Leveraging ICTs to Build Information and Knowledge Societies for Achieving the Sustainable Development Goals (SDGs)

Version 1.5
(11th May 2018)
Disclaimer

Please note the WSIS Forum 2018 Outcome Document is a compilation of the outcomes of the sessions (Thematic Workshops, Country Workshops, Action Line Facilitation Meetings, Interactive Sessions, Information Sessions and Policy Sessions) submitted to the WSIS Secretariat by the organizations responsible for their respective sessions. ITU does not hold any responsibility for the outcomes provided by the organizers of the sessions for the WSIS Forum 2018.

All the session recordings are available here:

- Recordings of Remote Participation (Adobe Connect Virtual Rooms): Available for each session in the interactive agenda on the top right side of the page: [https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda#agenda](https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda#agenda)
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Special Address:
United Nations
Secretary General

Mr António Guterres, Secretary-General, United Nations

VIDEO MESSAGE TO WORLD SUMMIT ON THE INFORMATION SOCIETY FORUM 2018

Geneva, 20 March 2018

www.wsis.org/forum
United Nations Secretary-General: Mr António Guterre

Message to the WSIS Forum 2018
20th March 2018

Ladies and Gentlemen,

In today’s digital world, Internet access is imperative.

“Connecting the unconnected” is crucial to achieving the 2030 Agenda for Sustainable Development.

It is essential for sharing information, bringing people in from the margins and giving people a voice.

The international community has committed to ensuring universal and affordable Internet access in least developed countries by 2020.

I thank the World Summit on the Information Society Forum for promoting an inclusive process to meet this goal.

Please accept my best wishes for a successful gathering.

Thank you.
Following the UN General Assembly Resolution A/70/125, calling for close alignment of the WSIS and SDG process as well as holding the WSIS Forum on the annual basis, the WSIS Forum 2018 was held from the 19 – 23 March at the ITU Headquarters in Geneva and the overall theme of the WSIS Forum 2018 was “Leveraging ICTs to Build Information and Knowledge Societies for Achieving the Sustainable Development Goals (SDGs)”.

More than 2500 information and communication technology (ICT) experts and implementation actors contributed to and participated in the recent World Summit on the Information Society (WSIS) Forum 2018 to foster partnerships, showcase innovation, exchange best practices and announce new tools and initiatives to use ICTs to advance the United Nations’ Sustainable Development Goals (SDGs).

From 19-23 March, over 250 content-rich workshops and open-space talks enabled on-site as well as virtual participants from over 150 countries to engage with more than 500 high-level representatives of the wider WSIS Stakeholder community, including more than 85 ministers and deputies, ambassadors; and leaders from the private sector, academia and civil society. Aligned with both WSIS Action Lines and the SDGs, this year's programme focused on highlighting the
linkages between the two, including SDG priority areas such as health, hunger, education, youth inclusion, employment, gender empowerment, the environment, infrastructure and innovation.

WSIS Forum 2018 was chaired by H.E. Eng. Majed Sultan Al Mesmar, Deputy Director General of the United Arab Emirates' Telecommunications Regulatory Authority (TRA). The forum was co-organized by ITU, UNESCO, UNCTAD and UNDP, in close collaboration with all UN agencies.

"As the lead UN agency for ICTs, ITU champions their power to transform and improve people's lives worldwide. This year's WSIS Forum demonstrated how ICTs can foster creativity and innovation to accomplish the Sustainable Development Goals. After nine years of engagement between all WSIS stakeholders, WSIS Forum remains the premier global platform to make ICTs a critical driver of global development," said ITU Secretary-General Houlin Zhao.

The concrete outcomes of WSIS Forum 2018 will enable stakeholders to strengthen implementation of WSIS Action Lines and the alignment of the WSIS and SDG processes, and include among others:

- UN Group on the Information Society (UNGIS) reiterated commitment to the WSIS Action Lines implementation and alignment of the WSIS and SDG processes, with a UNGIS Joint Statement to be released during the high-level political forum 2018, at which time UNDP and ITU will become UNGIS co-chairs for the year 2018-2019.
- UN Regional Commissions committed to strengthen regional-level WSIS action through multi-stakeholder platforms and a series of regional face-to-face meetings. It is anticipated that WSIS will be included in the UN Regional Coordination Mechanisms and WSIS4SDG will become one of the pillars of the regional SDG Forums.
- Launch of the WSIS Forum 2018 Agenda mobile application developed by the University of West Indies and ITU.
- Ministerial Round Table participants emphasized the importance of the WSIS Action Lines framework as a key UN framework for work on the information and knowledge societies, and reiterated that many national digital agendas were built upon it. They applauded the WSIS Forum for creating global partnerships. WSIS Prizes were cited as an important global recognition of impactful ICT projects. The WSIS SDGs Matrix coordinated by ITU was highlighted as an important tool to map the missing links. The need for strengthened collaboration for building digital skills and ICT incubation programmes and fighting cyberattacks was highlighted.
- ITU and the UN Food and Agriculture Organization organized the Hack Against Hunger, which brought together 73 participants from countries across all five UN regions.
- The forum also included the announcement of the WSIS Prizes 2018 winners and champions, which represented all seven continents and all five WSIS stakeholder groups. In addition, the winning entries of the WSIS Forum Photo Contest 2018 were unveiled, highlighting how ICTs are playing a vital, enabling role on the road to achieving the SDGs.
WSIS Forum 2018 was also an opportunity for partnerships to be forged and valuable tools and initiatives to be launched. The full list of Official WSIS Forum 2018 Outcomes, and the below information materials are available on the WSIS Forum 2018 website.

- WSIS Forum 2018: Outcome Document
- WSIS Forum 2018 High Level Track Outcomes and Executive Brief
- WSIS Action Lines Supporting Implementation of the Sustainable Development Goals (2018) will be available soon
- WSIS Stocktaking Report 2018
- WSIS Forum 2018 and SDG Matrix
- WSIS Stocktaking Success Stories 2018

WSIS Forum 2018 was made possible through the generous support of its strategic partners – Platinum Partner: United Arab Emirates; Gold Partner: Saudi Arabia; Partners for Specific Activities: Japan, Rwanda, IEEE, Switzerland; Contributing Partners: Poland, Oman, ICANN, ISOC; Supporting Partner: IFIP and INWES.

Building on the open consultation process, more than 150 thematic sessions were held during the WSIS Forum 2018, aligned with the overall theme of the WSIS Forum 2018. This provided a vibrant atmosphere for facilitation and exchange on a multistakeholder vision of the WSIS Process towards achieving SDGs. An exhibition space also provided the perfect atmosphere to network, learn and share.

Key outcomes of the WSIS Forum 2018 include the following:

- **WSIS Forum 2018: Outcome Document**
  This document provides a summary of more than 200 sessions organized during the Forum Track of the WSIS Forum 2018. Each session shows a direct linkage between the WSIS Action Lines and the respective SDGs (please see the WSIS Forum 2018: WSIS Action Lines and SDGs Matrix). The Forum track is the result of the multistakeholder Open Consultation Process.
**WSIS Forum 2018: High Level Track Outcomes and Executive Brief**
This document provides a summary of each high-level moderated session by the respective High level Track Facilitators and lists thematically all the Policy Statements submitted by the Ministers, Regulators, Heads of UN Agencies, Academia, Leaders from the Civil Society and Technical Community. The key role played by ICTs in Enabling the SDGs is very clear in the statements made by the policy makers.

This document has been developed by the WSIS Action Line Facilitators and identifies the key linkages of the WSIS Action Line with the theme for the HLPF 2018 Moving Towards Resilient and Sustainable Societies providing case examples.

**WSIS Stocktaking Report 2018**
The eighth edition of the WSIS Stocktaking Report Series, focuses on contributions by stakeholders worldwide to WSIS and Sustainable Development Goals. It emphasizes achievements, highlights trends and draws conclusions consistent with the action lines referenced in the Geneva Plan of Action. This Report provides key findings on emerging trends in the development of the information society, and references major activities being implemented in the eighteen areas covered by the eleven WSIS Action Lines.

**WSIS Stocktaking Success Stories 2018**
This report highlights 18 winning projects of the WSIS Prizes 2018 contest that provides a platform for identification and showcasing success stories across the WSIS Action Lines defined in the Geneva Plan of Action. The WSIS Prizes honour outstanding projects that leverage the power of information and communication technology to accelerate achievement of sustainable development goals.

**WSIS Forum 2018 and SDG Matrix**
This document builds upon the WSIS-SDG Matrix and provides guidance on the outcomes of more than 200 sessions held during the forum, emphasizing linkages between the WSIS
Action Lines and SDGs as well as highlighting rational for each linkage that has been established.

All WSIS Forum 2018 Outcomes, photo and video documentation and highlights are available at www.wsis.org/forum.
The Agenda and Program of the WSIS Forum 2018 were designed in collaboration with the multi-stakeholders on the basis of official submissions received during the Open Consultation Process on the thematic aspects and innovations of the format of the WSIS Forum 2018. Involving all WSIS Stakeholders (governments, civil society, private sector entities, academia and international organizations), this process aimed to ensure active participation of different sectors during the event. The process began in September 2017 and was structured in five phases that include online submissions and physical meetings. The ITU-WSIS Secretariat received more than 250 submissions containing proposals on the thematic aspects and innovations on the format of the WSIS Forum 2018, including binding requests for partnerships, workshops, exhibition spaces and so on.

*Please note that about half of submissions from Western Europe came from the headquarters of International Organizations.

All related information can be found at: https://www.itu.int/net4/wsis/forum/2018/Pages/OpenConsultations#intro
More than 2500 information and communication technology (ICT) experts and implementation actors contributed to and participated in the WSIS Forum to foster partnerships, showcase innovation, exchange best practices and announce new tools and initiatives to use ICTs to advance the United Nations' Sustainable Development Goals (SDGs).

From 19-23 March, over 250 content-rich workshops and open-space talks enabled on-site as well as virtual participants from over 150 countries to engage with more than 500 high-level representatives of the wider WSIS Stakeholder community, including more than 85 ministers and deputies, ambassadors; and leaders from the private sector, academia and civil society.

### Representation of participation by Stakeholder Type

- **Government**: 35%
- **Private Sector**: 18%
- **Civil Society**: 17%
- **International Organizations**: 17%
- **Academia**: 13%

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**Participation at the WSIS Forum 2018**

[Diagrams and charts illustrating stakeholder participation]
Please note that about half of submissions from Western Europe came from the headquarters of International Organizations.

Gender Participation in the WSIS Forum 2018
The WSIS Forum is very widely followed by the WSIS Stakeholders, who in turn are very active, involved and responsive to the social media present of the entire WSIS Process. The following graphs provide an overview of the different social network channels that were used to promote the WSIS Forum 2018 before and during the event. Primarily Twitter, Facebook, Instagram and the ImeetyouatWSIS Forum onsite community platform were used with the aim of reaching and engaging with WSIS Stakeholders worldwide.

**WSIS Process Twitter Account #wsis**

28 day summary with change over previous period

- Tweets: 69 ↑60.5%
- Tweet impressions: 139K ↑72.8%
- Profile visits: 11.3K ↑63.0%
- Mentions: 803 ↑348.6%
- Followers: 4,535 ↑300

**Twitter Analytics**

The day #WSIS was in the top 3 of Switzerland trends on Twitter…

**Switzerland trends**

1. #Finance20
2. #HRC37
   - 2,915 Tweets
3. #WSIS
   - 1,354 Tweets
   - @Intenetsociety, @TimUnwin and 1 more are Tweeting about this
4. #pairuxzurich
5. #InternationalDayOfHappiness
   - 114K Tweets
   - @OECDeduSkills, @voicesofyouth and 3 more are Tweeting about this
6. Paléo
   - 3,218 Tweets
7. Denoche Mode
#WSIS

Around 1,354 people were tweeting about WSIS using the #WSIS at the same time on March 20th, 2018. This has been the biggest achievement in terms of communication in this platform, engaging the majority of our multi-stakeholders in the planned workshops, sessions, and exhibitions during the WSIS Forum 2018.

**Facts**

The number of tweets increased in a 60.5% during the WSIS Forum 2018, around 139,000 people all over the world viewed the tweets from the account WSIS Process. The WSIS Process twitter account received 11,300 new views. The WSIS process twitter account was mentioned 803 times on Twitter and the followers in total are 4,535 to the date.

**Facebook**

![Graphical representation of Facebook Page summary]

In our overview, we can see that all the indicators increased exponentially (green color).
The most important indicator is the Posts engagements. It shows that the engagement increased 865% during one week. In fact, 3,330 people took actions reacting, commenting or sharing our posts. This great performance is due to the number of publications and the live activities.

Page views: The WSIS Facebook page has been viewed 1147 times during the WSIS Forum.

**Geographical distribution**

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<td>Algiers, Algiers Province</td>
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People who are the most engaged on our page are from Bangladesh.
**Instagram:**

A very recent WSIS Instagram account has 1.091 followers to the date and we hope to increase our popularity in the community.

**ImeetyouatWSIS outcome report**

ImeetyouatWSIS is a special feature for registered participants, an online community platform created as an extension of the WSIS Forum 2018 to help attendees to meet other registered participants, start conversations, interact with scheduled speakers and build a personalized schedule of sessions. As a confirmed participant of the Forum, people automatically registered to the online community platform and received an invitation to complete the profile.

ImeetyouatWSIS gave attendees the possibility to:

- View the profiles and interests of the other attendees
- Discover which of your Twitter, LinkedIn and Facebook contacts are also attending
- Build a personalized schedule of talks to attend
• Download hand-outs and materials for sessions
• Schedule one-on-one meetings with other attendees
• Join the discussions about WSIS related topics and issues
The Opening Ceremony set the priorities of the WSIS Forum 2018, bringing forth a wide range of topics within the Global Information and Knowledge Societies while emphasizing the role of Information and Communication Technologies (ICTs), WSIS Action Lines in particular, regarding the recently adopted Sustainable Development Goals (SDGs). In this way, the WSIS Forum 2018 built upon the outcomes of the UN General Assembly Overall Review of the implementation of the WSIS outcomes (UNGA Resolution 70/125), which recognized the necessity of holding this Forum on an annual basis and called for a close alignment between WSIS and the SDG processes.

The WSIS Forum 2018 therefore served as a key forum for discussing the role of ICTs as a means of implementation of the SDGs and targets, with due regard to the global mechanism for follow-up and review of the implementation of the 2030 Agenda for Sustainable Development (UNGA Resolution A/70/1). The WSIS-SDG Matrix, developed by UN WSIS Action Line Facilitator and presented at the WSIS Forum 2015, served as the mechanism to map, analyse and coordinate the implementation of WSIS Action Lines, and more specifically, ICTs as enablers and accelerators of the SDGs.

The ceremony began with opening statements from the host, co-organizers, partners and representatives of stakeholders engaged in the WSIS Process. The Opening Ceremony concluded with the handing out of the WSIS Prizes 2018.

Detailed recordings of the Opening Ceremony are available on the WSIS Forum Website.
WSIS Prize 2018 Ceremony

Eighteen WSIS Project Prizes were awarded during this session recognizing successful initiatives by governments, private sector actors, civil society members and partnerships between all stakeholders: wsis.org/prizes. The winners were awarded for their tremendous efforts and achievements on implementation of WSIS outcomes. Mr Houlin Zhao, Secretary-General, ITU, presented the awards to the 18 Winning Projects. Please visit the WSIS Prize 2018 website for more information www.wsis.org/prizes
The WSIS Forum builds upon the outcomes of the UN General Assembly Overall Review of the implementation of the WSIS outcomes (UNGA Resolution 70/125), which recognized the necessity of holding this Forum on an annual basis and called for a close alignment between WSIS and the Sustainable Development Goals (SDG) processes. The WSIS Forum has served as a key forum for discussing the role of ICTs as a means of implementation of the Sustainable Development Goals and targets, with due regard to the global mechanism for follow-up and review of the implementation of the 2030 Agenda for Sustainable Development (UNGA Resolution A/70/1).

Policy Statements were delivered during the High-Level Track (20-21 March 2018) of the WSIS Forum 2018 by high-ranking officials of the WSIS Stakeholder community, representing the Government, Private Sector, Civil Society, Academia and International Organizations. The high-level track consisted of the opening segment, interactive policy dialogues, ministerial round table, and a high-level networking programme. Policy Sessions were moderated by high-level track facilitators and were grouped around different themes identified as important by the WSIS Stakeholders during the open consultation process and the outcomes of the UN General Assembly Overall Review.
During the High level Track fourteen moderated High-level Policy Sessions (HLPSs) took place on the 20th and 21st of March. Please see the moderators and speakers of the HLPSs below. Details and the policy statements are available in the document - *WSIS Forum 2018 High Level Track Outcomes and Executive Brief* available at :  

Complete recordings are available in the interactive agenda here:  
https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda#intro

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<td>4. <strong>Georgia</strong> – H.E. Mr. Giorgi Cherkezishvili, Deputy Minister, Ministry of Economy and Sustainable Development of Georgia</td>
<td>4. <strong>Afghanistan</strong> – H.E. Mr. Shahzad Gul Aryobee, Minister, Ministry of Communications and Information Technologies</td>
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<td>5. <strong>Portugal</strong> - Ms. Paula Meira Lourenço, Member of the Board, Autoridade Nacional de Comunicações (ANACOM)</td>
<td>5. <strong>Benin</strong> - H.E. Mrs. Aurelie Adam-Soule Zoumarou, Ministre, Ministère de l'Economie Numérique et de la Communication</td>
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<td><strong>Sweden</strong></td>
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<td>6.</td>
<td>Mr. Dan Sjöblom, Director General, Swedish Post and Telecom Authority</td>
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**Tuesday, 20 March (CICG, Room 1, Level 1)**

**Time: 15:15 – 16:00**

**Session 3**

**Bridging Digital Divides**

2. Chairman of WSIS Forum
3. WSIS Action Line Facilitator UNDESA - Mr. Vincenzo Aquaro, Chief E-Government Branch, Division for Public Administration and Development Management
4. Brazil – H.E. Mr. Andre Müller Borges, Secretary of Telecommunications, Ministry of Science, Technology, Innovation and Communication
5. Ghana – H.E. Mrs. Ursula Owusu-Ekuful, Minister, Ministry of Communications
6. Senegal – H.E. Mr. Abdoulaye Balde, Minister, Ministry of Communication, Telecommunications, Posts and Digital Economy
7. Poland – Mr. Marcin Cichy, President of the Office of Electronic

**Tuesday, 20 March (CICG, Room 2, Level 0)**

**Time: 15:15 – 16:00**

**Session 4**

**Enabling Environment**

1. Moderated by High-level Track Facilitator: Mr. Deepak Maheshwari, Symantec, India
2. Chairman of WSIS Forum
3. WSIS Action Line Facilitator ITU – Mr. Kemal Huseinovic, Chief, Department of Infrastructure, Enabling Environment and E-Applications (IEE)
4. Bahamas - H.E. Mr. Elsworth Johnson, Minister of State, Office of the Attorney General and Minister of Legal Affairs
5. United Kingdom– H.E. Mr. Julian Braithwaite, Permanent Representative and Ambassador of the UK to the UN and WTO, UK Mission to the UN
6. Asia-Pacific Telecommunity - Mr. Masanori Kondo, Deputy Secretary General
8. Microsoft Corporation — Mr. Paul Mitchell, General Manager, Technology Policy
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<td><strong>8. SAMENA Telecommunications Council</strong> - Mr. Bocar A. Ba, Chief Executive Officer</td>
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<td><strong>9. ChunriChoupaal</strong> – Ms. Iffat Gill, Founder and CEO (Netherlands)</td>
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<td><strong>10. TEMA Telecom Equipment Manufacturers Association of India/CMAI Association of India</strong> – Prof. NK Goyal, Chairman/President</td>
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**Tuesday, 20 March (CICG, Room 1, Level 1)**

**Time: 16:00 - 16:45**

**Session 5**

**WSIS Action Lines and the 2030 Agenda / Financing for development and role of ICT**

1. Moderated by High-level Track Facilitator: Dr. Michael Nelson, Cloudflare, USA
2. **Chairman of WSIS Forum**
3. **WSIS Action Line Facilitator ITU** – Mr. Yushi Torigoe, Deputy Director, Telecommunication Development Bureau
4. **Switzerland** – Mr. Thomas Schneider, Ambassador and Director of International Affairs, Federal Office of Communications OFCOM
5. **Bulgaria** – Mr. Rossen Jeliazkov, Chairman, Communications Regulation Commission
6. **Cuba** – Mr. Ernesto Rodríguez, IT Director, Ministry of Communications
7. **UNDESA** – Mr. Vincenzo Aquaro, Chief E-Government Branch, Division for Public Administration and Development Management
8. **ITC** – Mr. Anders Aeroe, Director, Division of Enterprises and Institutions
9. **Horyou** – Mr. Yonathan Parienti, Founder and CEO

