can be used for inclusive development which is a basic human right.
- Use ICT's not only for economic development, but also improve social and environmental sustainability.
- Regulation of ICTs is necessary to improve their security, resilience and data integrity.
- Development of ethical and responsible frameworks

9.5. Emerging trends:

- E-government through mobile applications,
- education online, especially since covid pandemic,
- ICTs for climate change through increased energy efficiency
- AI enabled platforms for enhancing communication between public service providers and users (e.g., health services)

9.6. Opportunities:

- Improve service delivery of the public sector and government to its citizens in areas such as health, communication and business opportunities.
- Increase inclusion of marginalized communities, including women and the youth; e.g., through inclusive education
- Support to small and medium enterprises, facilitate their digital access to capital, know-how, virtual marketplaces on a global and local level, and other business transactions.
- Increase efficiency and accessibility of public services through e-governance. This can also help to improve resilience of public service delivery during crises and assure that people have access to basic public services even in adverse situations.
- Climate change: Reduce global emission through increased efficiency and promotion of circular economy with ICTs.

9.7. Key challenges:

- Overcoming the digital divide with meaningful, free and safe access for all
- New security risks through cyber threats on public infrastructure and supply chains as well as data leakages.
- There exist different political views on platform governance when it comes to digital sovereignty and freedom of expression. Key concerns are data privacy and censorship that limit the freedom of expression.
- Geopolitical tensions need to be overcome to enhance international cooperation and overcome the digital divide.

- Digital cooperation is necessary, focus on specific thematic issues across and overcoming political or cultural divisions.

9.8. Case examples:

- mobile apps for e-governance,
- online education programs,
- online health services and monitoring
- Virtual marketplaces
- Protection of global activities
- Promotion of local and sustainable energy to marginalized communities.

9.9. Links to the SDGs:

- Heath,
- quality education,
- climate action,
- sustainable cities and communities
- Strong institutions

9.10.   Road ahead:

The road ahead for utilizing Information and Communication Technologies (ICTs) to achieve sustainable development and the United Nations Sustainable Development Goals (SDGs) requires collaborative efforts among all stakeholders, including young people from civil society and the private sector. The emphasis is on sustainable digital development that aligns economic, social development with nature, and regulating ICTs to enhance their security, affordability, accessibility, and data integrity. Emerging trends in e-government through mobile applications, online education, ICTs for climate change, and AI-enabled platforms offer numerous opportunities to improve the delivery of public services and overcome the digital divide. Ultimately, we must actions follow words of commitment and learn from best practices to create human centric and inclusive information societies in alignment with the natural environment. Sustainable development is a basic human right that can only be achieved together with the equal participation of all stakeholders.

HLPS 10:   Bridging Digital Divides

High-Level Track Facilitator:
Dr Claire Somerville, *Ex Dir Gender Centre, Geneva Graduate Institute*

WSIS Action Line Facilitator:
Sulyna Abdullah, *Special Advisor to the Secretary-General's Office, ITU*

10.1.   Panellists

- **Philippines (Republic of the):** H.E. Mr. Ivan John Uy, Secretary, The Department of Information and Communications Technology
- **Lithuania (Republic of):** Ms. Eglė Markevičiūtė, Vice-Minister, Ministry of the Economy and Innovation
- **Saint Vincent and the Grenadines:** Mr. Apollo Knights, Director, National Telecommunications Regulatory Commission
- **Malawi:** Mr. Andrew Nyirenda Director of Economic Regulations Malawi Communication Regulatory Authority, Malawi
- **Germany:** Dr. Irina Soeffky, Director National, European and International Digital Policy, Federal Ministry for Digital and Transport
- **Basic Internet Foundation:** Prof. Josef Noll, Secretary General
- **The OneGoal Initiative for Governance, Zurich AR/VR Meetup:** Ms. Alève Mine, Founder
- **African Tech Unicorn**: Ms. Thoko Miya, CEO and Founder

10.2.   Summary

The panel discussion can be summed up under three headings under which digital divides are reproduced: Awareness, Affordability, Access