**Tuesday, 20 March (CICG, Room 2, Level 0)**

**Time: 16:00 – 16:45**

**Session 6**

**Bridging Digital Divides**

1. Moderated by High-level Track Facilitator: Dr Anuradha Rao, National University of Singapore, Singapore
2. **Chairman of WSIS Forum**
3. **WSIS Action Line Facilitator ITU** – Dr. Cosmas Zavazava, Chief of Department, Projects & Knowledge Management, Telecommunication Development Bureau
4. **Japan** – H.E. Mr. Masahiko Tominaga, Vice-Minister for Policy Coordination (International Affairs), Ministry of Internal Affairs and Communications
5. **Czech Republic** – Mr. Jaromír Novák, Chairman of Council, Czech Telecommunication Office
6. **Research ICT Africa** – Dr. Alison Gillwald, Executive Director (South Africa)
7. **Amplio (formerly Literacy Bridge)** – Mr. Cliff Schmidt, Founder & Executive Director (United States)
8. **Fundación Proacceso** – Mr. Aleph Molinari, President (Mexico)
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<td>1. Moderated by High-level Track Facilitator: Ms. Moira S. Patterson, IEEE Standards Association, USA</td>
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<td>Facilitator: Mr. Pavan Duggal, Founder and Chairman,</td>
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<td>International Commission on Cyber Security Law</td>
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<td>Strategic Planning and Membership Department</td>
<td>6. <strong>Ukraine</strong> - Mr. Olexandr Ryzhenko, Head, State Agency for E-Governance</td>
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<td>4. <strong>Romania</strong> - H.E. Ms. Maria-Manuela Catrina, Secretary of State,</td>
<td>7. <strong>Facebook</strong> – Dr. Robert Pepper, Head of Global Connectivity Policy and Planning</td>
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<td>Ministry of Communication and Informational Society</td>
<td>8. <strong>International Network of Women Engineers &amp; Scientists (INWES)</strong> - Ms. Yvette Ramos, Vice-President INWES, External Relations</td>
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<tr>
<td>5. <strong>India</strong> – Ms. Aruna Sundararajan, Secretary (Telecom), Vice-Minister,</td>
<td>9. <strong>UN Major Group for Children and Youth</strong> – Mr. Ryan Kelly, Student</td>
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<td>Ministry of Communications</td>
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<td>6. <strong>Turkey</strong> – Dr. Ömer Fatih Sayan, President &amp; Chairman of the Board,</td>
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<td>Information and Communication Technologies Authority</td>
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<td>7. **Norway Government (Ret.)- Mr. Stein Schjolberg, Chief Judge (Ret.)</td>
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<td>5. <strong>Azerbaijan</strong>– H.E. Mr. Elmir Velizade, Deputy Minister, Ministry of Transport, Communications and High Technologies</td>
<td>5. <strong>Colombia</strong>- H.E. Mr. Juan Sebastián Rozo, Vice Minister of Connectivity and Digitalization, Ministry of Information Technologies and Communications</td>
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<td>6. <strong>Oman</strong> - Mr. Dr. Salim Al Ruzaiqi, CEO, Information Technology Authority</td>
<td>6. <strong>Practical Action</strong>– Mr. Paul Smith Lomas, CEO</td>
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<td>7. <strong>Nokia Corporation</strong>– Mr. Marc Vancoppenolle, Head of Global Government Relations</td>
<td>7. <strong>ARTICLE19</strong>– Ms. Mahsa Alimardani, Iran Programme Officer</td>
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<td>8. <strong>25th Century Technology Limited</strong>– Dr. Kwaku Ofosu-Adarkwa, Managing Director</td>
<td>8. <strong>Association for Progressive Communications</strong>– Dr. Carlos Rey-Moreno, Community Networks Project Manager</td>
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<td>9. <strong>University of Geneva</strong> - Prof. Yves Flückiger, Rector</td>
<td>9. <strong>University of Geneva</strong> - Prof. Chuang Liu, Chair of Data Publishing Subgroup, CODATA Task Group in Developing Countries (China)</td>
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<td>10. <strong>CODATA (Committee on Data for S&amp;T)</strong> – Prof. Chuang Liu, Chair of Data Publishing Subgroup, CODATA Task Group in Developing Countries (China)</td>
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<td><strong>ICT applications and services</strong></td>
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<td>1. Moderated by High-level Track Facilitator: Ms. Moira de Roche, IFIP IP3 Chairman, Global Industry Council Director</td>
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<td>4. <strong>Iran (Islamic Republic of)</strong> – H.E. Mr. Nasrollah Jahangard, Vice Minister for Technology and Innovation, Ministry of Information &amp; Communication Technology</td>
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<td>5. <strong>Poland</strong> – H.E. Mr. Karol Okonski, Undersecretary of State, Ministry of Digital Affairs</td>
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<td>6. <strong>India</strong> – Mr. Prabhash Singh, Member (Technology and Services) Telecom Commission, Department of Telecommunications, Ministry of Communications</td>
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<td>7. <strong>SSVAR - Swiss Society of Virtual, Augmented and Mixed Reality</strong> – Mr. Jean-Philippe Mohamed Sangare, Founder and CEO</td>
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<td>4. <strong>United States of America</strong> – Ms. Liesyl Franz, Senior Policy Advisor, Office of the Coordinator for Cyber Issues, U.S. Department of State</td>
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<td>5. <strong>Germany</strong> – Dr. Uwe Petry, Head of the Economic Affairs Division, Permanent Representation of the Federal Republic of Germany to the UN in Geneva</td>
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<td>6. <strong>European Commission</strong> – Ms. Maya Plentz Fagundes, Innovation Policy Advisor</td>
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<td>7. <strong>UN Women</strong> - Ms. Hiba Qasas, Chief of Crisis Prevention, Preparedness and Response</td>
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<td>8. <strong>Italy</strong> - Ms. Roberta Cocco, Deputy Mayor for Digital Transformation and Services to Citizens, Municipality of Milan</td>
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<td>9. <strong>Facebook</strong> – Dr. Robert Pepper, Head of Global Connectivity Policy and Planning</td>
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<td>10. <strong>Health and Environment Program</strong> – Dr. Madeleine SCHERB, President</td>
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<td>11. <strong>She Loves Tech</strong> – Ms. Virginia Tan, Founder and CEO</td>
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</table>
### Session 13: Digital Economy and Trade

1. Moderated by High-level Track Facilitator: Ms. Natalia Vicente, ESOA, Belgium
2. Chairman of WSIS Forum
3. WSIS Action Line Facilitator ITU – Mr. Torbjörn Fredriksson, Chief, ICT Policy Section, Division on Technology and Logistics, UNCTAD.
4. Singapore – Mr. Leong Keng Thai, Deputy Chief Executive, Infocomm Media Development Authority
5. VEON - Mr. Tomas Lamanauskas, Group Director Public Policy
6. ASIET (Asociación Interamericana de Empresas de Telecomunicación)– Mr. Pablo Bello, Secretary General
7. Pathfinder4 (Caribbean)– Mr. Matthew McLarty, Co-Founder — CEO
8. Association for Proper Internet Governance– Mr Richard Hill, President
9. Kiwicampus– Mr. Sasha Iatsenia, Head of Product
10. Intervale - Dr. Yury Grin, Deputy Director General
11. African Civil Society on the Information Society - Dr. Cisse Kane, President

### Session 14: Knowledge societies, capacity building and e-learning / Media

1. Moderated by High-level Track Facilitator: Mr. Alfredo M. Ronchi – EC MEDICI Framework of Cooperation
2. Chairman of WSIS Forum
3. WSIS Action Line Facilitator ITU – Dr. Cosmas Zavazava, Chief of Department, Projects & Knowledge Management, Telecommunication Development Bureau
4. Mauritius – H.E. Mr. Yogida Sawmynaden, Minister, Ministry of Technology, Communication and Innovation
5. Rwanda– H.E. Mr. Jean de Dieu Rurangirwa, Minister, Ministry of Information Technology and Communications (MiTEC)
6. Ukraine – H.E. Mrs. Emine Dzhaparova, First Deputy Minister, Ministry of Information Policy
7. United Arab Emirates - Mr. Ali Al Yafei, ICT Minister Advisor, Ministry of Education
8. Centro de Estudios Avanzados en Banda Ancha para el Desarrollo (CEABAD)- Mr. Sungnam Choi, Program Director
9. EDACY– Mr. Temitope Ola, Founder and CEO
10. AIESEC– Mr. Abdelrahman Mohamed, Global President of AIESEC International (Netherlands)
11. Evolution of Mind, Life and Society Research Institute (EMLSRI)- Dr. Yohko Hatada, Founder and Director
High-Level Dialogues (HLD) provide a unique combination of expert panelists and audience interaction. These High-Level Dialogues are on specific topics identified as crucial within the mandate of the WSIS Forum 2018 and provide insights from leading experts on these pivotal issues.

### HLD1 Promoting Internet Universality Indicators as a comprehensive tool for achieving SDGs

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### HLD2 An End to Electronic Waste

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### HLD3 The Skills Mismatch: the digital skills employers are looking for

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<td>CICG, Room 1</td>
<td>A/C/E/F/R/S</td>
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### HLD4 2008-2018: A decade of the COP Initiative – Priorities for the future of youth empowerment online

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Promoting Internet Universality Indicators as a comprehensive tool for achieving SDGs

Wednesday 21 March  
13:30 – 15:00
CICG, Room 1
Interpretation E/F

Key achievements, announcements, launches, agreements, and commitments

This High Level session presented the first draft of the “Internet Universality Indicators” and assessed their utility as a comprehensive tool to help states and other stakeholders to measure Internet policies in support of achieving the 2030 Sustainable Development Agenda at national levels.

Main outcomes highlighting the following:

I. Debated Issues

The panelists debated all six categories of the internet universality Indicators (ROAMX + contextual indicators) and emphasized the fact that:

- Human rights should apply equally online and offline;
- An Internet that fails to uphold human rights is incompatible with the SDGs;
- All citizens should have equal, non-discriminatory and affordable access to the Internet;
- Multistakeholder cooperation is essential in order to create an Internet Society with a human dimension.

With the audience, panelists discussed the implementation of the project and insisted on the fact that:

- The internet universality indicators will serve as a self-assessment tool;
- The implementation of the indicators will be crucial;
- It is essential that UNESCO secures resources to build a tool that allows for feedback on how it is being implemented in individual countries at the national level.

One of the main challenges highlighted by the participants was the universality/adaptability of the indicators.
II. Quotes

Yolanda Martínez M (National Digital Strategy Office, Mexico):

“Having reliable information regarding the ROAM Principles of Internet Universality will boost the development of the Information Society. We understand that the development of indicators represents a major effort in this sense. However, having more than 240 indicators represents a real challenge for the member states who will have to gather reliable and updated data both form governments and non-government actors.”

Ms Raquel Gatto, representative of the Internet Society (ISOC):

“This project is very relevant for the future of the Internet. It embraces very complex issues, but we are in a complex time. In Internet space, complexity is our challenge but also our strength.”

III. Overall outcomes of the session

The internet universality indicators will help identify the gender gap and will boost the development of information and knowledge societies;

Pilots and pre-tests will provide insights and tips on how to prioritize data gathering and how national instruments for data gathering could be enhanced to capture new measurements according to the ROAM principles;

The implementation of the internet universality indicators will help assess and promote the WSIS Action Lines through rights, openness, access for all, multistakeholder participation, gender issues, youth, and safety.

IV. Main linkages with the Sustainable Development Goals

UNESCO’s internet universality indicators will help achieve SDG 16

“Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.” The indicators embrace five principles that have been and should continue to be fundamental to the development of the Internet and its role in advancing the SDGs. The project is also linked with SDG 5 on gender equality and SDG 10 on reducing inequality.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Participants underlined the need to further develop programmes on digital literacy.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Applying the Internet Universality Indicators: a step towards Internet development and policy improvements
Key achievements, announcements, launches, agreements, and commitments

The signing of a Letter of Intent which will lead towards paving the way for coordination and Collaboration on UN system-wide support for e-waste management.

Main outcomes highlighting the following:

I. Debated Issues

Electronics are everywhere and yet we are throwing away precious materials and not capturing these resources. Businesses must adapt their models to facilitate a reduction in the loss of resources, whilst consumer must have a clear message about the impact of e-waste. Between businesses and the UN system, a common language must be established. E-waste is a grassroots issue, very much at the national level, with the consumer very much heavily involved. Poor management of waste at the national level is something that we must address, whilst it must be understood that waste management is not something just done at the end, rather the source of waste is equally important. Design, production and standardisation are all the elephants in the room, when it comes to the source of e-waste.

Achievements:
Challenges:
- Still a limited statistical base on e-waste, whereby any information which we have, is not concisely presented and available to those whom it would be useful for, e.g. enforcement authorities, governments, port authorities etc.
- There is no clear message on e-waste that the consumer can interpret clearly. Electronics are products that comprise many different materials (and waste streams), which may be something challenging for the consumer to grasp.
- UN and private sector collaboration requires a common language in order to respond to the fast-paced environment of the business sector.
- The building of a coalition on e-waste must be multi-stakeholder. It must include the expertise of a wide range of actors.

II. Quotes
“Change the concept that waste is a cost, to waste as a revenue” (Ms. María Mendiluce, World Business Council for Sustainable Development)
“E-waste is a win-win situation for sustainable development, for industry and for green jobs” (Ms. Alette Van Leur, International Labour Organization)

III. Overall outcomes of the session highlighting
- Long-term discussions among UN entities on the possibilities for increased programmatic collaboration, grand partnerships and the communication of key messages in their efforts to tackle the global challenge of e-waste.
- Follow-up meetings to build the E-waste Coalition, including at major events coming up.
- Possible support from partnering and interested private sector organisations for initiatives such as a Knowledge Sharing Platform on e-waste.

IV. Main linkages with the Sustainable Development Goals
https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/174#intro (see our Agenda page on the WSIS Forum website).

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
Most certainly the impact of ICTs growth and smart cities on the rise of e-waste, including the waste from telecommunications devices which is circling the world in space – as mentioned during this event by Mr. Zhao himself.
The Skills Mismatch: the digital skills employers are looking for

Wednesday 21 March

CICG, Room 1

Key achievements, announcements, launches, agreements, and commitments

ITU will soon be launching its digital skills toolkit, which provides new, updated guidance to both ITU members and the Decent Jobs for Youth community on how to ensure young people are able to develop their job-ready digital skills. The toolkit will also support the design of national digital skills development strategies for life and work of all citizens in the growing digital economy. It takes a hands-on how-to approach with a flexible road map and includes wealth of real-life examples designed to inspire action.

1. Main outcomes highlighting the following:

I. Debated Issues

One of the main issues highlighted during the session was the importance of combining technical skills with soft skills. Digital skills cannot be seen in isolation and we need to think in a holistic manner. Essential skills in addition to technical skills include critical thinking, teamwork, interpersonal skills, intercultural skills and the ability to adapt to a constantly changing environment. Furthermore basic empathy, historical consciousness, the ability to adapt to ambiguity and humility have also been proposed from the audience as important skills in the digital economy.

A second important debated issue is the need for constant learning. It is true that new skills are needed, but it is not only important to learn these skills, it is also essential to learn how to learn and to be adaptable to the constantly changing technology environment. So it is also our responsibility to teach ourselves, and there are several opportunities available including free online courses.

In such a dynamic and constantly changing environment, reskilling is also essential and Telenor in particular highlighted their focus on seeing how they can upscale the existing workforce and how to create a culture for learning so that people don’t only have one career but actually reskill themselves along their professional lives.

One tool Telenor is currently using is the 40 hour challenge, through which every employee is challenged by the CEO to spend 40 hours during the year on their own upskilling. In view of this constantly changing environment, the challenge of adapting curricula to the skills needed in the digital economy has been highlighted. To address this the two essential elements highlighted were the need for life-long learning and the importance for educational institutions and training providers to closely collaborate with employers to adapt their curricula to the actual needs of the job market.

Mr. Anir Chowdhuri, from the a2i programme in Bangladesh presented how in his country these issues are being addressed highlighting some of the achievements in the area which include for
example the training of about 10,000 entrepreneurs in rural areas and the implementation digital skills training for nearly 300,000 teachers.

II. Quotes

“Lifelong learning is essential for all of us, not just for the youth. It’s increasingly important not to gridlock people into predefined jobs but create work environments that help them to excel.” Ms. Elizabeth Thomas Raynaud, Senior Policy Executive, Digital Economy and Director, BASIS, International Chamber of Commerce

“The biggest opportunity for job creation is actually going out there and be an innovator. Learn something new. If there was an advice that I would have for a young person trying to build or think about his careers, go on some of these video tutorials and learn something new and try to educate yourself” Mr. Pierre Mirlesse, Vice President, Hewlett Packard Enterprise

“ITU and ILO launched the Digital Skills for Decent Jobs for Youth Campaign at the WSIS Forum last year, and ITU will soon be launching its Digital Skills Toolkit that will support stakeholders to build digital skills strategies where young people can develop basic skills, progress to acquire intermediate and advanced levels of digital expertise, to then be able to participate in emerging industry sectors and to start their own businesses” Mr. Yushi Torigoe, Deputy to the Director, ITU BDT.

III. Overall outcomes of the session

- A holistic approach is essential to focus not only on technical skills, but also on soft skills
- Life-long learning and the ability to adapt to a constantly changing technology environment is essential.
- It is important to learn new skills, but also to learn how to learn and to create a culture for learning to be able to adapt to such a dynamic environment
- It is important to keep curricula up-to-date with the actual employers’ needs and to create collaborations between educational institutions and employers
- The ITU Digital Skills Toolkit is designed to support stakeholders to build national digital skills strategies to promote youth employment and digital skills for the digital economy.

IV. Main linkages with the Sustainable Development Goals

Digital skills (advanced, mid-level, basic, entrepreneurship and soft skills) are increasingly needed for nearly all jobs and professional careers. Understanding the skills demanded in the labour market is thus essential to ensure young women and men are equipped with relevant, transferable, job-relevant digital skills. This is in line with SDG 4.3 which calls for equal access for women and men to affordable and relevant education and SDG 4.4 which calls for increasing the number of youth and adults with relevant skills for employment.

SDGs 5.5 and 5.6 are addressed through guiding young people, universities and training providers on the skills needed to ensure young women and men alike can pursue successful professional careers in the digital economy.
Considering the number and quality of jobs available for young people with digital skills, the discussion will provide a better understanding of the digital skills demanded in the digital economy thus addressing the current youth employment crisis in line with SDGs 8.5 and 8.6.

V. Emerging Trends related to WSIS Action Lines identified during the meeting
In relation to WSIS Action Line 4, the discussion highlighted several positive trends leading to improved digital skills training for young men and women. First of all, the session highlighted some of the skills needed in the digital economy which include not only technical skills, but also soft skills. It also stressed the importance of lifelong learning and presented some examples of how this can be implemented through online courses as well as workforce reskilling programmes (such as the 40 hours challenge presented by Telenor). The aforementioned example from Bangladesh also highlighted how digital skills training programmes are already being implemented in different areas. Finally, Ms. Elizabeth Thomas-Raynaud from ICC also presented the example of an international school in France where children are learning in a very different way compared to traditional education programmes, by for example not using textbooks, but only the web and tablets in class as well as teaching agility and adaptability.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
Some topics touched upon by this session would in our opinion deserve greater attention. For example identifying more concrete examples on how to provide youth with the skills needed that have been highlighted in this session. Furthermore it would also be important to further discuss how to ensure that such essential training programmes are inclusive and take into consideration also minorities and vulnerable groups.
Over these years, through the COP initiative, the COP guidelines for industry, policy makers, children, parents and educators were published. More children were heard by their policy makers, more governments put the issue of protecting children online at the centre stage, and more entities are active in pushing the topic to the forefront of discussion. Some of the progress done by the member states and private sector were also highlighted and the need to create a culture of online internet safety for children was emphasized.

I. Debated Issues
I. Things are much better if we think at certain things by design. We need to also think and look at how things are developed, designed and deployed.
II. We need to share information with children and talk to them.
III. There is the need to develop global indicators for law enforcement agencies to collect information on victim identification.
IV. There is also the need to invest in specialized law enforcement units to train police officers on the ground.
V. Media literacy as important to protecting children as much or more than any laws.
VI. Global partnerships can also in connecting different national stakeholders to develop national policies and strategies.

II. Quotes
- “There is no one better placed to do this than PSM, provided we get the right legal framework. A framework to protect children online as much as they are in the linear world, to rein in the lack of accountability of platform operators, and to allow PSM to continue to deliver their mission in a financially sustainable way.” Noel Curren, DG EBU

- “We have come a long way, however, much still needs to be done.” Houlin Zhao, SG ITU
III. Overall outcomes of the session highlighting
The High Level Dialogue highlighted the need to invest more on prevention and the need to have a 360 look at the issue. It emphasized also necessity to involve and engage young people in order to make sure that policies and strategies are designed in a relevant way for young audiences. In this regard, it is also important to measure the impact of the success in order to identify gaps and take concrete actions. The importance of multistakeholders partnerships was also considered as vital as well as the need to have a dialogue with children and share information on the potential online risks.

IV. Main linkages with the Sustainable Development Goals
SDG 17.2 Violence against children

V. Emerging Trends related to WSIS Action Lines identified during the meeting
Investing in AI Technologies to support law enforcement agencies to identify criminals and Victims.
The traditional Ministerial Round Table took place on the 21st of March as an integral component of the WSIS Forum.

The participants of the Ministerial Round Table emphasized on the importance of WSIS Action Lines framework as a key UN framework for work on the information and knowledge societies, and reiterated that many national digital agendas were built upon it.

They applauded the WSIS Forum for creation of global partnerships. WSIS Prizes were cited as an important global recognition of impactful ICT projects. The WSIS SDGs Matrix coordinated by ITU was highlighted as an important tool to map the missing links. The need for strengthened collaboration for building digital skills, incubation programmes and to fight cyberattacks was highlighted.
High-Level Policy Statements: Concluding Session

Wednesday 21 March 2018 16:30 – 18:00
CICG, Room 1
Captioning Interpretation: E/F/R/S/C/A

Concluding Session:

- Mr Houlin Zhao, Secretary-General, ITU
- Chairman of WSIS Forum: H.E Eng. Majed Sultan Al Mesmar,
The Tunis Agenda for the Information Society states that the WSIS implementation mechanism at the international level should be organized based on the themes and action lines in the Geneva Plan of Action and moderated or facilitated by UN agencies when appropriate. In addition, it states that ITU, UNESCO and UNDP should play a leading facilitating role in the implementation of the Geneva Plan of Action.

- **C1.** The role of public governance authorities 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 the use of ICTs
- **C6.** Enabling environment
- **C7.** ICT Applications:
  - E-government
  - E-business
  - E-learning
  - E-health
  - E-employment
  - E-environment
  - E-agriculture
  - E-science
- **C8.** Cultural diversity and identity, linguistic diversity and local content
- **C9.** Media
- **C10.** Ethical dimensions of the Information Society
- **C11.** International and regional cooperation

Each year, the WSIS Action Line Facilitators:
- Provide reports on the year’s activities on their respective Action Lines
- Organize Interactive Action Line Facilitation Meetings on their respective Action Lines.
1) Key achievements, announcements, launches, agreements, and commitments

- Launch of the updated MHEWS Checklist – for the World Meteorological Day – 23 March 2018
- Commitments were made by all panelist that the organizations they represent will continue work in the area of development and implementation of Early Warning Systems through providing the required support through financing, technical support, capacity building, development of solutions to meet the needs, awareness creation and providing the connectivity to the last mile.

2) Main outcomes highlighting the following:

I. Debated Issues
   - Launch of the MHEWS Checklist\(^1\): Going Forward - Relevance and Importance
   - Importance of Digital Radio in the dissemination of early warning messages to the last mile

\(^1\) MHEWS Checklist is a key outcome of the Multi-Hazard Early Warning Conference (MHEWC) held from 22 to 23 May 2017 in Cancún, Mexico. It updates the original 2006 document Developing Early Warning Systems: A Checklist which was developed as an outcome of the Third International Conference on Early Warning: From concept to action (EWC III) held from 27 to 29 March 2006 in Bonn, Germany\(^1\). Through the lens of the Sendai Framework, it incorporates the acknowledged benefits of multi-hazard early warnings systems, disaster risk information and enhanced risk assessments.
Highlights in the new developments in the area of IoT, Big Data and Artificial Intelligence.
Importance of working together to create ecosystems of solutions and provide more compelling solutions at better costs
Continued improvement of international processes delivers better results on the ground.

II. Quotes
- Radio is the last mile of resistance – Mrs. Ruxandra Obreja, DRM Consortium
- Challenges are often policy considerations, not the technical solutions – Daniel Kull, World Bank Group
- Rapid growth on commercial players in weather market is both a challenge and an opportunity. – Daniel Kull, World Bank Group
- ITU does design and deploy early warning systems, at ITU our moto is technology neutrality - there is no technology that is superior over another technology, it all depends on the situation on the ground – Dr. Cosmas Zavazava, ITU
- Internet of Things, Big Data and Artificial Intelligence have got a great potential in Saving Lives, not only in early warning but also in Disaster Management, search and rescue” – Dr. Cosmas Zavazava, ITU

III. Overall outcomes of the session highlighting
- There should be a harmony among technology considerations, operating procedures/processes and capacity building (institutional and human capacity building)
- We need to bring resources together, together we can do more in the implementation of WSIS Action lines beyond 2015

IV. Main linkages with the Sustainable Development Goals
SDG 11, SDG 12 and SDG13

V. Emerging Trends related to WSIS Action Lines identified during the meeting
- High competition in the area of satellite communications on broadband services is driving cost decrease satellite services.
- Terrestrial communications remain key to continued sustainable development.
- Human and institutional capacity in the area of policy, legislation and management is key to ensure that acquired innovative technologies and services bring value to national challenges and further fuel sustainable development

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
- Environmental monitoring: Technological Accidents and Development.
1) Main outcomes highlighting the following:

I. Debated Issues

This year the focus was on social entrepreneurship under the theme “Building skills for social entrepreneurs.” The session was attended by around 50 participants. It focused on how capacity building using ICTs supports the achievement of Sustainable Development Goal Number 4 (SDG 4) on ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030, and specifically target 4.4 which aims at an increase in the percentage number of youths and adults who have relevant skills including technical vocational skills, for employment, decent jobs and entrepreneurship. ICTs are used by entrepreneurs to develop innovative techniques aimed at solving social, cultural and environmental problems. These social entrepreneurs as they are currently called, create businesses aimed at generating a positive return to society, rather than profit. To achieve this, they require specific ICT skills to be able to generate appropriate innovations and remain relevant in their field.

The session was conducted in the form of a panel discussion and was moderated by ITU.

The panel consisted of 5 speakers from: the International Labor Organization (ILO), three social enterprises (WeRobotics, Horyou, and Empowerment lab), and the Government of Mexico. The panelists looked at how capacity building promotes social entrepreneurship and what skills are required to create ICT solutions aimed at generating returns to society rather than profit.

In his contribution, the representative from ILO highlighted the role of the social and solidarity economy in the achievement of the SDGs. He informed participants that there are over 200 million individuals who need work but cannot be absorbed in the employment market. Unemployment rates and the social deficit continue to grow across the world. ILO is therefore committed to support productive and sustainable enterprises that are working towards providing solutions to improve livelihoods. These enterprises have an advantage over other enterprises to provide much needed innovations while creating employment opportunities. The presentation highlighted the need to investigate the skills requirements for these social enterprises as well as realignments of the education sector to include entrepreneurship training from early stages of education.
The presentation made by the representative of the government of Mexico covered initiatives that have been put in place by the Mexican government to support entrepreneurs and develop skills in the digital era. These initiatives include communication, services and digital participation schemes based on the needs of users, public blockchain initiatives, innovative models for public procurement, as well as digital inclusion programmes aimed at promoting digital skills and computer use among students and teachers of 5th and 6th grade public schools in selected states within Mexico.

The representative from We Robotics shared their experiences in using robotics to create solutions for developing countries. This social enterprise uses a network of flying labs to build robotics capacity in countries they operate in. These labs contribute to creating new jobs and build local markets. The enterprise identifies local needs and adapts robotics solutions to address the needs, followed by technical training of locals on how to use robotics hardware and software to implement the identified solution. The skills are piloted through short projects, followed by business incubation programmes.

The representative from Horyou, a global social network for entrepreneurs, shared how through their network they have been able to bring together like minded people, provided an opportunity for extended market reach and enabled their members to turn their ideas to actual projects or businesses through knowledge exchange.

The representative of Empowerment Lab, a social enterprise from Ukraine that teaches girls to express themselves and develop their creativity through technology, presented a case study of their project called “Code in Creativity”. Through this project, girls are introduced to programming and taught coding skills as well as the use of creative digital software. The programme also supports development of soft skills such as nurturing vision, resilience, stress management and creativity.

II. **Key achievements highlighted in this session are:**

- Increase in the use of ICTs to provide solutions to social problems
- Introduction of robotics training to local communities in developing countries
- Creation of new jobs and markets for small entrepreneurs
- Increase in the number of girls trained in programming
- Increased access to required information by social entrepreneurs

III. **Challenges highlighted are:**

- Lack of pre-requisite skills in social entrepreneurship
- Illiteracy as an impediment to learning of new skills
- Limited internet penetration and IT infrastructure
- Lack of economic power to access ICTs

IV. **Quotes**

“Once trained you have the know-how but do you have the do-how?” Sonja Betschart, WeRobotics
V. Main Outcomes of the Session highlighting

- Main conclusions reached during the discussion
  - The development of ICT skills is critical to support innovation and entrepreneurship.
  - An overhaul of education policies is needed to include ICT and entrepreneurial training in school curriculum from primary school level.
  - Education processes have to be re-organized with the role of peer-to-peer training emphasized.
  - Access to the Internet and social media is critical to the success of small enterprises today, therefore accessibility costs have to be reduced as much as possible and quality ensured.
  - For social enterprises to thrive, they need employees with both technical and soft skills.
  - The use of technical solutions that are adapted and aimed at addressing local needs of communities improves uptake and learning.
  - Introducing technical skills, such as programming and coding, to girls at an early age increases chances of them innovating ICT solutions in the future and establishing new enterprises, reducing the gap between the number of women and men in ICT-related occupations or businesses.

VI. Main linkages with the Sustainable Development Goals

SDG 1, Focus of the action line C4 includes development of domestic policies to ensure that ICTs are fully integrated in education and training at all levels, including in curriculum development, teacher training, institutional administration and management, in support of the concept of lifelong learning. Creation of policy frameworks requires stakeholder engagement, analysis and interpretation of data for targeted policy interventions which can be achieved through skills development programmes.

SDG 2, With the emergence of e-agriculture and the growing need for the knowledge in the use of ICT’s, capacity building interventions focused at development and promotion of programmes to eradicate illiteracy using ICTs at national, regional and international levels, will contribute to knowledge growth and inclusion. It also focuses on building the capacity to use ICT tools to increase crop production, adopt modern farming methods, predict weather patterns, and in the process work towards eliminating hunger and creating food security.

SDG 3, To support research and strengthen capacity of developing countries for early warning, risk reduction and management of national global health risks, activities include design of specific training programmes in the use of ICTs in order to meet the educational needs of information professionals, such as archivists, librarians, museum professionals, scientists, teachers, journalists, postal workers and other relevant professional groups which focuses not only on new methods and techniques for the development and provision of information and communication services, but also on relevant management skills to ensure the best use of technologies.
SDG 4, Action line C4 focuses on development and promotion of programmes to eradicate illiteracy using ICTs at national, regional and international levels, with the aim of increasing the number of people with relevant ICT skills and to facilitate employment and entrepreneurship in the ICT sector.

SDG 5, Work on removing the gender barriers to ICT education and training and promoting equal training opportunities in ICT-related fields for women and girls, is part of the action line, with early intervention programmes in science and technology targeting young girls with the aim of increasing the number of women in ICT careers as well as promotion the exchange of best practices on the integration of gender perspectives in ICT education.

SDG 6, Development of distance learning, training and other forms of education and training as part of capacity building programmes, is part of the capacity building initiatives that supports countries interventions giving special attention to developing countries and especially LDCs in different levels of human resources development.

SDG 12, Raising awareness on sustainable consumption and production in today’s era requires the use of technology. The action line therefore impacts on this SDG by enhancing technological capacity of countries through training and development initiatives that target ICT’s and related areas, as well as building a more inclusive information society.

SDG 13, Action line C4 promotes creation by governments, in cooperation with other stakeholders, of programmes for capacity building with an emphasis on building a critical mass of qualified and skilled ICT professionals and experts.

SDG 14, Empowering communities in ICT use and promoting the production of useful and socially meaningful content is a capacity building intervention that can increase scientific knowledge and promote innovation and research.

SDG 16, The C4 action line focuses on promotion of international and regional cooperation in the field of capacity building, including country programmes developed by the United Nations and its Specialized Agencies.

SDG 17, Capacity building initiatives contributes to the SDG through the design and implementation of regional and international cooperation activities to enhance the capacity, notably, of leaders and operational staff in developing countries and LDCs, to apply ICTs effectively in the whole range of educational activities. Also through the launch of pilot projects to design new forms of ICT-based networking, linking education, training and research institutions between and among developed and developing countries and countries with economies in transition.

VII. Emerging Trends related to WSIS Action Lines identified during the meeting
- The need to take technology to those who need it, and teach them how to use it continues to be a priority in many parts of the world
- Social enterprises have a unique value proposition that should be leveraged on to build skills while addressing social problems
- Approaches to skills development should be diversified to respond to identified needs
Interactive Facilitation Meetings

WSIS Action Line C7: E-health: Digital Health - Status and Roadmap & WHO eHealth activities

WHO/ITU

Monday, 19 March 2018  14:30 – 16:15
Room H2 - ITU

This outcome will be made available soon.
1. **Key achievements highlighted in this session are:**

   - Increase in the use of ICTs to provide solutions to social problems
   - Introduction of robotics training to local communities in developing countries
   - Creation of new jobs and markets for small entrepreneurs
   - Increase in the number of girls trained in programming
   - Increased access to required information by social entrepreneurs

Challenges highlighted are:

   - Lack of pre-requisite skills in social entrepreneurship
   - Illiteracy as an impediment to learning of new skills.
   - Limited internet penetration and IT infrastructure
   - Lack of economic power to access ICTs

2. **Main outcomes highlighting the following:**

   I. **Debated Issues**

   This year the focus was on social entrepreneurship under the theme “Building skills for social entrepreneurs.” The session was attended by around 50 participants. It focused on how capacity building using ICTs supports the achievement of Sustainable Development Goal Number 4 (SDG 4) on ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030, and specifically target 4.4 which aims at an increase in the percentage number of youths and adults who have relevant skills including technical vocational skills, for employment, decent jobs and entrepreneurship. ICTs are used by entrepreneurs to develop innovative techniques aimed at solving social, cultural and environmental problems. These social entrepreneurs as they are currently called, create businesses aimed at generating a positive return
to society, rather than profit. To achieve this, they require specific ICT skills to be able to generate appropriate innovations and remain relevant in their field.

The session was conducted in the form of a panel discussion and was moderated by ITU.

The panel consisted of 5 speakers from: the International Labor Organization (ILO), three social enterprises (WeRobotics, Horyou, and Empowerment lab), and the Government of Mexico. The panelists looked at how capacity building promotes social entrepreneurship and what skills are required to create ICT solutions aimed at generating returns to society rather than profit.

In his contribution, the representative from ILO highlighted the role of the social and solidarity economy in the achievement of the SDGs. He informed participants that there are over 200 million individuals who need work but cannot be absorbed in the employment market. Unemployment rates and the social deficit continue to grow across the world. ILO is therefore committed to support productive and sustainable enterprises that are working towards providing solutions to improve livelihoods. These enterprises have an advantage over other enterprises to provide much needed innovations while creating employment opportunities. The presentation highlighted the need to investigate the skills requirements for these social enterprises as well as realignments of the education sector to include entrepreneurship training from early stages of education.

The presentation made by the representative of the government of Mexico covered initiatives that have been put in place by the Mexican government to support entrepreneurs and develop skills in the digital era. These initiatives include communication, services and digital participation schemes based on the needs of users, public blockchain initiatives, and innovative models for public procurement, as well as digital inclusion programmes aimed at promoting digital skills and computer use among students and teachers of 5th and 6th grade public schools in selected states within Mexico.

The representative from We Robotics shared their experiences in using robotics to create solutions for developing countries. This social enterprise uses a network of flying labs to build robotics capacity in countries they operate in. These labs contribute to creating new jobs and build local markets. The enterprise identifies local needs and adapts robotics solutions to address the needs, followed by technical training of locals on how to use robotics hardware and software to implement the identified solution. The skills are piloted through short projects, followed by business incubation programmes.

The representative from Horyou, a global social network for entrepreneurs, shared how through their network they have been able to bring together like minded people, provided an opportunity for extended market reach and enabled their members to turn their ideas to actual projects or businesses through knowledge exchange.

The representative of Empowerment Lab, a social enterprise from Ukraine that teaches girls to express themselves and develop their creativity through technology, presented a case study of their project called “Code in Creativity”. Through this project, girls are introduced to programming and taught coding skills as well as the use of creative digital software. The programme also supports development of soft skills such as nurturing vision, resilience, stress management and creativity.
II. Quotes

“Once trained you have the know-how but do you have the do-how?” Sonja Betschart, WeRobotics

III. Main Outcomes of the Session highlighting

Main conclusions reached during the discussion
– The development of ICT skills is critical to support innovation and entrepreneurship.
– An overhaul of education policies is needed to include ICT and entrepreneurial training in school curriculum from primary school level.
– Education processes have to be re-organized with the role of peer-to-peer training emphasized.
– Access to the Internet and social media is critical to the success of small enterprises today, therefore accessibility costs have to be reduced as much as possible and quality ensured.
– For social enterprises to thrive, they need employees with both technical and soft skills.
– The use of technical solutions that are adapted and aimed at addressing local needs of communities improves uptake and learning.
– Introducing technical skills, such as programming and coding, to girls at an early age increases chances of them innovating ICT solutions in the future and establishing new enterprises, reducing the gap between the number of women and men in ICT-related occupations or businesses.

IV. Main linkages with the Sustainable Development Goals

SDG 1, Focus of the action line C4 includes development of domestic policies to ensure that ICTs are fully integrated in education and training at all levels, including in curriculum development, teacher training, institutional administration and management, in support of the concept of lifelong learning. Creation of policy frameworks requires stakeholder engagement, analysis and interpretation of data for targeted policy interventions which can be achieved through skills development programmes.

SDG 2, With the emergence of e-agriculture and the growing need for the knowledge in the use of ICT's, capacity building interventions focused at development and promotion of programmes to eradicate illiteracy using ICTs at national, regional and international levels, will contribute to knowledge growth and inclusion. It also focuses on building the capacity to use ICT tools to increase crop production, adopt modern farming methods, predict weather patterns, and in the process work towards eliminating hunger and creating food security.

SDG 3, To support research and strengthen capacity of developing countries for early warning, risk reduction and management of national global health risks, activities include design of specific training programmes in the use of ICTs in order to meet the educational needs of information professionals, such as archivists, librarians, museum professionals, scientists, teachers, journalists, postal workers and other relevant professional groups which focuses not only on new methods and techniques for the development and provision of information and communication services, but also on relevant management skills to ensure the best use of technologies.

SDG 4, Action line C4 focuses on development and promotion of programmes to eradicate illiteracy using ICTs at national, regional and international levels, with the aim of increasing the number of people with relevant ICT skills and to facilitate employment and entrepreneurship in the ICT sector.
SDG 5, Work on removing the gender barriers to ICT education and training and promoting equal training opportunities in ICT-related fields for women and girls, is part of the action line, with early intervention programmes in science and technology targeting young girls with the aim of increasing the number of women in ICT careers as well as promotion the exchange of best practices on the integration of gender perspectives in ICT education.

SDG 6, Development of distance learning, training and other forms of education and training as part of capacity building programmes, is part of the capacity building initiatives that supports countries interventions giving special attention to developing countries and especially LDCs in different levels of human resources development.

SDG 12, Raising awareness on sustainable consumption and production in today’s era requires the use of technology. The action line therefore impacts on this SDG by enhancing technological capacity of countries through training and development initiatives that target ICT’s and related areas, as well as building a more inclusive information society.

SDG 13, Action line C4 promotes creation by governments, in cooperation with other stakeholders, of programmes for capacity building with an emphasis on building a critical mass of qualified and skilled ICT professionals and experts.

SDG 14, empowering communities in ICT use and promoting the production of useful and socially meaningful content is a capacity building intervention that can increase scientific knowledge and promote innovation and research.

SDG 16, The C4 action line focuses on promotion of international and regional cooperation in the field of capacity building, including country programmes developed by the United Nations and its Specialized Agencies.