The well-balanced panel sought to unpack five of the big digital divides:

1. Income: the level of Internet use in low-income countries at 26% remains far below that of high-income countries, which are close to 92%
2. Urban-Rural: the share of Internet users is almost twice as high in urban areas at 82% urban versus 46% rural.
3. Gender: The gender divide, 69% of men are using the Internet, 63% of women- but of course, the digital gender gaps are multiple from lack of women and girls in STEM, to gender pay gaps that make access less affordable; and differences in time use often in the form of unpaid care work
4. Generations/age: 75% of youth use the Internet last year, versus 65% of the rest of the population
5. Education/skills: In nearly all countries where data is available, rates of Internet use are higher for those with more education.

Each of the country case-study examples provided national contexts for each of these digital divides, highlighting the very different country situations and therefore gravities of each of the five identified digital divides, and therefore, also, different policy priorities.

For example, population age profiles and Internet usage.

The current median age in the Philippines is 24 years old compared to the global median age of 31. Filipinos spend more than ten hours per day on the Internet compared to the global average of about 6 hours, and 4 hours on social media platforms versus 2 hours for the rest of the world.

By contrast, we heard how Individuals in Lithuania who live in rural areas as well as lower-income, less educated, elderly, disabled or unemployed individuals are less likely to benefit from using the Internet and risk being excluded from access to some services (e.g., healthcare, banking, e-government), which are increasingly reliant on digitalised systems.

Outlining the importance of regional and global coordination, examples from St Vincent and the Grenadines emphasized ongoing work toward legal frameworks that ensure access and affordability across networks neighbouring countries. In particular, they revised and ratified a new treaty, that sets a framework for ICTs in the subregion- which of course reminds us of the work going on to create the Digital Compact.

Finally, we heard about the income divide experienced by Malawi. Malawi has a GDP of less than 650 USD per head– with growth at just 3% per year. With a population of nearly 20 million, 85% live in rural areas, and 65% are youth. Malawi facing intersecting divides on income, age and on the rural-urban split.

Whilst these national differences in digital divides are significant, and each country faces unique contextual divides, the need for globally coordinated multi-sectoral and multi-stakeholder efforts are critical to moving forward towards the SDGs.

With 2.6 billion people unconnected (meaning that they have never used the internet) – there was agreement that without a global effort to connect the unconnected, the 2030 agenda will not be achieved. This coordination demands not just member states, but also industry, academia and civil society actors working together. Such multi-stakeholder collaboration not only bring innovative approaches and solutions, but also ensures that risk is shared among networks of actors. Furthermore, core infrastructures, notably stable and sustainable energy sources, are critical if tech entrepreneurs are to develop innovative solutions to deliver a fair and just digital world.

10.3.   Road Ahead: Key messages

1. Whole-of-nation approach to ensure that we nurture a safe cyberspace
2. Targeted policies to address country-specific digital divides
3. Policies that ensure fair recruitment, training and advancement of women and girls in the ICT/STEM sector
4. Multi-stakeholder and multi-sectoral approaches
5. Wide participation, including civil society, academia, private sector, and marginalized communities.
6. Global, regional and sub-regional levels of coordination and collaboration
7. Global/International legal frameworks
8. Sustainable renewable energy

10.4.   Relevant Action lines

- C1. The role of governments and all stakeholders in the promotion of ICTs for development
- C2. Information and communication infrastructure
- C3. Access to information and knowledge

- C8. Capacity building Cultural diversity and identity, linguistic diversity and local content
- C10. Ethical dimensions the Information Society

10.5.   Key points:

Awareness, Affordability, Access

HLPS 11: Knowledge Societies, Capacity Building and e-learning / ICT Applications and Services

High-Level Track Facilitator:

Dr. Liberato C. Bautista, *President, Conference of Non-Governmental Organizations in Consultative Relationship with the United Nations (CoNGO)*

WSIS Action Line Facilitator:

Paul Donohoe, *Digital Economy and Trade Coordinator, Universal Postal Union*

11.1. Panellists

- **Cuba:** H.E. Eng. Wilfredo Gonzalez Vidal, First Deputy Minister, Ministry of Communications
- **Guinea:** H.E. Mr. Ousmane Gaoual DIALLO, Minister, Ministère des Postes, des Télécommunications et de l'Économie
- **Mauritius:** H.E. Mr. Deepak Balgobin, Minister, Ministry of Information Technology, Communication and Innovation
- **Cyprus:** H.E. Dr. Stelios Himonas, Permanent Secretary, Deputy Ministry of Research, Innovation and Digital Policy
- **Iran:** H.E. Dr. Mohammad Khansari, Deputy Minister and Head of Information Technology Organization (ITO), Ministry of Communication and Information Technology
- **Russian Federation:** Mr. Dmitrii OGURIAEV, Deputy Minister, Ministry of Digital Development, Communications and Mass Media
- **Türkiye:** Mr. Ömer Abdullah Karagözoğlu, President, Information and Communication Technologies Authority
- **UNIDO**: Zou Ciyong, Deputy to the Director General and Managing Director of the Directorate of Technical Cooperation and Sustainable Industrial Development
- **OpenUK**: Amanda Brock, CEO

11.2. Summary

High-level policy session 11 had as its theme knowledge societies, capacity building, and e-learning. The basic premise for the session was that each person should have the opportunity to acquire the necessary skills and knowledge to understand, participate actively in, and benefit fully from the Information Society and the knowledge economy.

Literacy and universal primary education are critical factors for building a fully inclusive information society, paying particular attention to the unique needs of girls and women. Building institutional capacity deserves special attention, given the wide range of ICT and information specialists required at all levels.

Furthermore, partnerships, particularly between and among developed and developing countries, including countries with economies in transition, research and development, technology transfer, manufacturing, and utilization of IT products and services, are crucial for promoting capacity building and global participation in the Information Society.

The seven high-level speakers from governments and two from the United Nations bodies all touch upon the multiple aspects of the above themes. In relation to a Knowledge Society, many speakers emphasized the importance of the positive integration of developing countries into the knowledge economy, which

significantly contributes to development and competitiveness. In this context, speakers of countries in the session emphasized opening up digital access to remote and rural areas and to all categories of vulnerable and disadvantaged population groups - economically disadvantaged persons, migrants, the elderly, and the disabled.

Since almost one-third of the world's population has yet to have digital access, considerable new efforts are being made, and they must be extended to this category of disadvantaged. Along the way, increasing access to public digital payment services is one step in the digital learning process of the broad strata of the population. The more the citizens become familiar with ICTs and more general aspects of digitalization, the greater the premise of a better and more fulfilling life will be.

Capacity Building measures in all countries also address this issue, emphasizing introducing schooled children and university students to the broadest range of digital technology and appropriate equipment. Building capacity requires open-source software, open hardware, and open data. Currently, access to data is too often restricted either by regulation or unawareness of the value of opening up knowledge. In this context, almost all speakers underlined the importance of having comprehensive ICT infrastructure, including high-speed broadband networks and digital platforms for e-government, e-commerce, and e-education. Several speakers also referred to the significance of tax incentives for start-ups and SMEs and research. Government authorities should also initiate and support this specific creation of ICT training centres.

Under the heading e-learning, many speakers addressed the necessity for achieving universal connectivity and the role of government in providing adequate administrative and financial backing to educational institutions at every level. The exchange of information among all relevant educational institutions must be supported both through policy and practical initiatives of the authorities. Also, under this heading, government procurement services should be digitally streamlined and more efficient.

The expansion of e-learning will lead to the number of specialists becoming available in the employment market to rise and fill the extensive gaps of competency that exist at the moment. The availability of skilled personnel will also attract investment in ICT applications, services, and artificial intelligence. Short-term solutions are needed today, leading to long-term investment and solutions.

Almost all participants commented on the importance of enhancing international cooperation in all aspects of ICT, including openness to all stakeholders. The creation of international standards in data protection will also be of increasing importance.