SDG 17, Capacity building initiatives contributes to the SDG through the design and implementation of regional and international cooperation activities to enhance the capacity, notably, of leaders and operational staff in developing countries and LDCs, to apply ICTs effectively in the whole range of educational activities. Also through the launch of pilot projects to design new forms of ICT-based networking, linking education, training and research institutions between and among developed and developing countries and countries with economies in transition.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

The need to take technology to those who need it, and teach them how to use it continues to be a priority in many parts of the world Social enterprises have a unique value proposition that should be leveraged on
To build skills while addressing social problems approaches to skills development should be diversified to respond to identified needs.
Interactive Facilitation Meetings

WSIS Action Lines C1 (The role of governments and all stakeholders in the promotion of ICTs for development), C7 (E-government), C11 (International and regional cooperation): Aligning ICT and E-government strategies with National development strategies

UNDESA
Thursday, 22 March 2018 11:00 – 13:00
Room C1 - ITU

1) Key achievements, announcements, launches, agreements, and commitments

The outcome of the facilitation meeting will feed into:

a. United Nations E-Government Survey 2018, the only tool that assesses the progress in e-government development of 193 UN Member States

b. High-level Political Forum 2018, the main UN platform to review the implementation of Sustainable Development Goals (SDGs)

2) Main outcomes highlighting the following:

I. Debated Issues

C1 – Promotion of ICTs for SDGs
The vital role of ICTs in achieving the Sustainable Development Goals (SDGs) low visibility of ICTs in the 2030 Agenda for Sustainable Development, National Development Plans, and in the High level political forum (HLPF) the need for significant dialogue in aligning ICT and e-Government Strategies with National Development Strategies (NDS) to ensure that developing countries can build resilient and sustainable societies equitable and inclusive growth and access to safe water by using ICTs Human rights issues, accessibility, security, privacy network neutrality The role of innovation and enabling environment in promotion bridging digital divide and investing in digital skills via education and vocational training for those who are on jobs, and life-long learning to put into practice (ICT/e-Government as part of life learning)

C7 e-Government
Openness in all aspects of e-Government Development (open source, data, standards, communities, markets, culture) Importance of having a digital marketplace to link technology or people with digital projects in the public sector and especially involving Small and Medium Enterprises (SMEs) more in the government contracts. The role of ICT/e-Government technology in helping disabled and leaving no one behind strategies to address the causes of digital divide
mainly elderly who lacks the confidence to use ICTs and II) economic causes and affordability of access

C11 - Partnerships
Importance of public private partnerships (PPP) especially with local organizations, micro-enterprises, and local SMEs importance of setting digital centers in urban/rural areas, PPP hosted by Governments but run by entrepreneur's role of UN regional offices i.e. the WSIS activities undertaken by UNECA in Africa The role of regional perspective – no one can do it alone, importance of information sharing, promotion of regional cooperation, role of UN regional commissions. The important role of private sector in deployment of ICTs and e-Government and not treating mega ICT companies and private sector as a cash machine for taxation

II. Quotes
“Make things open: it makes things better!” Mr. Chris Ferguson, Director at Cabinet Office, Government Digital Service, United Kingdom

“The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.” Bill Gates quoted by a panelist

“When we are rebuilding Iraq, we did not go to other parts of world for an e-government strategy, we went to our neighbors for help” Dr. Haidar Fraihat of ESCWA quoting an Iraq official to indicate the importance of regional cooperation

“ICTs have unprecedented potential for delivering equitable and inclusive growth, protecting the environment and improving the well-being of people around the world.” UN Deputy-Secretary General Amina J. Mohammed quoted by a panelist

III. Overall outcomes of the session highlighting
The importance of promoting common principles and standards the importance of Openness in designing e-government systems (open source, open data, open standards, open communities, open markets, open culture) paying attention to human rights issues (cyber security, data protection, access to information) while designing ICT and E-Government Strategies the importance of using non-threatening language while promoting ICTs for development i.e. Service at doorsteps instead of e-government, Time, Cost, Value instead of corruption or transparency the role of private sector and public private partnerships in delivering digital services

IV. Main linkages with the Sustainable Development Goals
Digital government is an important factor for achieving the SDGs and can generate benefits in the form of eliminating poverty and increasing prosperity. Exploiting ICTs through digital government has far-reaching potential in improving public services that are critical to the poor. ICTs can ensure inclusion and participation to fulfil the motto of leaving no one behind. Increasing access to digital technologies brings more choice and greater convenience for the most vulnerable. Through inclusion, and innovation, poor and disadvantaged are provided by opportunities that were previously out of reach. Governments by exploiting ICTs can provide new services or improve existing ones that are critical to the poor in ending poverty, hunger and achieving food security as well as ensuring healthy lives and empowering women and girls.
V. Emerging Trends related to WSIS Action Lines identified during the meeting

- Digital marketplace for public sector to connect Government ICT projects with people and technology particularly from SMEs
- Services through public private partnerships or in partnerships with civil society organizations

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

“Empowering people and ensuring inclusiveness and equality” in line with the theme of the HLPF 2019
1. Main outcomes highlighted the following

I. Debated Issues

ICTs are key to the advancement of the digital economy and contribute to achieving the Sustainable Development Goals (SDGs), because people need affordable access, need the digital skills to benefit from these tools, and need a trusted, safe and secure ICT environment to achieve progress across the different sectors - going from education to finance to health, agriculture, etc. It is important to highlight cooperation at the international, regional and national level. Sharing experiences, best practices and tools for the digital transformation cannot be underestimated.

With the rise of the Internet, Artificial intelligence, 5G communications and cloud technologies, ICTs increasingly power and enable the global economy. Existing markets are transformed beyond recognition, others have become obsolete while new ones emerge. Hardly any area of the economy and society has remained untouched. Infrastructure development alone is not important anymore. It should be more closely related with the social-economic development of national economies. In this sense, regulation needs to be flexible, to allow innovative services and applications, as now it is time to move to a new era of regulation. It is difficult to regulate what you do not know and what you do not understand. Collaboration is not only a private, exclusive dialogue, but should be an open exchange in order to find adapted and forward-looking solutions through a holistic approach.

It is becoming more and more relevant to foster innovative projects that contribute to disseminate communications at lower prices and which also contribute to reducing costs of services and investment costs. Panelists highlighted the importance of investment in ICT infrastructure to guarantee connectivity and access to all and reduce the digital divide. In order to be able to better address the challenges in having efficient collaboration in the digital environment, it is necessary to define how to move from one generation of regulation to the next. Policy makers and regulators need to be flexible and dynamic as markets and technologies are very dynamic. Policy makers and regulators should be able to swiftly adapt to evolving technologies and market conditions.
Some of the important challenges in the digital economy are related to security and privacy. For markets to thrive, effective mechanisms need to exist to enhance collaboration across the sector and thus create the enabling environment to be able to quickly and effectively respond to security threats and build trust in the digital environment. The example of collaboration with the financial regulator for the development of digital financial inclusion in Egypt was largely discussed. Despite the advances and work done worldwide, there is need for more collaboration between the ICT sector and the financial sector – there are still issues that need to be considered and further tailored to specific national contexts, such as microfinancing, interoperability, mobile payments, and competition issues, consumer protection and security. Panelists noted that others sectors’ stakeholders often underestimate the importance of telecommunication/ICT infrastructure and technologies, as they only focus on specific services. A more collaborative and holistic approach to regulating those services can go a long way in overcoming misconceptions and recognizing the pivotal role of infrastructure. We are facing a host of policy and regulatory issues, from infrastructure development to market competition to data protection; however, one of the key areas to address remains the human factor.

Last year, ITU published the first in a new series of reports, the ITU Global ICT Regulatory Outlook. The second edition will be launched at the forthcoming Global Symposium for Regulators (GSR) from 9 to 12 July in Geneva.

The evolution of regulation in the digital transformation has been analyzed from a regulatory perspective in ITU’s work stream on collaborative regulation, which was presented during the session.

II. Quotes

Christine ARIDA, National Telecom Regulatory Authority of Egypt

• “We need to continue providing widespread and affordable access, and move to a new era of regulation”
• “Our investment needs are growing, and we are under growing pressure to deliver universal service, but revenues from traditional telecom products are declining”

Aarti HOLLA-MAINI, ES OA - EMEA Satellite Operators Association

• “You cannot regulate what you don’t know or what you don’t understand”
• “The future is going to be one of convergence and hybrid solutions that will require regulation and collaboration”

Manuel DA COSTA CABRAL, ANACOM, the Regulatory Authority for Electronic Communications in Portugal

I. “We need to be humble enough to admit we do not know what the future will be like”
II. “Let’s think about some high-level principles that will help us face these challenges - precise measures might be difficult to define at this stage”

Pablo BELLO, ASIET - Asociación Interamericana de Empresas de Telecomunicaciones

• “Despite the amazing progress of the last ten years, half of the world population is still not connected”
• “Current regulations were made for a world that does not exist anymore. Dialogue and leadership are key to creating trust and a collaborative environment where new regulatory frameworks will be shaped”
III. Main Outcomes of the Session

ICT Regulators, Policy Makers and the private sector as well as the wider community recognize that regulation – and importantly collaborative regulation – play an important role in digital transformation. What's more, creating incentives for innovation and entrepreneurship must be addressed holistically at the policy and regulatory level. ICTs are key to helping achieve the SDGs. More synergies between the various economic sectors is needed to break across silos. Clearly defined roles and mandates are necessary, as well as the identification of overlaps – and areas for collaboration – among policy makers and regulatory authorities. The important role of ITU in addressing major regulatory challenges at the international and regional level was emphasized. ITU is viewed by stakeholders as a neutral platform to support countries and society to move to a new digital paradigm. A major challenge going forward will be balancing futuristic ambitions with the real needs of people – and bringing in digital transformation by embracing new technologies and innovation. Political and development portfolios need to shift focus and put forward policy and market reviews to identify the strengths and weaknesses of current policy and regulatory frameworks. We have to move from words to actions.

Beyond the national level, collaboration between stakeholders – and importantly policy makers and regulators – from different countries, is key to ensure regional harmonization. NRAs should innovate at the national level and collaborate across borders. What more can we do together? It was highlighted that NRAs can lead and support multi-sector collaboration to deliver on the digital promise – integrating efforts across health, finance, education, energy and ICTs, by defining approaches for effective coordination, cooperation and accountability across the sectors, and involving government agencies, policy makers, private sector, academia and civil society.
1) **Key achievements, announcements, launches, agreements, and commitments**

- Enhance digital innovation for the poorest of the poor by understanding and acting on both front end and back end.
- Building a framework for digital innovation in agriculture
- Develop National E-Agriculture Strategy, currently in 6 countries already.

2) **Main outcomes highlighting the following:**

   **I. Debated Issues**

   We live today in a digitalized world. In 2017, 47% of the world’s populations were using the Internet and 54% of households in the world had Internet access. Mobile-broadband subscriptions have grown more than 20 annually in the last five years and are expected to have reached 4.3 billion globally by end 2017. By 2020, the world is expected to have over 50 billion Internet of Things devices and equipments. At the same time, the food and agricultural sector, which also includes livestock, fishery, forestry, nutrition and climate topics, is going to face enormous challenges to feed the 9.6 billion people who will inhabit the planet by 2050, and food production must increase by 70% by 2050.

   Digital Innovation is key transforming those areas to address global challenges and achieve the SDGs in line with the WSIS Action Lines. Therefore, it is necessary to develop a strategic framework for sustainable digital innovation to support collaboration of UN agencies, partners, and national governments in implementing ICTs, digital innovation ecosystems, and increase e-agriculture initiatives and capacity development. The FAO and ITU developed a National e-Agriculture Strategy Guide ([http://www.fao.org/3/a-i5564e.pdf](http://www.fao.org/3/a-i5564e.pdf)) working with member states in
developing their national e-agriculture strategies and masterplans. FAO and ITU co-organized regionals, and a global hackathon called #HackAgainstHunger (http://www.itu.int/net4/wsis/forum/2018/Pages/SpecialTracks/Hackathon) which took place at WSIS Forum 2018. Around 80 participants from 33 nationalities, 47% were women, worked two days in Geneva designing, developing and applying innovative ways to use ICTs in agriculture.

Technology will surely play a huge role in bringing up new, sustainable solutions, such as precision farming, machine learning and AI, internet of things, and data analytics framework. Precision farming represented the first wave of tech innovation in the agriculture sector. Machine learning & Artificial intelligence are now augmenting the traditional UX patterns. In a connected world, machines will report on their own activity and the potential for data collection is endless. Better data along with the volume and speed with which it is now becoming available, affords new possibilities to understand people and places more deeply.

Human-Centered Design is an innovation process in which end-user needs; aspirations and context are given extensive attention at each stage of the product/service development process. It is better to co-design and test solutions with users, locating users’ needs and expectation in the center. Make sure people become part of solutions, through the three phases such as project definition, realization and execution, capturing work flow of ideate, prototype, test, develop, deploy and monitoring. Working with users instead of working for them, we can build a better future together.

ICT application for low literate farmers, which allows us to bridge the gap to low literature people for obtain health and agriculture training to the hardest to reach communities. ICT for farmers training has been implemented in remote areas in Ghana, which proves that ICT devices are very useful for low literature farmers. The agriculture training received through ICT devices help farmers plant crops more effectively. ICT allows us to design project for the every poorest rural families and complete that last mile to help the poorest of the poor. Through analogical innovation, the project creates audio recordings in local language filled with knowledge from local experts on agriculture practices and health behaviors to address the needs of people in hard-to-reach communities. Digital innovation allows us to create user-friendly devices, such as audio recording which allow low literate farmers to use whenever they like.

E-agriculture has been a WSIS action line led by the FAO with support from ITU since the Geneva 2003 and Tunis 2005 Summits. Many e-Agriculture applications today are the product of numerous years of this fruitful bilateral cooperation.

ITU/FAO jointly has developed e-agriculture strategy to give this advice to government. It is necessary to bear in mind that we have great opportunity to use digital tools/solutions to make bigger changes. However, it’s not just one or two applications, as we saw from previous two concrete projects, it only happens when lots of applications work together as comprehensive, cohesive and overall system to achieve the goal. That’s why it is important to develop an ecosystem.

It is also important to make sure each area is able to speak to each other. Build on each other, each sector knows what are the roles they play, such as government (Ministries of Agriculture,
Communications and others), what is real role from government to maximize the impact. Different applications are isolated, it is necessary to break silos to shift from (silied) applications to system approach by creating a common digital platform that some assets are common, some solutions are concrete.

National E-agriculture strategy includes a full circle of strategic planning, analysis, design and implementation. Information collected from project implementation would help us further project analysis for a better outcomes.

According to demand driven platform design process: what to do from strategy to platform, the national e-agriculture strategy includes requirements gathering (business architecture), tech inventory, information architecture design, interoperability framework, request for proposal for system integrators (including technical architecture).

II. Quotes

“Innovative use of digital technologies contribute to improving livelihoods of farmers, increase nutrition and food security, reduce poverty, and provide solutions to better adapt and mitigate the effects of climate change on agriculture. In addition, innovation and ICTs help us to improve society productivity and to reach the most vulnerable. It is important to harness digital innovation for social good”—James Azevedo Görgen, Head of Digital Innovation and Development at FAO.

“A common ICT framework brings together partners and solutions from across value chain/across sectors to synergize and meet needs to further SDGs. A common ICT component business models include information providers, sector specific buyers/suppliers, technology providers, NGOs, telecom operators, banking, finance and payments, donors and government. People from these different sectors shall speak to each other for a comprehensive, cohesive and overall system to make big changes and achieve SDGs”- Hani Skandar, ICT Applications Coordinator at ITU.

III. Overall outcomes of the session highlighting

People care about their problems not digital solutions. Innovation design decisions must be rooted in solving real problems suffered by actual users, or they’re not useful. Therefore, it is critical to learning with the community, designing with the community and testing with the community.

When doing innovation, it is important to consider both frontend and backend, if you don’t understand what to do at the backend, you actually don’t understand the frontend well either. The existing examples from Bangladesh and India teaches us that when thinking about the framework, naturally flushing with lots of solutions at the beginning stage, however it is important to think about systems. Do not leave it for later, otherwise problems could become serious.

When doing e-Agriculture, it actually takes many differences to meet farmers’ need. If only offering knowledge, and there are no way farmers to get seeds or other services, then there will be no concrete results at all. That’s why it is important to develop partnerships with other stakeholders to complete the comprehensive programme from frontend to backend. It is important to know backend. It is important to know the users. The number of people to use the device will generate data to help you make better decisions. To avoid using technology to easily get project deployed for incentives to see success, instead using technology to bride the gap and let people further behind benefit from the development of technology.
Digital innovation framework is a platform for multi-stakeholders to work together with innovative technology and practices, as well as innovative business models and processes. FAO and ITU, as well as the entire UN community, need to be able to work with all sectors. It’s important to engage multi-stakeholders to promote digital innovation and achieve successful business model.

IV. Main linkages with the Sustainable Development Goals

Digital innovation has the potential to transform the approach to all 17 SDGs. Specifically, the development of a strategic framework for digital innovation in the food and agriculture sector will provide a systematic process and sustainable business model for creating, testing, funding, and scaling new digital solutions to achieving the SDGs, particularly 1, 2, 8, and 13. Through this process, youth entrepreneurship, capacity development, and multi-stakeholder partnerships will be formed that will enable a permanent and systematic approach to integrate digital technologies and innovation into local communities and national action plans. These activities contribute to SDGs 1, 2, 6, 8, 9, 13, 14 and 15 as well as establishing business models to produce new ideas and products aimed at contributing and achieving all the SDGs.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Digital innovation ecosystem
The framework of digital innovation in agriculture
National e-Agriculture Strategy
Common digital platform
Precision and smart agriculture
Human-centered design
Machine Learning and data analytics
1) Main outcomes highlighting the following:

I. Debated Issues

The session aimed to provide a better understanding of Blockchain technology and its relevance to security. It analyzed and evaluated the current status of Blockchain technology and its maturity. It further expanded on the various uses of Blockchain and the potential policy and regulatory implications and finally reflected on the future of the technology.

II. Quotes

David Manset, Be-Studys: “Data will become the currency of the future and we want the related transactions to be secure”

Ghassan Karame, NEC Laboratories Europe: “Blockchain can be one of the most robust platforms against cyberattacks, IF one knows how to use it.”

David Wen, ITU FG-DFC: “We first need to look at the goals of each system, then understand the economic impact and the regulatory requirements and, finally make sure that the technology is implemented in a compliant way.”

III. Overall outcomes of the session

Blockchain is not a one-size-fits-all application. It needs to be developed based on different use cases, so that it can be applied effectively in different industries, such as the telecom industry. Standardization is vital in this regard. Some of the advantages mentioned were that Blockchain allows to digitize and speed up financial processes and that it is more robust against attacks. Blockchain technology is often referenced as “secure by design”, making it potentially suitable for activities such as record management, identity management, transaction processing, supply
chain management, voting etc. Some panelists were however of the view, that in Blockchain’s current level of maturity, privacy is not fully safeguarded. Bitcoin has inspired recent interest in Blockchain and DLT as a technology that can meet some of the security requirements of a new form of money. However, there are also considerable shortcomings in the scalability and reliability of the underlying technology. The aspect of wasting resources was further mentioned as a potential disadvantage of DLT, in view of its design to create multiple copies of the same portion of data (e.g. waste in terms of energy consumption, server capacity or cost of transaction).

IV. Main linkages with the Sustainable Development Goals

In the Post-2015 era, ICTs are expected to have an enabling role in all aspects of socioeconomic development. Such development would however not be sustainable without providing the necessary safeguards, based on which nations could benefit and thrive. The WSIS-SDG Matrix elaborates further on areas of the SDG framework, where security in the use of ICTs could foster and accelerate implementation. These include inter alia access to electronic financial services (1.4), access to online information as part of education (4.1, 4.3, 4.5), empowerment of women through ICTs (5b), development of resilient infrastructure and sustainable economic growth (7.1, 7a, 7b, 8.1, 9.1), transition to Smart Cities (11.3, 11b), and end of child violence and exploitation, especially in the online world (16.2). Blockchain was identified as a promising technology that could potentially be applied in many uses of ICT, as these are listed above.
1. key achievements and challenges shared by the audience and/or panelists

**Overview of speakers’ comments:**

The UPU announced the launch of a partners-led technical assistance programme for the digitization of postal financial services to foster financial inclusion. Achievement of a consensus among postal operators that digitization is a necessity, has been a big step forward in servicing the needs of the connected businesses and citizens. The UPU brings a global and clear picture on the potential and actual contribution that national post offices make to financial inclusion through digital financial services. The UPU is studying how to enhance the contribution of the international postal network to the development of small merchant acceptance of digital payments and will be releasing, with its partners, a research paper on this key topic. UPU launched a call for partnerships to support Postal operators wishing to enter the digital financial services space. The representative of VISA Inc. mentioned they are heavily engaged with non-traditional entities that have relationships with the underbanked and underserved populations and the capacity to reach the last mile. They are working with various channels to lead transformation through digitization of financial services and payments with social and economic impacts for targeted populations including micro and small merchants, women and farmers.

Bangladesh set up a super interoperability and mobility platform among banks, Telcos, MFS, Posts and other providers to overcome inefficiencies and gaps caused by actors working in silos. Bangladesh is focusing on social safety payments in a partner approach including the Post. Understanding the specific needs of the population is key to insurance the alignments and relevance of digital financial products.

Given the local nature of ecommerce in Bangladesh, where 80% of ecommerce is from local regions, focus is given to creating about 5,000 local ecommerce hubs located in government offices but run by entrepreneurs linking rural and urban market players.
The Postmaster General of Nigeria and CEO of NIPOST, stressed that the Nigerian Postal Service is back in the financial services space in Nigeria through innovation, partnerships and digitization, targeting youth and rural populations. Creating added value jobs and growth in rural areas and for the youth is a strategic direction taken by Nipost. An example of successful partnership in digital solutions was the NIPOST Address Verification System which was awarded a WSIS Prize during this year’s WSIS Forum.

The representative from ITC explained some of the concrete challenges faced by SMES in developing countries vis-à-vis formalization through digitization. ITC underlined the successful partnerships developed between small exporters and postal operators in developing market access especially through digital solutions, including identification and payments.

The representative from UNCTAD highlighted that the co-facilitators are also partners in eTrade For All. Overall, the eTrade For All initiative identified seven policy areas, one of which is electronic payment solutions including issues of interoperability, legal and regulatory frameworks. WSIS stakeholders were invited to make use of the platform, which includes other partners aiding on e-commerce for development, including on the issue of payments and financing for e-commerce. In addition, stakeholders were invited to the UNCTAD E-commerce Week from 16-20 April 2018 where there is an opportunity to explore the outcomes of this session as part of this year’s theme of “digital platforms for development”.

2. Main outcomes highlighting the following:

I. Debated Issues

Please capture highlights of the main issues debated and interactions with audience

This session considered the importance of access to digital financial services in order to foster both financial inclusion and SMES’ development and addressed the needs for a strong “partnership for implementation approach” at country level between all relevant stakeholders and for leveraging the relevant infrastructures including the postal network to meet SDG 8 target 3. Experiences from Bangladesh, Nigeria, among others, and discussed ways to meet SDG target 8.3 on MSME growth through access to financial services.

II. Quotes

Please provide important quotes from the session and the names & organization of the person you are quoting.

“Posts must go digital to remain relevant, efficient and impactful to fully support Financial inclusion. Many postal operators have already embraced digitization of financial services with great success both in terms of business and most importantly in terms of financial inclusion of excluded populations and enterprises. The UPU is providing policy advice and technical assistance support to the Posts willing to take that Digital journey”. Youssouf Sy, Senior Expert Financial Inclusion, Universal Postal Union (UPU)
«The ability to take and make digital payments is a first order of business for SMEs, especially small businesses, to join the new economy and participate in ecommerce. With unique proximity to the world’s hardest-to-reach populations, Postal financial institutions are well-positioned to provide small businesses the digital payment services they need to thrive in an ever-more connected world. Posts won’t just deliver mail, they’ll also deliver digital payment services to neighboring merchants, supporting business growth while bringing new revenue opportunities to post offices with technology and services that keep them vital in the digital age. » Jorge Ortega, Senior Director, Global Financial Inclusion Visa Inc.,

“We talk about savings, loans, insurance, payments and remittances, but again these are considered by the point of view of the experts. But if you look at it from the poor’s perspective it is receiving and making payments. If they are living from hand to mouth savings is not an issue, basic payments and remittances where it starts.” Anir Chowdhury, a2i Project Advisor to Prime Minister’s Office, Bangladesh

«We want to empower youth and rural populations through our innovative postal strategies and products» Adebisis Adegbuyi, Postmaster General and CEO of Nigerian Postal Service (NIPOST)

«Getting digital for informal small businesses requires creating at least 50% to 100% added value to remain profitable. Formalization and compliance costs drive online prices up while there is price pressure by econsumer who expect to buy cheaper online». Mohamed Es Fih, eSolutions, International Trade Centre, (ITC)

« Rapidly spreading digital technologies now offer an opportunity to provide financial services at much lower cost, and therefore profitably, boosting financial inclusion and enabling large productivity gains across the economy. », Paul Donohoe, Manager of Digital Economy, E-commerce and Trade Programme, Universal Postal Union (UPU)

III. Main Outcomes of the Session highlighting

Consensus about the importance of digital financial services as a key element for financial inclusion and growth of SMSEs that can help accelerate the achievement of

SDG target 8.3
Important national infrastructures such as the postal network with the universal reach into the last mile can increase financial inclusion of unbanked and underserved communities, which can be an enabler for formalization and growth of SMSEs. The importance of a “human and merchant centered” approach to digital financial services was considered vital to ensure relevant services were provided to the right socio and economic segments of the population. All the actors of the digital financial services space including governments should partner to bring their added value.

Consensus on added-value of digital financial services in meeting the needs of individual and small businesses in ways that are superior to the informal financial tools they use today.

Cost of formalization and digitization of SMEs in developing countries was identified as a challenge to address in the future.
Businesses and government leaders need to make a concerted effort to secure the potential benefits of financial inclusion using digital financial services.
Three building blocks are required:
1. Widespread mobile and digital infrastructure,
2. A dynamic business and regulatory environment for financial services,
3. And digital finance products that meet the needs of individuals and small businesses in ways that are superior to the informal financial tools they use today.

IV. Main linkages with the Sustainable Development Goals

The session paid particular attention to the way e-business, e-commerce and financial inclusion pave the way to the formalization and growth of MSMEs, which make up the majority of enterprises in developing countries. This is directly related to

**Goal 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**Target 3:** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Development-oriented policies enabling digitization are required to encourage the formalization and growth of micro-, small- and medium-sized enterprises, through access to financial services.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

The E-Business Action Line aims to enhance the involvement of all stakeholders in promoting the benefits of e-business and stimulating the development of enabling frameworks to enhance impact of e-business applications, content and services.

Align the entire WSIS forum around the SDGs that are specifically dealt with in annual HLPF. This way a focused link can be made between the contribution that continued development of the digital economy and its benefits can make to the achievement of these specific SDG.
1. Key achievements

Strategy of New Networks in the Republic of Serbia Opportunities for ICT4D in Asia and the Pacific

Facebook projects for connecting the Unconnected and Under Connected

ITU assistance based on the Objective 2 of the Buenos Aires Action Plan: Modern and secure telecommunication/ICT Infrastructure: Foster the development of infrastructure and services, including building confidence and security in the use of telecommunications/ICTs

2. Main outcomes highlighting the following:

1. Debated Issues

The session debate was mostly focused on the importance of ICT Infrastructure and its link to SDGs. The session addressed several aspects in relation to ICT Infrastructure and how those can be used to fulfill the SDGs purpose. Also, it is been mentioned that technology has a determining role in our lives and most of the needed processes of any sort of implementations depend on the technology therefore, it is very important to have a strong foundation and dynamic ICT intrastation implemented in every region to help reaching the sustainable development goals.

Prof. Irini Reljin (Serbia) addressed the aspects of technology which are important to be developed at a regional level to increase development of the SDGs some of which are the Cloud Services, IoT, 5G coverage, as well as Spectrum. The mentioned aspects are a necessity for the implementations of the ICT infrastructure such as broadband connectivity.
Mr. Masanori Kondo from Asia-Pacific Telecommunity mentioned their strategic plan which is reflected in the region and it is the bounding and dependency between connectivity, innovation, trust, capacity building, and partnership. APT current activity consist of focusing on presenting the regional area prospective regarding to ICT and other aspects in relation to SDGs development and needs as well as facilitating the development of ICT infrastructure taking place in the region. One of the challenges mentioned regrading to the ICT infrastructure is the population of internet users is increasing dramatically which is leading to a severe impact on how ICT infrastructure can be implemented regarding to policy and regulation aspects and business accommodations. It was mentioned that is it important for all regions to be aware for such issue and accommodate solutions based on the region characteristics.

Dr. Robert Pepper from Facebook addressed the company strategy in helping fulfilling the backhaul and fine a solution to its issues one of which is Facebook is committed to give access to internet to all around the globe in a very affordable way. Some of the steps been taken by Facebook to fill the gaps are providing a robust broadband services by creating symbiotic partnership with several ICT tools and Internet providers. Facebook have a 3 aspects for their vision regrading connectivity architecture some of which are Ground Station Feed Link, Point to Point Optical Links for Inter-UAS Communication, and UAS Point to Multipoint FS Links.

Mr. Desire Karyabwite and Mr. Vladimir Daigele from BDT presented the Technical Assistance provided by ITU to its membership on telecommunication/ICT infrastructure and services. Consisting of: Spectrum management and radio monitoring, Broadcasting; Next-generation networks including ICT networks for Smart Grids and Future Networks; Broadband networks: Wired and wireless technologies, including IMT-2020 (5G), Satellite Communications and support for Internet of Things (IoT); Rural communication; IXPs, IPv6; Conformance and interoperability (C&I); Interactive Transmission Maps.

II. Quotes

“Common in the development of Cloud computing, IoT and 5G is the necessity for the Broadband Infrastructure Availability” Prof. Irini Reljin (Serbia)

“APT Members have the target to connect the next 1.4 billion users by 2030, the region represents 2/3 of the world population” Mr. Masanori Kondo (APT)

“Without robust broadband infrastructure it’s impossible to reach the SDGs” Dr. Robert Pepper (Facebook)

III. Overall outcomes of the session highlighting

It was agreed on that ICT infrastructure holds a very importance role as it is the fundamental tool to maintain a good life as it helps to connect people where they can express their needs and concerns regrading to fundamentals life elements such as health, education, peace, and food.
IV. Main linkages with the Sustainable Development Goals

SDG 9

V. Emerging Trends related to WSIS Action Lines identified during the meeting

The need to access and understand the increasing amount of data and enhanced innovation cycle to produce new technology to help fulfilling the SDGs.
Action Line Facilitators

Pursuant to Article 109 of the Tunis Agenda, the eleventh meeting of the WSIS Action Line Facilitators will take place within the framework of the WSIS Forum 2018.

The purpose of the meeting is to assess the general progress made within the WSIS Action Lines, as well as to identify measures to strengthen the overall WSIS implementation process. In addition, this year’s meeting will focus on innovating trends in ICTs and the implementation of the WSIS Action Lines to facilitate the achievement of the Sustainable Development Goals.

Format:

This session will be moderated in a dialogue style format engaging all WSIS Action Lines Facilitators to identify the key priorities, opportunities and challenges for their respective WSIS Action Line towards the achievement of the SDGs.

AGENDA:

Moderator:
- Ms Gitanjali Sah, ITU

Welcome by Mr Houlin Zhao, Secretary General ITU
Gitanjali, WSIS Forum Coordinator:
- Highlights the important nature of the session because it will talk about the orientation’s facilitations of the WSIS Forum
- Each UN agency has a role in facilitating and contributing these orientations regionally and internationally
- The session will be focused on the orientation contribution for creating new societies
- **Question to UNDESA:** Can you please indicate which measures are taken by governments in collaboration with stakeholders for having an impact on the SDGs, in particular to accelerate the creation of sustainable society?

UNDESA, C1 C11 E-GOVERNMENT Facilitator:
- Congratulates ITU for the success of the week. Mentioning the interesting discussions in the WSIS Forum
- The e-government is a part of the strategy of development of each country
- ICT is not visible on the 2030 Agenda and especially in High-Level sessions. Also ICT are underrepresented in the 2030 Agenda from the beginning.
- Many solutions were proposed to solve this situation by including every stakeholders in the process
- Private sectors has to collaborate with government to integrate the services for the citizens

Gitanjali, WSIS Forum Coordinator:
- Thanks UNDESA
- **Question to ITU:** Do the implementation of the ICT infrastructures can create more synergy, improve access to sustainable modern energy for everyone?

ITU, C2 C6 Facilitator:
- ICTs became an essential good in actual societies but 4 billion people are still unconnected due to missing infrastructures
- Barriers were discussed by stakeholders during the WSIS Forum 2018 and they proposed solutions
- Policy, geography, technology are the 3 variables to count in the process of breaking barriers

Gitanjali, WSIS Forum Coordinator:
- Second question: What is the role of ITU in the assistance of spectrum national management?

ITU, C2 C6 Facilitator:
- Radiofrequencies spectrum is essential for applications tools which are indispensable for the human kind evolution. New management tools are more efficient and can cover rural regions.
- ITU gives to member states the best tools for managing the spectrum

Gitanjali SAH, WSIS Forum Coordinator:
- **Question to UNESCO:** Access to information is important, what is the position of UNESCO and measures taken for creating sustainable societies?
UNESCO:
- Thanks ITU in the collaboration in the organization of the WSIS Forum 2018
- Education social in human sciences, natural human sciences, culture and communication and information are the main stream of concept knowledge societies
- Central pillars includes such as freedom of expression and access to the information.
- Commemorating universal access to information as well as United nation’s International day
- Software preservation for sharing the digital sources
- Partnership with both public and private sector in policy level and programmatic level.

Gitanjali SAH, WSIS Forum Coordinator:
Engagement of youth in WSIS Forum in 2019 for the exploration of role and contribution they could play and make respectively towards WSIS process.
Questions to ITU: what the role of skill’s development in building resilient sustainable societies?

ITU, C4 Facilitator:
- Exploring for the role of Capacity building and policy orientation
- Sharing experiences of entrepreneurship in terms of opportunities and challenges available
- Participation in Internet and social media fully
- Developing technical and soft skills

Gitanjali SAH, WSIS Forum Coordinator:
Questions to ITU: What’s kind of new protection provided for building confidence and cyber security using for ICTs to children?

ITU, C5 Facilitator:
- ITU launched global cyber security agenda
- High-level dialogue managed for children online protection
- More than 20 sessions organized for analysing new threats
- Transparency and privacy for the data to establish safer cyber space
- Blockchain technology is supposed to work for different cases effectively

Gitanjali SAH, WSIS Forum Coordinator:
Acknowledgment of the achievement of children online protection and outcomes presented from different sessions online

Questions to ITU: What’s kind of innovation in technology policy implemented and why it is important?

ITU, C6 Facilitator:
- Understanding changes in environment
- Creating most favourable environment for all providers
- Cooperation among different sectors
Gitanjali SAH, WSIS Forum Coordinator:
Invite Co-organizer to post question related to e-agriculture

Co-organizer from UNESCO:
Questions to ITU: How does digital innovation in e-agriculture applied for each farms and enhance resilience in the rural areas of developing and LDC countries?

ITU, C7 Facilitator:
- Transforming the ideas into values for the stakeholders in a sustainable way
- Partnership will be formed to integrate technologies and innovations into local community and national agriculture plans
- Innovative process supports the rural populations
- E-agriculture policies and solutions are involved in capacity development

Co-organizer from UNESCO:
Second question: What are the UN systems, in your organizations, specifically, member states doing, how can they achieve these components in a sustainable approach going beyond just access to technology?
ITU, C7 Facilitator:
- Developing some applications to deliver Knowledge and information for farmers
- Training and literacy courses will be provided

Gitanjali SAH, WSIS Forum Coordinator:
Thanks to ITU
What type of Innovation and projects is applied in e-business for the development of sustainable society?

ITU, C7 Facilitator:
- Promoting development of internet polices in supporting to product activities
- National infrastructure plays a vital role in a number of services

Gitanjali SAH, WSIS Forum Coordinator:
Thanks to ITU
Questions to UNDP: How the action lines can bring about the linkage with SDG’s and what is your suggestion for that?

UNDP:
- Giving boldness and aspiration to 2030 agenda
- Deep engagement among different communities to show how ICTs contribute to the achievement of every goal
- Digital infrastructure will be significant in the way we build the cities
- Making communities competitive
**Gitanjali SAH, WSIS Forum Coordinator:**
Thanks to UNDP
Will be working closely in UN family to explore the opportunities. Acknowledgment of chairman UAE’s participation for WSIS forum
Questions to Vladimir Stankovic: What’s the observation for different kind of projects shared with respect to action lines and what’s the assessment of WSIS prizes for this year?

Vladimir Stankovic:
- Big increase in submission of projects overall
- Higher numbers in ICT application
- Promoting stocktaking process

Representative of UAE:
- Making a small video to explain how people can access and vote

**Gitanjali SAH, WSIS Forum Coordinator:**
E-learning and livelihoods will be focused in 2019 hackathon WSIS forum
Question to UNESCO: Introduction to Implementation of WSIS action lines in C7 e-learning

**UNESCO:**
- Establishment of both policy and infrastructure related to open educational resources and program
- Understanding the concepts of open educational resources and solutions
- Assisting countries to develop and update national ICT educational policies
- Publishing the report of digital skills for life and work
- Covering work at E-science
- Collaboration with other UN agencies and governments

**Gitanjali SAH, WSIS Forum Coordinator:**
Thanks to UNESCO
Question to ITU regarding to update the ICT’s partnership’s activities

**ICT Partnership:**
- International and regional organizations are involved in measuring ICT for SDG’s
- International organizations work together to monitor information society
- Invitation for the feedback from stakeholders

**Gitanjali SAH, WSIS Forum Coordinator:**
Thanks to ITU
Question to UNESCO in terms of C8 culture diversity and C9 media

**UNESCO C8:**
- Increasingly integrated ICTs throughout the programmatical works
- Shaping culture policies
- Preserving culture heritages

**UNESCO C9:**
- Promoting the free flow of information through all media platforms
- A massive of policy research offered by UNESCO website
- Promoting media information literacy
- Invitation to the consultation

**Gitanjali SAH, WSIS Forum Coordinator:**
Thanks to UNESCO
Thanks to all WSIS action lines facilitators
1) **Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)**

The United Nations General Assembly approved the Outcome Document of the High Level Meeting of the General Assembly on the Overall Review of the Implementation of the WSIS Outcomes (A/RES/70/125), mandates the UN Regional Commissions (UNRCs) to continue their support to implementation of WSIS Action Lines (section 5 and paragraph 68). In this regard, this meeting discussed the key role played by the regional commissions in the wider deployment of ICTs by leveraging a number of actions that are taken by Governments and civil society. UN Regional Commissions presented their regional perspectives on WSIS, especially the successful regional reviews as well as the convening of the Regional Forum on Sustainable Development that have been conducted. The UN Regional Commissions expressed their willingness to collaborate together and with other international and regional organizations to exchange experiences, to peer learn and to use the regional space as an opportunity to consolidate lessons learnt through national and sub-regional implementation and to reflect on knowledge deficit areas, and other new opportunities that will enable institutional and regional co-ordination to exchange best practices vis a vis WSIS outcomes. It is noted that both UNDESA, ESCWA and ECA conduct similar surveys with their Member States in the area of WSIS Action Lines. To avoid duplication, the meeting agreed to share the survey and to harmonize it.

2) **Main outcomes highlighting the following:**

   I. **Debated Issues**

   The important role of regional commissions was highlighted as a unique space to foster learning and through their convening spaces can spur greater action to enable the implementation of the SDGs. The meeting highlighted the significance of the regional dimension of development in this regards WSIS will become one of the Regional Forums for Sustainable Development (RFSDs) in implementing the Agenda 2030. "The Regional Forums for Sustainable Development helped
institutionalize the fora as intergovernmental mechanisms for implementing Agenda 2030 through: facilitating consensus on regional road maps for SDGs implementation; producing regional annual reports; serving as peer review mechanisms; and finding ways to strengthen national institutional frameworks for SDG implementation”. It is noted that both ESCWA and ECA conduct similar surveys with their Member States in the area of WSIS Action Lines and how they can prevent some duplicate work. It is noted that ECA send out a similar survey to UNDESA’s Member States Questionnaire (MSQ) where different aspects of ICT and e-Government Strategy of a country are requested from the Member States. A similar survey seems also be sent out by ESCWA

II. Overall outcomes of the session highlighting

- WSIS will be will become one of the pillar of the regional SDG Forums. In this regard, the UN Regional Commissions agreed to find a way to organize the WSIS annual review under the regional forum on sustainable development.
- The annual Regional Forum on Sustainable Development is an important arena that enables the consolidation of knowledge and the opportunity to ensure a good reality check is done comprehensively. In this regard, all UN regional Commission have been invited to organize as of 2019 the WSIS annual review under the regional forum on sustainable development
- The Regional Commissions, will report next year on the progress made towards Agenda 2030 and this will be captured in the UN Regional Commissions annual work plan 2018-2019 in the implementation of WSIS towards 2025. UNECA was requested to update a matrix with detailed activities
- ECA organize regular meeting of UN Regional Commission Committee every six month. And, ECA as Chair of The UN Regional Commission Committee will call for a meeting asap
- Harmonization of the Survey
  - All Surveys: will be reviewed and synchronized wherever possible
  - All focal points will be synchronized and we will be using one centralized database
- UN regional offices will also be invited to the Task Group on ICT for SDGs which UNDESA is one of the co-leads together with ITU

III. Main linkages with the Sustainable Development Goals

“Information and communication technologies (ICTs) form the backbone of today’s digital economy and have enormous potential to fast forward progress on the SDGs and improve people’s lives in fundamental ways.”
Interactive sessions provide workshop style interactions amongst the participants and panellists. The panellists provide an introduction to the framework of the session and act as moderators, while the participants are encouraged to drive the discussion of the session.
1. Key achievements, announcements, launches, agreements, and commitments

The work of the Partnership Task group on ICT for the SDGs related to the development of the thematic list of ICT indicators that could be used to measure ICT availability and use in sectors relevant to the SDGs (that are not covered in the global SDG indicators framework) was presented. WSIS stakeholders were requested to provide comments and inputs to the list from June 2018. The Task group on ICT for the SDGs is still expecting members.

2. Main outcomes highlighting the following:

I. Debated Issues

This session highlighted the work of the Partnership Task group on ICT for the measurement of the SDGs, but that are not covered in the global SDG indicators framework. The session included mention of ITU's work in measuring the information society including the ICT Development Index which is a tool by Member States to benchmark their progress to other countries. The importance of the work of the ITU Expert Groups on ICT Indicators was emphasized, which helps to define indicators that could be used to measure the fast pace of ICT developments. It was highlighted during the session the substantial contribution of ICTs in the implementation and measurement of all SDGs, which has not been sufficiently recognized in the current targets and indicators.

The TG-SDG addresses this gap by proposing ICT indicators that could contribute to the measurement of progress towards the SDGs and complement the existing SDG measurement framework. In addition to the list of thematic indicators, the task group will prepare a methodology document for the ICT indicators included in the list and will present the list to regional and international events to raise awareness on the thematic list of indicators. Several examples of ICT infrastructure, ICT households, ICT in business, e-government and e-waste indicators that could be included in the list were presented. Finally, a country example from Bangladesh was presented, which highlighted the challenges faced in monitoring the implementation of the SDGs, including the coordination among stakeholders, the cooperation between the public and private sectors, raising awareness on the role of ICTs in the SDGs, and the scarcity of baseline data.
The discussion that followed focused on the need for capacity building and digital literacy skills, and the importance of clearly communicating the definitions and methodologies needed for the collection of data. Some pointed out the challenges related to data availability and disaggregation, the new of new data sources including big data to complement traditional data sources.

It was highlighted that data could be quickly outdated, and recommended the inclusion of near-real-time data whenever it is available. Yet, the use of new data sources requires building capacity in the use of big data and addressing the challenges related to data access, as it is difficult to get individual level data from companies due to confidentiality issues and business interests. Finally, the session concluded by inviting participants to participate in the discussion of the thematic indicators by joining the task group on ICTs for the SDGs.

II. Quotes

“Improving statistical system capacity so as to better respond to new requirements related to SDG measurement is of utmost relevance.” Mr. Alexandre Barbosa, CETIC, Brazil

If we were to assess number of computers in our schools, we would do great. However, if we were assessed with the impact of computers on students, we would not do that much good.” A participant from Ministry of Education, Mexico.

III. Overall outcomes of the session highlighting

The current SDG indicators framework needs to be supplemented by indicators to capture the contribution of ICTs to achieving the SDGs. The thematic list of ICT indicators currently being developed by the Partnership Task Group on ICT for SDGs can be used by countries to measure ICT availability and use in sectors relevant to the SDGs that are not covered in the global SDG indicators framework. There is also need to come up with indicators to better measure the impact of ICTs. For example, instead of looking at how many computers deployed in schools, look at what is the impact of technology on students, in other words, identify indicators that can measure this impact.

IV. Main linkages with the Sustainable Development Goals

a. The Partnership has made a concerted effort to highlight the role that ICTs will play in achieving the SDGs. It has also helped to shape the SDG monitoring framework to help track the SDGs and targets.

b. The Partnership’s work will support monitoring the SDGs, and help overcome the challenges in terms of data availability, and quality. The Partnership will present new and potential data sources in support of monitoring progress towards the SDGs.

C. The Partnership will finalize the thematic list of ICT indicators to better monitor the broader contribution of ICTs to achieve the SDGs. This approach has been adopted for other areas to monitor progress towards the SDGs.
V. Emerging Trends related to WSIS Action Lines identified during the meeting

The use of big data as an alternative data source was highlighted during the session. To produce real-time indicators to address current problems.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

“Use of big data for Measuring the Information Society” or “Empowering people and ensuring inclusiveness and equality” in line with the theme of the HLPF 2019
This session concentrated on the achievements and the future of WSIS Stocktaking. Events and a wide range of ceremonies were organized during the WSIS forum 2018 and a brief overview was presented. Statistics, graphics, and the publications (e.g., success stories report, global report) linked with WSIS Stocktaking and WSIS Prizes were introduced. New products, including the geographical maps, were presented. The regional contributions of the projects were discussed, including the six regional reports on how ICTs projects are delivering impact on the ground and, therefore, contribute to the SDG’s.

The main outcomes of this session was the message summarized by the WSIS Stocktaking team on the way forwards, as the following:

- The International Telecommunication Union (ITU) remains committed to the World Summit on the Information Society (WSIS) process, and to implementation of the WSIS goals beyond 2018.
- ITU recognizes and highly appreciates the extremely valuable contributions made by stakeholders to enable the continuation of WSIS monitoring and reporting.
- There can be no doubt whatsoever that, in today’s fast-moving world, innovation and efficiency are vital to success.
- Accordingly, the WSIS Stocktaking 2018 Report shares with you the most recent updates and success stories in the WSIS stocktaking process.
Several key points on this year’s WSIS Stocktaking process were delivered:

- The Web 2.0 WSIS Stocktaking Platform continues to foster implementation of the WSIS outcomes and to facilitate exchange of information among more than 300,000 members representing governments, the private sector, international organizations, civil society, and other stakeholders.
- As the Web 2.0 platform continues to flourish, so does the promotion of social development and economic growth through ICTs.
- ITU continues to maintain and improve the WSIS Stocktaking Database, which contains close to 800 entries this year.

Background of the Interactive Session

WSIS stocktaking has been evolving to be the unique global process for collecting information on actions implemented within WSIS framework, aligning the WSIS process with the 2030 Agenda for Sustainable Development, highlighting the crosscutting contribution of ICTs to the SDGs. The United Nations Economic and Social Council (ECOSOC) resolution 2015/26 on "Assessment of the progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society", which reiterates the importance of sharing best practices at the global level and recognizes excellence in the implementation of the projects and initiatives that further the goals of the World Summit, encourages all stakeholders to nominate their projects for the annual World Summit project prizes, as an integral part of the WSIS Stocktaking process, while noting the report on the WSIS success stories.

Since 2016, WSIS Prizes reflect close linkages with achieving SDGs, and it grew into one of the most globally appreciated efforts for collecting and promoting ICT-related projects and initiatives that also enable progress towards achieving SDGs on local, regional and global level. WSIS Stocktaking: Success Stories 2018 ePublication with examples from the ground, true stories of engaging ICT power for development, reflects the evidence from the ground that could impact policy making in the future and help in shaping strategies towards achieving the United Nations Sustainable Development Goals.
WSIS is indeed a multi-stakeholder event. It is not dominated by any particular stakeholder group whether it is government or civil society. It is equally distributed. Deputy Secretary General, ITU - Mr. Malcolm Johnson

Improving stocktaking process is not only improving ITU’s work, but promoting the whole UN system. WSIS Policy Analyst, ITU - Mr. Vladimir Stankovic

WSIS gives us opportunity to make a difference on different countries, when you put it on a global scale, it makes a whole of difference. Even if what we might be doing on a small level, you may think it is not that important and it is not that big, it makes a difference. Everybody is doing for something the good of the people and for the development of their countries here. WSIS gives us opportunity to the global sphere. When you are here, you have the opportunity to meet with the governments who are interested in and take your small projects into next level. It makes the world being connected closely and help each other on the ground. Professor, Abdelmalek Essaâdi University, Faculty of Sciences and Techniques of Tangier- Prof. Mostafa Ezziyani

I. Overall outcomes of the session highlighted the following:

- Promote WSIS Prizes 2018 outcomes, including the awarded projects (18 winners and 72 champions), while inviting ICT communities and networks to submit for the WSIS Prizes 2019 contest (new call to be launched in Summer 2018).
- Disseminate and promote the WSIS Stocktaking 2018 ePublications, including:
  - WSIS Stocktaking Report 2018
  - WSIS Stocktaking: Success Stories 2018
- Call for all ex-winners and champions (2012-2018), in coordination with the WSIS Team, to form a group of WSIS Prizes Pioneers to strengthen their future role:
- Contribute to leveraging ICTs to build information and knowledge societies for achieving the Sustainable Development Goals (SDGs) by participating in upcoming surveys and calls for action, and
- Promote the WSIS Stocktaking and WSIS Prizes within their communities and networks as a supporting instrument for evidence-based policy making.

II. Suggestions for Future Work and Thematic Aspects that might be included in the WSIS Forum 2019

- Improve promotion of the WSIS Stocktaking and WSIS Prizes outcomes, including the WSIS Stocktaking publications, WSIS Stocktaking platform, and WSIS Prizes awarded projects and entities since 2012
- Better engage WSIS Stocktaking products and services in various international processes, including policy making and strategy design
- Encouraging more projects to be submitted from ICT communities by promoting process though the existing WSIS stakeholders
- Involvement of new communities, such as youth, who can make contributions towards WSIS Stocktaking process
1. Introduction: World Café

World Café is the ideal multi-stakeholder platform, enabling active involvement of each and every participant to explore key questions about the successful implementation of the WSIS Action lines at international, regional and local level, while addressing challenges towards achieving the Sustainable Development Goals (SDGs). This collaborative format facilitates brainstorming trends, challenges and opportunities in the ICT Ecosystem and further development of the Information and Knowledge Societies.

During the World Café “15 Years of implementation of Geneva Plan of Action – Looking towards 2025”, stakeholders had the opportunity to discuss and explore the insights, and actions that these Winners and Champions take for the promotion of their projects in their homeland. This World Café gave a glimpse into the success stories around the world as delivered by the WSIS Prizes 2018 Winners and Champions in which ICTs are used to enable grassroots enhancement and how they are paving the way to achieving development in all segments of life. It has also provided a platform to discuss the trials and triumphs of implementing ICT4SDG, focusing on the mechanisms that will further enhance “taking stock” of ICT progress and implementation of effective policies from the multi-stakeholder perspective. Highlighting the importance of identifying good practices around the world, discussions were enriched by the presence of WSIS Prize Winners and Champions, who had share and present their innovative projects and ideas.

This was a unique opportunity to meet-the-winners and champions and learn from their valuable experience. This exchange has also yield insights into concrete ways in which WSIS can help them to promote their project on their platform. The World Café was moderated by Mr. Vladimir Stankovic, WSIS, and ITU.
2. Deputy Secretary General, Mr. Malcolm Johnson
Opening Statement

“This is the third year of running World Café. This year marks 15th year anniversary of implementation of Geneva Plan of Action (2003). This is really a great chance to look on the progress we have made in 15 years with you and we look forward for more. A lot has been achieved in these 15 years. WSIS Forum is a worthwhile event for participants to have same objective by using various technologies to help the communities. Everybody is working towards the same goal. Every year, it is bigger and better. We really need to improve as per the requirements and suggestions given by the stakeholders. We started WSIS Prizes in 2012 and then, Champions started in 2016. It is always pleasurable to meet previous WSIS Prize Winners. The award serves the purpose as they receive lot of support from the government and their community. We have invited the current Prize Winners and Champions as well as previous Winners and Champions as well. The world café is all about getting suggestions for improving WSIS Process and helping to promote your project. As we have WSIS Stocktaking Database containing almost 10000s projects, it can help us to reach the goal of United Nations SDG Goal of 2030. Please help us to have the bright ideas for enhancing the process.”

3. Winners and Champions

Out of 685 projects, 492 were nominated. During the voting phase, 72 of them became champions and 18 were selected as Winners.

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<tr>
<th>Categories</th>
<th>Winning Entities</th>
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<tr>
<td>C1: The role of government and all stakeholders in the promotion of ICTs for development</td>
<td>OSE – Fast Internet for all schools (Ministry of Digital Affairs, POLAND)</td>
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<td>C2: Information and Communication Infrastructure</td>
<td>Federal Real Estate Program for the deployment of Telecommunications Infrastructure (Ministry of Communications and Transport, MEXICO)</td>
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<td>C3: Access to information and knowledge</td>
<td>Parent Mobile App (Ministry of Education, OMAN)</td>
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<td>C4: Capacity Building</td>
<td>Digital Citizenship (Ministry of Information and Communication Technologies of Colombia- COLOMBIA)</td>
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<td>C5: Building confidence and security in use of ICTs</td>
<td>Digital KID (General Women's Union, UNITED ARAB EMIRATES)</td>
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<td>C6: Enabling environment</td>
<td>The establishment of the Office for Information Technology and e Government</td>
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<td><strong>C7: E- Government</strong></td>
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<td>MuktoPaath Facilitating Use of e-Learning in Skills and Professional Development (Access to Information (a2i) Programme, Prime Minister’s Office, BANGLADESH)</td>
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<td><strong>C7: E- Health</strong></td>
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<td>NIPOST Address Verification System (Nigerian Postal Service, NIGERIA)</td>
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<td>Disaster Emergency System (Abdelmalek Essaâdi University, Faculty of Sciences and Techniques of Tangier, MOROCCO)</td>
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<td><strong>C7: E- Agriculture</strong></td>
<td>E-voucher systems: Connecting Smallholders to Knowledge, Networks, and Institutions (International Fund for Agricultural Development, KENYA)</td>
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<td><strong>C7: E- Science</strong></td>
<td>Development of PC based Color Code System (Multimedia University, MALAYSIA)</td>
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<td><strong>C8: Cultural diversity and identity, linguistic diversity and local content</strong></td>
<td>Mujeres TIC-Ayni Bolivia: when women get wings! (Ayni Bolivia, BOLIVIA)</td>
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<td><strong>C9: Media</strong></td>
<td>IndonesiaBaik.id Government Portal for Viral-able Public Policy Communication (Ministry of Communication and Information Technology, INDONESIA)</td>
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<td><strong>C10: Ethical dimensions of the Information Society</strong></td>
<td>Social Program for Digital Equality (PJSC Rostelecom, RUSSIAN FEDERATION)</td>
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<tr>
<td><strong>C11: International and regional cooperation</strong></td>
<td>“Digital schools!” Chaptherthon (Internet Society, INTRNATIONAL)</td>
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4. Phase One: Trends in the past and present

We have passed from the paper copies from 2004 until 2010 to only electronic copies after. Because in 2010, we have established WSIS Stocktaking Online platform. In 2011 at the WSIS Forum, there was a discussion that led to the establishment of WSIS Prizes Contest. In 2015, at the final review of WSIS Process by UNGA, we have received another mandate until 2025. It was a lucky coincidence for the WSIS Process that until 2015, there was a new agenda on UN Sustainable Development Goals (SDGs) which is to be established until 2030. So, WSIS Process including WSIS Stocktaking and WSIS Prizes started in line to all our activities with the SDGs. Since, then we are no longer following ICT projects and initiatives implementing 18 WSIS Action Lines, but we are also tracking down that how are these projects affecting and advancing 17 SDGs. As Mr. Houlin Zhao (Secretary General, ITU) mentions, “We do hope that WSIS Process including WSIS Prizes will continue even to 2030 as well as with Sustainable Development Agenda and we will see what will happen in the future.”

So after 7 years, we have 340 Awarded Projects. Some of them came from same entity, so we cannot say that they are from 340 entities that were awarded. But, 18 Winners in these 7 years is 126 Winning projects and in last few years, we have 72 Champions per year. In the past, we had an evolution here as well. We had a submission phase. Then, the projects went into the nomination phase. Nomination phase is dealt by the expert group from ITU. These are the experts for the individual categories. Right now, these experts are reviewing all these submissions together with WSIS Team. We are trying to see which projects should be nominated for the online voting. Online voting is the third phase which in the past has led to the final phase of announcement. However, sometimes the online voting doesn’t function to the best of pack. Because behind these projects, there were strong online voting campaigns and some of the entities would be receiving more than 1 Winning Award. So, we introduced the selection phase. In this phase, we picked top 5 most voted projects in the Online voting and are brought back to the expert groups and they decided out of these 5 projects, which one deserves to be a winning project based on the community and the society.

Finally, the announcement about the project is made in the same manner. So far, we have made the announcements in a way that the champions are announced as soon as we have results and then, Winners are announced during the ceremony. Although, we inform the Winners in confidential way as there is lot of work involved to prepare. These suggestions and comments that we have received such as secret announcements of Winners during the WSIS Prize Ceremony itself as no champions are announced as Winner. Even this is an evolution that has come from the community and from you. Suggestions about the categories were introduced that they are not reflecting everything that is now happening in relation to the development of technologies i.e. No Artificial Intelligence, No Blockchain, and no other technologies as well.

How we can improve this? Well, WSIS have to come together again to change anything that was established in 2003 and 2005. Summit uses the word ‘World’ because it is the top and highest event of UN where Head of States and Prime Ministers come together to discuss the important issues. This was done in 2003 as a first phase and 2005 as a second phase with months and months of work. So, for us to change anything in the description of any of the WSIS Action Lines, it is a big challenge and we have to work for what we have. However, they are still working with
us and most of the projects can fit into the categories. We can see, so far, 1500 submitted projects and millions of votes were casted.

We have the experience that some of the Winning Entities actually promote their achievement as a campaign back home. Communities are communicated about the projects that are winning WSIS Prizes and the government/ NGOs/ companies are doing much to spread the word. Coming home with the UN recognition really adds the value of this project. It is not just national or regional entities recognizing the efforts by the stakeholders, but also WSIS Community which also right now counts almost 3000s stakeholders registered on WSIS platform.

WSIS helps the community which is completely out of radar and knows about them through entities like Internet Society. We have heard a lot about different projects. Why can't we help those projects to reach portal like WSIS? It is not just the promotion of the project, but it is actually the promotion of the technologies. There is no big or small projects. Sometimes, on a scale of the budget or the number of stakeholders involved, we can't compare the small NGO or startup. A story about the small project happening in Africa where used cellphones are given away to midwives. A mid-wife covering many villages help to reach out to many pregnant woman or in delivery to Doctor. But, this project is saving lives even being the small scale project. WSIS prizes is present here to help everyone who wants to reach out for the recognition.

Since, 2004 and 2006, WSIS Stocktaking is growing. We try to promote WSIS on social media like Facebook and Media. This work is majorly done by interns since 2003. On Instagram, we have reached 1000 followers. ITU comes under the umbrella of UN. ITU has different focal points in different regions, organizations and communities. We try our level best to extract the projects. We find focal points in the Winners and Champions and make them Ambassadors/ Pioneers/ Trail-blazers to extract local projects. WSIS website almost answers everything regarding rules and procedures as per transparency is concerned. We can find different phases of WSIS Prizes, different action lines facilitators, number of votes casted, links of projects that have been selected as champions. But, we try to make the process smoother.

We have provided toolkits to champions and winners via email. We can dig out of thousands of projects but it becomes difficult for us to review them as we have to move forward to the selection phase as well. Last year, we have 345 project. This time we have record breaking 492 out of 685 projects as selected projects. It has been huge increase from past 4 years in the submission of projects. We really hope that in the future, we will see booming numbers in the projects. We are providing the interactive geographical map where you can find the maximum number of projects from the different regions. We observed that the government entities are huge contributor in the project submission but we need other entities to grow as well.
5. **Phase Two: Round Table Discussion**

We would like to know ex-Winner or ex-Champion to share their stories. How these projects and prizes were received back at home? What was the impact and the progress since the project was awarded?

![Image of a meeting with participants]

**Access to Information (a2i) Programme, Prime Minister’s Office, BANGLADESH:**

“In 2014, at first we have won Digital Centre as a winner and 2nd Winner award for Multimedia talking Book for the visually impaired student and learners and 3rd for national portal- largest e-governance portal in the world (we believe), there are more than 25000 officials are connected and 75000 employees as well. This year we got the winner prize for MuktoPaath.

Let me first talk about Multimedia Talking Book for visually impaired students. Every recognition reminds you that it has some value. It actually builds the trust of the target audience. So for the national portal, we all got the support from the government officials, from the ministry to the rural level, and for Multimedia Talking book, we got support from Teachers and ministries and for this award, we also got the opportunity to produce more initiatives. Last year, we have produced free books for all our visually impaired students. So, for the teacher’s forum, you would be surprised to know that there are more than 280 teachers who are connected with this portal. This is the portal of sharing the content digitally for the teachers, teachers can create and upload the content, and some teachers can also download the content for using that content in their digital classroom.

When we won that prize, some of the teachers and even our Honorable Prime M declared that by 2020 we need to make all teachers as the members of this portal and since, then it has been decided and we have been working on the same. We are also working towards bringing all the teachers to the platform. So, these were some of the initiatives that have won to WSIS Prizes which has really drive us to move forward. We actually circulated this news in different channels as we have the largest National Blog Portal. We declared this in news, on Facebook group, network in the rural level, TV/ Radio network especially to the community of Teachers- Teacher’s Portal. So, the community further circulated the word which in turn build their trust. They are willingly connected to this portal.”
Internet Society

“Last year we were nominated for Champions for the project in Armenia supporting the Blind people. We actually helped them to fund the project. The project was about Radio for blind people which don’t have access to the information and are often secluded from the world in many countries. Since then, some of the blind people involved in the project themselves have been offered the fellowship on board, some of them are studying in another countries. The project itself continues with new blind people that heard about the project and finally found out that they can do something more than just being at home and doing nothing as blind people. The project started in Yerevan. There was interest from the people of other regions as well. They had for the first time a woman in the project which was a big thing. A blind woman in the project. They started 12 week programs where they talked about the difficulties they face as blind people to communicate to the rest of the community. The problem reached out to the people beyond Armenia and to US, and they showed the interest in the project. Last year, they launched 5 projects.

For them, winning this prize meant a lot. I can’t tell you the emotion that was going around and when this project started with 5 blind people in Armenia who hardly knew how to operate the computer and suddenly being recognized in ITU, being the champions in WSIS. For them, it was like ‘Finally we exist! We are part of the part. Thanks to internet, ITU and WSIS.”

Relawan TIK, INDONESIA

“We are champions for this year. We have been doing this since 2012. Around 40 teams, Relawan TIK ICT volunteers started doing the activities in the school and promote them. Ministry of ICT helps to promote how to use Internet productively. They also refer to some coding lessons. Students are interested in coding, so teams bring open source materials for learning to program. The students try to make interactive games, cartoons and movies. This is what we have been trying to do for community. We also promote in different cities. We spread this program to far away province. We have an opportunity last year as we spread this in Asia Pacific like Korea. Some of the projects are being promoted by Ministry of ICT and Relawan TIK ICT Volunteers.

The community spreads the word like we try to cooperate with ICT Volunteers. We promote it through Ministry of ICT. We have structure as well like National Community to Province Community as top down approach. ICT is very important and we can’t deny the fact that it is one of the essential part of our lives.
As a representative of the young generation, I am glad and thankful of the trust and the opportunity given by WSIS and Kazakhstan Government. Analytical Center basically represents the data. We divide the society in two states - citizens and state. The relation between them is by the law. The prosecutor’s responsibility is to have corrective measures and legality of all the process in accordance to the law. The database is maintained for the prosecutors with the tools of data mining and data searching. Statistics are used in these kind of projects which in turn help lot of data scientists and computer engineers to grow. This center was established a year ago. But in this short time it has already created 6 smart systems. They provide readymade solutions to the government.

I. How WSIS Prize process can improve on the ex-Winning Projects for Champion and winners in the promotion? How WSIS can help in bringing out the best of the projects of the past as promotion?

**Table 1**: For the projects to be amplified, WSIS is a great platform where people connect with each other. We get to know the other side of the stories. Each one of us are contributing at local level while it reaches the global level. We need interactive tools to continue the discussion of the best practices of the small scale. We need to learn about the methods to be replicated and reproduced at the same level. Every project looks for the funding partners and some other players which help them to be sustainable and give them opportunities to grow.

**Table 2**:  

a) Communication system- Communication process is vital, so that every organization and countries must know about WSIS like a global portal.

b) As Winners and Champions, we have the responsibility to spread the word using the toolkit WSIS Team share in the social media and promote it as news as much as we can.

c) ITU should channel the communication specifically related to the activities of ITU. We know about ITU Telecom but we never hear about activities specifically related to ITU events. In my country, we need top- down approach in the communication channel. It should come from embassy and then to the different government departments. So, that different entities start competing with each other.
Table 3: We find it difficult to connect with the local projects as on communication barrier like language. So, as locals of such regions we can write to them and introduce them to WSIS Forum. ITU should create a collaboration hub and it can take help from smart systems from the other countries. Models and techniques from different projects can be taken into consideration. We can find mobile apps as the great tool to connect. Something that comes with the online platform approach and we all participants be connected to it.

Second, we need transparency in the process itself. We need to know the ICT Expert Group, criteria, weightage and some more objectives for shaping us the idea of getting into WSIS. Thirdly, we need training on tools as support from ITU so that we acquire how exactly it is impacting ITU and society at large. Similar projects, similar regions and similar governments should be benchmarked.

Table 4: We want the early notifications as champions and winners because we need time for the preparations and promotions. We want the user friendly website. We know that the information is available but it needs to be ease to simple.

Sometimes, filtrations as per the country is needed as similar projects should connect to each other within the country. We want to thank you for the quality of the event’s organization and the welcoming. I know that it is hard to organize such a big event with more than hundreds of people reunited in the same place. As a participant and a winner, we are glad to have participated to the competition and to have been chosen for our project. This project is part of scientific research. That is why we want to address this message to everyone, and specially the research workers which participate in the facilitation of exchanges.

It is easy to make contacts but it is hard to keep them. For example, I have tens of visit cards but the question that we need to ask ourselves is how to keep in touch with the person afterwards. Therefore we need to establish a short term and a long term collaboration strategy. A network bringing together and putting in contact all the champions and winners so they can improve and develop their project.

Table 5: We create platform for infographics for government so that it helps them disseminate their information. We encourage people to create content for video or visuals for the information. We really want young generation to help us with the mission. We were champions earlier and that’s how we get to know about WSIS. I was in the other department and shifted to the other and that’s how we brought the projects to WSIS since then.

Table 6: The easiest way to replicate the data is reverse engineering. We took 6 success stories from different regions and different segments. We train those people for 2-3 hours to break their components into smaller segments for how they want to proceed further. This
avoids replication of projects and can find out where all those success stories met together. Projects were chosen on the basis of their interests and willingness to represent their project as per the expertise.

We were testing those projects during the workshops. We were seeing dissemination of those projects and this results into partnerships on the basis of replication of projects. We almost created merge of Hackathon and Success Stories.

Phase Three: Solving the future

<table>
<thead>
<tr>
<th>Suggestions</th>
<th>Present Scenario</th>
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<tbody>
<tr>
<td>I) Communication platform needs upgrade.</td>
<td>We try to promote WSIS on social media like Facebook and Media. On Instagram, we have reached 1000 followers.</td>
</tr>
<tr>
<td>II) Media Toolkit for news</td>
<td>We always provide toolkit to the champions and the winners. We will try to amend the new keywords or tools for them.</td>
</tr>
<tr>
<td>III) Top- Down approach in Communication Channel</td>
<td>ITU has different focal points in different regions, organizations and communities.</td>
</tr>
<tr>
<td>IV) Collaboration hub</td>
<td>WSIS Stocktaking platform is a connecting platform for various projects on regional basis, success stories or global stocktaking reports.</td>
</tr>
<tr>
<td>V) Mobile App for smooth flow of information and transparency about facilitators</td>
<td>WSIS website answers everything regarding rules and procedures. Different action line facilitators are already mentioned on the website.</td>
</tr>
<tr>
<td>VI) Different language platform</td>
<td>WSIS is currently working to resolve this issue.</td>
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</tbody>
</table>

Suggestions

I) Communication platform needs to be upgraded.

II) New Media Toolkit for the news sharing on various platforms is required.

III) Top- Down approach in Communication Channel such as focal point is mandatory.

IV) Collaboration hub for the funding partners and winning projects entities should be created.

V) Mobile App for smooth flow of information and transparency about facilitators and voting system is needed.

VI) Different languages platform is needed for local projects to participate.
VII) Easy replication of data can be done by reverse engineering.

6. Outcomes

I) We try to promote WSIS on social media like Facebook and Media. On Instagram, we have reached 1000 followers.

II) We always provide toolkit to the champions and the winners. We will try to amend the new keywords or tools for them.

III) ITU has different focal points as ex-winners and ex-champions in different regions, organizations and communities.

IV) WSIS Stocktaking platform is a connecting platform for various projects on regional basis, success stories or global stocktaking reports.

V) WSIS website answers everything regarding rules and procedures. Different action line facilitators are already mentioned on the website.

VI) WSIS is currently working to resolve different language platform as per OCP suggestions as well.
WSIS Forum is a worthwhile event to have same objective for using various technologies to help the communities. Everybody is working towards the same goal. Every year it is bigger and better.

Mr. Malcolm Johnson, Deputy Secretary General (ITU)

Every recognition reminds you that it has some value. It actually builds the trust of the target audience.

Mr. Md. Afzal Hosain Sarwar, Policy Specialist (a2i, Bangladesh)

Finally we exist! We are part of the world. Thanks to internet society, ITU and WSIS.

Ex-Champions-Internet radio for people with visual impairments (Radio MENQ), Armenia

It is not just the promotion of the project, but it is actually the promotion of the technologies. There is no big or small projects.

Mr. Vladimir Stankovic, Policy Analyst, ITU

ICT is very important and we can’t deny the fact that it is one of the essential part of our lives.

Mrs. Hani Punawarti, Relawan TIK, Indonesia
The main objective of this activity was to discuss the main issues in the identified topics for youth within the WSIS framework and to encourage an active contribution and participation of youth to the WSIS process. The Cloud Café was set up in a dynamic space where ICT experts presented insightful presentation on topics identified by youth, and were available to discuss with the participants about emerging trends in ICTs and youth engagement in development affairs.

Summary

The Cloud Café hosted around 80 people with experts in various fields setting the scene for three topics: cybersecurity (Carla Licciardello, ITU, and Sareidaki Despoina, ITU), social media and communications (Theadora Mills, ITU), and Vladimir Stankovic (ITU and WSIS Stocktaking Coordinator on ICT implementation and as the moderator of the overall session.) At the beginning of the session, each expert presented the topic, posing one question, and working with the round tables to generate a solution. Participants enjoyed the light lunch served.

The event was honored with the presence of Mr Malcolm Johnson, Deputy Secretary-General, who welcomed the participants and invited all to continue participating and contributing to the WSIS values and WSIS Forum in the future.

In the first edition of the Cloud Café, an attempt to engage youth with the WSIS Forum and the WSIS process at large, consisted on learning how much youth is involved with the international affairs, including understanding of the international organizations activities, advancing the Sustainable Development Goals, and harvesting the power of ICTs towards equally distributed social impact.

The three different topics were identified through a survey, exercised in advance with various youth communities on local and global level. The opportunities and challenges of the social media, understanding the cybersecurity and its implications, and youth engagement in implementation of the ICT-related projects and initiatives for development, were among the most those that attracted the most interest within the youth. Therefore, the event was accompanied by experts that could deliver the raised questions and address the pros and cons of the selected topics.
The Cloud Café started with a brief introduction about ITU, the WSIS process and the WSIS Forum, and the Sustainable Development Goals and ways towards reaching them until 2030 with the support of ICTs. The present participants grouped by 6-8 people in a round table setting, had the opportunity to interact with the ITU experts and other participants of the WSIS Forum 2018. Through the round table discussions, participants were invited to share their insights on questions raised but also to point out to issues that are of their interest.

Outcomes

In order to better use the power of youth, the participants of the Cloud Café dedicated to youth engagement in the WSIS process, brought up a common solution: to crowdsource solutions and provide opportunities for the voices of youth around the world to participate and contribute to the implementation of the WSIS Action Lines and SDGs, through the smart use of social media to provide inputs, reach wider audiences, democratize information, sharing their ideas with decision makers. In order to have youth better engaged with the WSIS process, the participants of the Cloud Café invited the coordinators of the WSIS process to better reach out to youth communities and provide more information about the ICT opportunities for development through:

- continuously engaging youth at the WSIS Forum in the future;
- disseminating information through social media and also conducting “WSIS youth” related events at the local and global level;
- continue organizing events and activities at the WSIS Forum that are of more interest for youth, such as hackathons, photo contests, but also innovative discussion (such as PopTech and Big Think).

A funding mechanism to support physical participation of the youth at the WSIS Forum should be explored, while internship and job opportunities, especially in social media, should be made more available for youth. Finally, WSIS Forum should be considered as one of the options of the centralized platform for youth to learn about all UN events.

On a matter related to the cyberspace and how to make it safer, the participants of the Cloud Café brought up suggestions such as better education from an earlier age, improved legal environment, transparency when signing up for online services and on the data provided to online service providers, raising public awareness on data sharing literacy, dashboard visualizing how our data is used, coordinated international standards and cooperation that both private and government sectors should follow.
Finally, it was proposed that WSIS Forum should engage more with universities and young professionals, and that a unified message should be communicated from all UN agencies. In addition, youth projects should be promoted through the WSIS process, including WSIS Stocktaking and WSIS Forum, and provide a customized networking opportunities for youth, while organizing a WSIS platform to create “youth groups” and have meet-ups (physical and online).
During Country Workshops, countries provide updates and reports on the implementation of the WSIS Action Lines in their respective countries. These sessions provide an opportunity for all participants to learn and share their country level experiences on the implementation of the WSIS Action Lines.
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/249#intro

1. Key achievements, announcements, launches, agreements, and commitments
   - Announcement of the Transform Africa Summit taking place in Kigali from 7-10 May 2018
   - Strong commitment by ITU to help African lead
   - How can Africa leverage partnerships with the rest of the world to build a strong ICT industry within the continent and move away from being only consumers to providing solutions on the continent?
   - African countries being at the forefront in harnessing the agenda to drive the transform Africa initiative
   - Some specific initiatives for partnerships were also discussed like Regional Integration for ICT development at a continental level

2. Main Outcomes
   I. Quotes
   1) “It is only through partnerships and collaboration that Africa will leapfrog to Digital transformation” Hon. Jean De Dieu RurangirwaMinister of Information Technology and Communications-Rwanda

   2) “Africa is a huge continent with massive opportunities where continued engagements will benefit both the Government and Private sector and other Stakeholders” Nyirishema Patrick-Director General of Rwanda Utilities Regulatory Authority-RURA

   II. Overall outcomes of the session highlighting
   - Africa to focus on Business and Innovation
   - Priorities and programs towards Africa’s transformation
- Good will from African Leaders to leverage partnerships
- the vision for implementation of WSIS Action lines beyond 2015
- Continuous partnerships of paramount importance in realizing this agenda

**III. Main linkages with the Sustainable Development Goals**
- Partnerships to achieve the goal

**IV. Emerging Trends related to WSIS Action Lines identified during the meeting**
- Information technology has served as a big change agent in different aspects of business and society. It has proven a game changer in resolving economic and social issues

**V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019**
- Business and Innovation
Country Workshop

Iran National Activities towards the Information Society

Iran

Monday 19 March 2018 16:30 – 18:15
Room M - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/253#intro

1. Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

In this workshop which was arranged by Iran ICT Ministry, some of ICT-based activities in national level were reviewed by the panelists. Panelists are:

- Dr Hadi Shahriar Shahhoseini, Iran University of Science and Technology (IUST), Iran.
- Dr Alireza Reisi, Ministry of Health and Medical Education (MoHE), Iran.
- Dr Mohammad Khansari, ICT Research Institute (ITRC), Iran.
- Dr Seyad Morteza Moosavian, Ministry of Culture and Islamic Guidance, Iran.
- Dr Rahman Issazazadeh Nesheli, Ministry of Education, Iran.
- Mr Keyvan Keshavarz, Ministry of Agriculture, Iran.

After opening the session by Dr Shahhoseini from Iran University of Science and Technology, Dr Reisi, deputy minister from Iran Ministry of Health and Medical Education (MoHE), talked about Iran health system, the electronic health record (HER) and Health Transformation Plan (HTP) and their efforts to provide e-health in suburban and remote area in Iran. Then Dr Moosavian introduced two projects of Ministry of Culture and Islamic Guidance which are related to development of local digital content in Iran. Dr Issazazadeh, talked about the lesson learned from previous ICT projects in Iran Ministry of Education, and their future plan in developing digital content, promoting digital education for children, providing broadband, as well as using the Internet of Things (IoT) in Iran Ministry of Education. Then Mr Keshavarz, form Ministry of Agriculture, after giving some information about the agriculture situation in Iran talked about the electronic services that the government provides in this sector. Dr Khansari, from ICT Research Institute (ITRC), presented Iran road-map for Internet of Things in ICT sector.
1. Main outcomes highlighting the following

I. Debated Issues

The impact of technical standards which will change rapidly, the rules and regulations for digital contents, and the role of the private sector and funding on the described projects, are discussed.

II. Overall outcomes of the session highlighting

In this workshop, the progress in WSIS Action Lines in Islamic Republic of Iran was reported. The panelists from government and academia gave an overview of their activities in Iran regarding the ICT-based projects, in the area of health, culture, education, research, agriculture. They described the main ICT-related projects in their sector, to share the experiences and exchange ideas with the workshop participants.

III. Main linkages with the Sustainable Development Goals

G1 - G2 – G4 - G6 - G8 - G9

IV. Emerging Trends related to WSIS Action Lines identified during the meeting

- E-services
- Integrated Data Systems
- Internet of Things

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- Regional activities for providing e-services area as well as the aspects of national IoT plan in ICT sector refer to item
Talk 1:
Inspiring Services:
TRA presented bundle services as a new trend in government approach to provide customer centric services. UAE is focused on customer happiness as set by HH Shaikha Mohammed Bin Rashed to be the first in government services by 2021. Bundle service is an integrated service across multiple entities that reduces time and efforts required to avail government services by citizens.

The session focused on the New Born Baby bundle service, which eases the issuance of identity documents for new born babies in UAE reducing the visits from 7 visits to different government entities to single visit. The service was implemented as one of the services under the UAE Government Accelerator Program, an initiative of the Prime Minister Office. UAE government accelerator program is a shift of how government works from traditional government to an agile government. The service delivery was accelerated by leveraging the technology enablers that have been laid down by the implementation of smart government national plan initiatives.

The session also highlighted that the UAE government is working towards achieving the objective of UAE Centennial 2071 through the development of long-term work plans for the next five decades of development for the UAE. Ease of Doing Business is another bundle service, which is under development to ease the process of establishing a new business in UAE. The bundle service came to enrich the economic sector of the country.

Talk 2:
The SmartPass services as one of the key building blocks of the National Plan of UAE smart gov: The remaining points in the outcome document can be more related to the government accelerator and show cased results such as bungle of service.

An introduction was made to start the workshop and provided an overview of the National Plan and how SmartPass contributes as a key component to enable government through the digital transformation and enable other component to operate efficiently, as well as raise the awareness of people of the importance of verified digital identity.

A brief on the SmartPass service which mainly provides Single Sign-on between participant and authentication using multiple levels, Gov entities can choose which authentication methods to use for which services, Authentication Methods consist of the following:
1. Username + Password
2. Username+Password+OTP (SMS or Email) or QR CODE, TOTP
3. Emirates ID + PIN,
4. Emirates ID + Biometric

SmartPass also provides one verified account based on the individual information stored in the Emirates ID card. The verification happen at the registration phase, when an Emirates ID holder wishes to use any of the participant services, he or she simple needs to register only once and avail one trusted account from all participant, this helps to achieve:

§ Enables the use of unified data entry for online government transactions.
§ Facilitates an easy access to all of the entities’ provided services.

The project comes in the context of the national efforts aiming to achieve the pillars of the 'inclusive government', and improving the electronic/mobile government consistently with the concept of 'interconnected government' that the UAE aspires to achieve.

§ SmartPass will improve user experience, avail quality services and increase user satisfaction, which will contribute to users’ happiness as the ultimate goal of the mGovernment.

§ SmartPass will allow users to proof their identity only once at the registration (EID and PIN/Figer) and start using the participant websites, services and make transactions securely without having to visit the government entities to provide documents to proof the individual identity or register online every time they visit a website and create another username and password.

SmartPass main objective is to fulfill the UAE agenda 2021 objectives, which focus mainly on the following: increase the usage of e/m services, decrease the visits to service center, and increase people satisfaction and happiness. Therefore it was set as one of SmartPass goals as well as the National Plan of UAE Smart Gov is to increase gov entity maturity to accept other means of identity proofing and move services over the counter to digital channels.

As we move forward throughout the journey of SmartPass, the demand has increased to connect and benefit from SmartPass services as well as the gov entities requirements to provide end to end services, therefore the Digital Signature is now one of the new features that is under implantation, providing secure means of authentication and adoption of electronic signature, seamless services which improves government efficiency, and contributes to the UAE 2021 agenda toward a paperless government, happy customers.

**Talk 3:**

In one year, the more than 250 front line officers who made up the Government Accelerators teams under the sponsorship of 40 different federal entities of the UAE government and partnership with more than 100 local government entities, 95 private sector and NGO’s to accelerate the achievements of tangible results within 100 days achieving:

a. Increased Government Services delivery efficiency by reducing a total of 116 days in service delivery.

b. Increased the financial efficiency and saved an excess of 38 Million Euros from the Government Federal budget.

c. Saved 32 lives by reducing the total number of deaths on the Highways.

**5) Main outcomes highlighting the following:**

**I. Debated Issues**

- Sharing the Smart Government and Government Accelerators story and its methodologies.
- Building a culture that entrusts the front-line employees to lead the change and deliver results.
- Motivate leaderships to support and empower the teams during the 100 days challenge as well as beyond in sustaining and scaling results achieved.
- Adapting the methodologies on smaller and larger scales, locally and internationally.
- Seamless government services
- Happier Nation and people

II. Quotes

“If one allows a team to set their own goals, then achievement will follow” His Highness Sheikh Mohammed bin Rashid Al Maktoum Vice President and Prime Minister of the UAE

III. Overall outcomes of the session highlighting

- Smarter, Safer and happier nation
- Government Accelerators prove of concept in delivering outstanding results in short period of time through collaborative work between entities and individual.

IV. Accelerating Sustainable Development Goals achievements through the Government Accelerators multi-stakeholder mythology.

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
a. Aim for Impact over outcome.
1) **Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)**

1) The big-bang approach of equipping government with technology does not work anymore. Instead there is greater focus on creating an enabling environment where governments are equipped with frameworks and tools (like those developed by ITU) so that they are able to develop and prioritize their digitization strategy; identify services which are most needed by citizens; address core and urgent problems; and, develop national and sector-specific master plans that can be implemented in a timely manner.

2) Business models can ensure sustainability and excellence of public service delivery mechanisms. The service recipients need to pay a minimal service fee, while the service provider need to have incentives. One-stop service centre models in Bangladesh and Bhutan serve as appropriate examples.

3) A South-South Network for Public Service Innovation has been jointly launched by the Bangladesh government and the UNOSSC to encourage sharing of public service innovations from the Southern countries among themselves. The secretariat is housed in the Bangkok office of UNOSSC.

2) **Main outcomes highlighting the following areas:**

I. **Debated Issues:**

The session was highly participatory in the sense that the debate took place on a diversified number of issues and those include:

- Role of private sector in developing innovation ecosystem
- Role of the public sector in developing IT and enrich the Public-Private relationship
- Significance of investment in IT sector
- Development of Business Models for the sustainability
- Use of ICT based solutions for disaster management
- South-South network for ICT based public service innovation
- Effectiveness of top-down and bottom-up approach in creating an ecosystem for addressing citizens’ problems
- Role of connectivity (connecting the unconnected) in developing the ecosystem and improving citizen’s lives
- Use of social media
- Cyber security

Connectivity is a road, but we need vehicles. These vehicles are the content and the services which need to be created as well. Once the unconnected has been connected, the next question is what do they use it for. This is where we may fall behind if we lack empathy for the unconnected, and fail to understand the content and the services that they require most. - Mr. Anir Chowdhury, Project Advisor, a2i, Bangladesh.

Equipping government with technology is old concept. Now the focus should be more on creating an enabling environment where governments are equipped with frameworks and tools so they can tell us which services citizens’ need, which problems need to be addressed, and develop a master plan that can be implemented. – Mr. Mohamed Ba, Head of Innovation Division, ITU (Moderator)

Economic development is possible in today’s digital age through collaboration and cooperation. ITU has always guided us and advised on us how we can bring changes through policy intervention to make public service delivery better, faster, and more hassle-free. - H.E. Mr. Dina Nath Dhungyel, Minister, Ministry of Information & Communications, Royal Kingdom of Bhutan

Many governments want to go digital. But influx of new technologies are introducing more advanced levels of knowledge and skills which the government needs to take into consideration, otherwise we will create another form of digital divide. – Mr. Vincenzo Aquaro, Chief of e-Government Branch, UN DESA

Four pillars of e-governance are to make information available to the people and the authority, to reach the unreached, to reduce the response time, and to reduce cost to government. – Barrister Barrister Md. Harun-Ar-Rashid, DIG (T&IM), Bangladesh Police, DIG (T&IM), Bangladesh Police

II. Overall outcomes of the session highlighting

The session was embraced by a rich panel of senior policy makers and innovation experts and they demonstrated the importance of developing an enabling innovation ecosystem within the government by linking with non-government actors.

The panel shared successful examples of service process digitization and innovation in Bangladesh, Bhutan and other countries. Important insights were shared about the importance of creating services and content, and there were some debate regarding whether we should be more concerned with connectivity. But, what everyone agreed upon is that a more citizen-oriented,
bottom-up, iterative approach is more contextual for the LDCs and others compared to a top-down, big bang approach.

The model of service delivery to the marginalized and underserved using one-stop service centres was a popular discussion topic and it was proposed as an effective solution to reach the unreached with better service delivery offers.

South-South Network for Public Service Innovation (SSN4PSI) shows good promise as numerous participants approached to learn more about and even join the global network.

III. Main linkages with the Sustainable Development Goals

The session was directly linked with the following SDGs:

- Goal 1- No Poverty
- Goal 3- Good Health and Well-Being
- Goal 4- Quality Education
- Goal 5- Gender Equality
- Goal 7- Agriculture and Clean Energy
- Goal 8- Decent Work and Economic Growth
- Goal 9- Industry, Innovation and Infrastructure
- Goal 10- Reduced Inequalities
- Goal 11- Sustainable Cities and Communities
- Goal 13- Climate Action
- Goal 16- Peace, Justice and Strong Institutions
- Goal 17- Partnerships for the Goals

IV. Emerging Trends related to WSIS Action Lines identified during the meeting

- E-Government
- Eradication of Poverty
- South-South Cooperation and Country Innovation
- Creation of new jobs and services
- Embracing the advantage of Technology
- ICT4SDGs
- E-Strategies/ Digital Government Strategy/ Some kind of Master Plans
- Enabling environment
- Whole-of-Government approach

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- More in-depth conversation on the transformation of the LDCs in the next WSIS Forum
1) Talk 1:

**Inspiring Services:**

TRA presented bundle services as a new trend in government approach to provide customer centric services. UAE is focused on customer happiness as set by HH Shaikha Mohammed Bin Rashed to be the first in government services by 2021. Bundle service is an integrated service across multiple entities that reduces time and efforts required to avail government services by citizens.

The session focused on the New Born Baby bundle service, which eases the issuance of identity documents for new born babies in UAE reducing the visits from 7 visits to different government entities to single visit. The service was implemented as one of the services under the UAE Government Accelerator Program, an initiative of the Prime Minister Office. UAE government accelerator program is a shift of how government works from traditional government to an agile government. The service delivery was accelerated by leveraging the technology enablers that have been laid down by the implementation of smart government national plan initiatives.

The session also highlighted that the UAE government is working towards achieving the objective of UAE Centennial 2071 through the development of long-term work plans for the next five decades of development for the UAE. Ease of Doing Business is another bundle service, which is under development to ease the process of establishing a new business in UAE. The bundle service came to enrich the economic sector of the country.
Talk 2:

The SmartPass services as one of the key building blocks of the National Plan of UAE smart.gov. The remaining points in the outcome document can be more related to the government accelerator and showcased results such as bungle of service, let me know if you need more information. An introduction was made to start the workshop and provided an overview of the National Plan and how SmartPass contributes as a key component to enable government through the digital transformation and enable other components to operate efficiently, as well as raise the awareness of people of the importance of verified digital identity.

A brief on the SmartPass service which mainly provides Single Sign-on between participant and authentication using multiple levels. Gov entities can choose which authentication methods to use for which services. Authentication Methods consist of the following:

1) Username + Password

2) Username + Password + OTP (SMS or Email) Or QR Code, TOTP

3) Emirates ID + PIN,

4) Emirates ID + Biometric

SmartPass also provides one verified account based on the individual information stored in the Emirates ID card. The verification happens at the registration phase, when an Emirates ID holder wishes to use any of the participant services, he or she simply needs to register only once and avail one trusted account from all participants, this helps to achieve:

- Enables the use of unified data entry for online government transactions.
- Facilitates an easy access to all of the entities’ provided services. The project comes in the context of the national efforts aiming to achieve the pillars of the ‘inclusive government’, and improving the electronic/mobile government consistently with the concept of ‘interconnected government’ that the UAE aspires to achieve.
- SmartPass will improve user experience, avail quality services and increase users’ satisfaction, which will contribute to users’ happiness as the ultimate goal of the mGovernment.
- SmartPass will allow users to prove their identity only once at the registration (EID and PIN/Finger) and start using the participant websites, services and make transactions securely without having to visit the government entities to provide documents to prove the individual identity or register online every time they visit a website and create another username and password.

SmartPass main objective is to fulfill the UAE agenda 2021 objectives, which focus mainly on the following: increase the usage of e/m services, decrease the visits to service center, and increase
people satisfaction and happiness. Therefore it was set as one of SmartPass goals as well as the National Plan of UAE Smart Gov is to increase govt entity maturity to accept other means of identity proofing and move services over the counter to digital channels.

As we move forward throughout the journey of SmartPass, the demand has increased to connect and benefit from SmartPass services as well as the govt entities requirements to provide end to end services, therefore the Digital Signature is now one of the new features that is under implantation, providing secure means of authentication and adoption of electronic signature, seamless services which improves government efficiency, and contributes to the UAE 2021 agenda toward a paperless government, happy customers.

Talk 3:
In one year, the more than 250 front line officers who made up the Government Accelerators teams under the sponsorship of 40 different federal entities of the UAE government and partnership with more than 100 local government entities, 95 private sector and NGO’s to accelerate the achievements of tangible results within 100 days achieving:

- Increased Government Services delivery efficiency by reducing a total of 116 days in service delivery.
- Increased the financial efficiency and saved an excess of 38 Million Euros from the Government Federal budget.
- Saved 32 lives by reducing the total number of deaths on the Highways.

1. Main outcomes highlighting the following

I. Debated Issues

Sharing the Smart Government and Government Accelerators story and its methodologies. Key achievements of the Smart Gov and Government Accelerators:

I. Building a culture that entrusts the front-line employees to lead the change and deliver results.

II. Motivate leaderships to support and empower the teams during the 100 days challenge as well as beyond in sustaining and scaling results achieved.

III. Adapting the methodologies on smaller and larger scales, locally and internationally. Seamless government services Happier Nation and people

II. Quotes

“If one allows a team to set their own goals, then achievement will follow” His Highness Sheikh Mohammed bin Rashid Al Maktoum Vice President and Prime Minister of the UAE

III. Overall outcomes of the session highlighting

Smarter, Safer and happier nation Government Accelerators prove of concept in delivering outstanding results in short period of time through collaborative work between entities and individual.
IV. Main linkages with the Sustainable Development Goals (SDGs)

Accelerating Sustainable Development Goals achievements through the Government Accelerators multi-stakeholder mythology.

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
Aim for Impact over outcome.
A Hackathon is traditionally an event where computer programmers get together to collaborate on the development of various types software projects. At WSIS, the Hackathon track is composed of all of WSIS multistakeholders, from various nationalities and backgrounds, getting together to “hack” development issues related to ICTs in a collaborative manner.

This year, the Hackathon format was introduced to the WSIS Forum and it will continue to evolve as a permanent component of the Forum.

REGIONAL HACKATHONS

Please follow the link below to access the final Hackathon report:

Hackathon

Hackathon - Hack Against Hunger
ITU and FAO, facilitated by Impact Hub Geneva

Sunday 18 March 2018 08:00 – 21:30
Monday 19 March 2018 07:00 – 14:00
Reception Area – ITU Montbrillant

1. Key achievements, announcements, launches, agreements, and commitments

At the #HackAgainstHunger/Geneva, 73 participants (30+ nationalities represented), 14 teams across 4 continents came together in Geneva, Switzerland, to “hack” for a Future of Sustainable Agriculture and Food.

From Sunday to Monday in 36 hours non-stop, teams worked day and night on prepared projects, as well as their purpose-driven business models and leveraging the latest technologies to address world hunger. The teams developed innovative digital services, mobile & web applications, mainly for middle and lower-income countries, using artificial intelligence, as well as algorithms based on various datasets. During the #HackAgainstHunger/Geneva, participants were able to (1) connect with the UN ecosystem and telecoms influencers, (2) receive operational and startup support from social entrepreneurs and business coaches for further developing their projects and (3) benefit from specific know-how on the challenges that are being “hacked” from experts from ITU and FAO who give them feedback. All participants have been invited to the High Level Segment of the WSIS Forum, on Tuesday 20 March. The winning hacker teams were able to present (pitch) their projects in front of a high level and multi-stakeholder audience and will be supported by ITU and FAO to further develop their project after the hackathon.

2. Main outcomes highlighting the following:

I. Debated Issues

In the up-run to the #HackAgainstHunger/Geneva, each team had identified a specific challenge within the overall theme of the Hackathon, for which aiming to build a new solution. Furthermore #HackAgainstHunger/Geneva also built on #HackAgainstHunger/Rwanda, #HackAgainstHunger/Jamaica, and #HackAgainstHunger/Trinidad&Tobago. Three regional hackathons which took place prior to #HackAgainstHunger/Geneva. The regional winning hacker teams were invited to join the international final hackathon in Geneva.

Hereafter you can find the exhaustive list of the #HackAgainstHunger/Geneva teams, the challenges they were tackling, the projects (solution prototypes) they were building, as well as the SDGs they addressed:
@grishare | France, Tunisia and Italy | 7 team members

**Challenge:** How to use ICT to help farmers with contact and information and good practices?

**Project (solution):** the team aims at addressing the problem of farmers lacking contacts and information to improve their practice of agriculture.

**SDGs addressed:**
- SDG 2: Zero Hunger
- SDG 12: Responsible Consumption and Production
- SDG 13: Partnerships for the Goals

AgroUp | Ethiopia, Germany, Spain and France | 6 team members

**Challenge:** How to help rural farmers with information on market prices, technological inputs, technical assistance services to improve their productivity and profitability?

**Project (solution):** agroUp aims to improve the life of female smallholder farmers in rural areas in Africa, in developing agricultural support that targets specifically women.

**SDGs addressed:**
- SDG 5: Gender Equality
- SDG 8: Decent Work and Economic Growth
- SDG 17: Partnerships for the Goals

A-Grow | Jamaica | 4 team members

**Challenge:** How to provide relevant information to market players to improve farming at the national level?

**Project (solution):** A-Grow developed a solution that allowed decision makers to view farming related data in a single dashboard. The application also allowed decision makers to send out messages to farmers using social media.

**SDGs addressed:**
- SDG 2: Zero Hunger
- SDG 8: Decent Work and Economic Growth
- SDG 12: Responsible Consumption and Production

Biogas, see the future | China | 5 team members

**Challenge:** How to reduce soil pollution and ensure food safety, while boosting agricultural production and eliminate starvation?

**Project (solution):** “Biogas, see the future” applies academic research to develop highly efficient gas-generating accelerators to enhance biogas production and utilized biogas as a green and clean energy source.

**SDGs addressed:**
- SDG 6: Clean Water and Sanitation
- SDG 13: Climate Action
- SDG 15: Life on Land

ChangeMakers | Tunisia | 4 team members

**Challenge:** How to share food with those who need it and help with poverty and youth unemployment?

**Project (solution):** Wakalni is an app that transforms your passion for sharing food photos into actually sharing food for those who need it. First, you sign up via Facebook or Twitter and then, you visit a participating restaurant. By taking a photo of your meal with your app and posting it, the restaurant makes a donation to The Wakalnibox.

**SDGs addressed:**
- SDG 1: No Poverty
- SDG 2: Zero Hunger
• **SDG 8: Decent Work and Economic Growth**

**Food Vibes | Switzerland | 5 team members**

**Challenge:** How to create a sustainable business model by reducing food waste and turn it into affordable meals?

**Project (solution):** Food Vibes is a local solution to collect the “ugly” fruit and vegetables not complying with the consumers’ norms from farmers and create affordable and traditional meals in a food truck.

**SDGs addressed:**
- SDG 2: Zero Hunger
- SDG 3: Good Health and Well-Being
- SDG 15: Responsible Consumption and Production

**Hungry for Change | Norway & Mozambique | 8 team members**

**Challenge:** How to provide information, optimise water usage and preserve resources for farmers in rural areas?

**Project (solution):** the team plans to create a sensor that can sense how humid the ground is. So when they water the ground, they don’t need to use too much water.

**SDGs addressed:**
- SDG 6: Clean Water and Sanitation
- SDG 12: Responsible Consumption and Production
- SDG 15: Life on Land

**KizaLab | Rwanda & Hungary | 5 team members**

**Challenge:** How can we increase productivity and efficiency of farmers?

**Project (solution):** Kizalab is a software app that aims to increase productivity and efficiency of farmers by connecting them to a network of good practices.

**SDGs addressed:**
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action
- SDG 15: Life on Land

**McFly | China | 2 team members**

**Challenge:** How can we reduce the excessive pesticide spraying that represents a threat to food safety?

**Project (solution):** the team uses scientific and technological innovation to solve the problem of excessive pesticide spraying. They have developed a scientific algorithm to realize precise monitoring and variable in spraying pesticide.

**SDGs addressed:**
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action
- SDG 15: Life on Land

**National Seed Policy Evaluation System (NSPES) | Spain | 4 team members**

**Challenge:** How to develop a National Seed Policy Evaluation System?

**Project (solution):** Our solution uses an algorithm to classify national seed policies as ‘poor’ ‘fair’ or ‘adequate’ based on the degree of inclusion/exclusion of the informal seed sector and the eleven key elements identified by United Nations’ Food and Agriculture in the Voluntary Guide for National Seed Policy Formulation.

**SDGs addressed:**
- SDG 2: No Hunger
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production

**Pyramids Team | Egypt | 4 team members**

**Challenge:** *How to optimise the water usage for farmers?*

**Project (solution):** Our solution uses data acquisition, analysis and interpretation to develop a framework to help new farmers to assess the water quality for their farm.

**SDGs addressed:**
- SDG 6: Clean Water and Sanitation
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production

**Swiss cheese | Trinidad & Tobago | 4 team members**

**Challenge:** *How to use machine learning and artificial intelligence to predict best price for farmers’ products?*

**Project (solution):** Foodig is a mobile app that aims to reduce food waste by offering a digital food market platform for small scale farmers, fishermen, livestock sellers, groceries and restaurants.

**SDGs addressed:**
- SDG 2: Zero Hunger
- SDG 8: Decent Work and Economic Growth
- SDG 12: Responsible Consumption and Production

**SwissHackingTeam | Switzerland | 8 team members**

**Challenge:** *How to use ICT to help improve soil quality?*

**Project (solution):** The team uses scientific and technological innovation to build a digital crop advisors to solve the problem of monocultures in low income countries.

**SDGs addressed:**
- SDG 2: Zero Hunger
- SDG 8: Decent Work and Economic Growth
- SDG 12: Responsible Consumption and Production

**Tech4Humanity | Iran, Netherland & Switzerland | 6 team members**

**Challenge:** *How to help farmers recognize early symptoms of disease in plants?*

**Project (solution):** We use AI image recognition to find early signs of disease in plants by training a machine learning program with the database of current known diseases, and other open data sources.

**SDGs addressed:**
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action
- SDG 15: Life on Land
II. Quotes

“During the hackathon, we were able to test our brand-new and fresh ideas at a high speed, I really enjoyed it. Even though we were missing some competences inside our team, we received kind supports from other teams that allow us to move forward. We are grateful for it.” - Nicole Michelen, National Seed Policy Team, Spain

“For our team, it has been a huge challenge to find sponsors that would support of travel costs to come to Geneva. We made it and it was worth it! We are so happy to have spent this magical moment with you.” - Khalil Say, Changemakers Team, Tunisia

III. Overall outcomes of the session highlighting

The participants went through an intense collective intelligence & ideation session to create concrete solution prototypes through leveraging different creative team work methodologies such as Human Centered Design, Systems Thinking, Business Model Canvas, and others. #HackAgainstHunger/Geneva has familiarized, inspired and engaged representatives from International Organizations with the tech industry and start-up culture and practices. Participants were offered an ‘enabling space’ to prototype innovative and actionable technology-based solutions. Finally, at the end of the hackathon the co-organizers (ITU, FAO, and Impact Hub) assisted the hacker teams in defining concrete next steps in developing their prototypes into viable and scalable solutions by providing information and contacts for partnerships for needed incubation, acceleration support, and partnerships.

IV. Main linkages with the Sustainable Development Goals

The #HackAgainstHunger/Geneva addressed and supported global solutions to tackle SDG2: Zero Hunger, with a focus on solutions for middle to lower income countries. Nevertheless, a wider range of SDGs have tackled as mentioned above.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Strengthening “bottom-up” innovation is needed and fully complementary to top-down/high-level cooperation within the international development agenda.
Thematic Workshops are interactive sessions based on the requests received from stakeholders during the Open Consultation Process. These workshops are organized and designed by the aforementioned stakeholders and are therefore a true testament to the inclusive spirit of the WSIS Forum 2018.
Thematic Workshop

Megaconstellations offering new technology for an inclusive access to rural areas of the LDCs

International Network of Women Engineers and Scientists (INWES) & AB5 Consulting

Monday 19 March 2018 09:00 – 10:45
Room Popov 2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/189#intro

1. Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

The workshop was organized by the International Network of Women and The key achievements of the session were the review of the good practice of developing sustainable solutions in Africa and other LDC regions. These comprise the training and involvement of the local users on the solution, re-use of existing materials, co-development and open source code wherever possible, the development of low cost solutions, the importance of interfaces and the development of modules, which can be assembled to fulfil the needs of a community, country, region. The workshop welcomed around 50 participants and created a very cooperative atmosphere of exchange of experiences and ideas.

2. Main outcomes highlighting the following:

I. Debated Issues

The key achievements of the session were the review of the good practice of developing sustainable solutions in Africa and other LDC regions. These comprise the training and involvement of the local users on the solution, re-use of existing materials, co-development and open source code wherever possible, the development of low cost solutions, the importance of interfaces and the development of modules, which can be assembled to fulfil the needs of a community, country, region.

II. Quotes

• “It is important to involve local people and inform them about the new system if the project is to be successful"
“Barriers to a sustainable development of the solutions include regulations, fees, too complicated and expensive technical solutions”

Betty Bonnardel, AB5 Consulting: “the session has provided an invaluable input into the project and should help develop pilot projects leading to the successful implementation of sustainable solutions.”

III. Overall outcomes of the session highlighting

- The main conclusions for the session are as follows. To be successful a pilot project needs to consider:
  a. the best possible location/country in terms of the environment, including the regulations, fees, interest
  b. a solution which should be easy to implement, maintain and with a low cost
  c. train the users and encourage them to train others on the solution
  d. favour co-development, open source code, development of modules

- The vision is to develop inclusive and sustainable solutions which benefit all, and in particular those communities which are remote, and women.

IV. Main linkages with the Sustainable Development Goals

Such a project addresses all the SDG if correctly implemented.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

More concrete and practical solutions, good practice sharing, long term sustainability, low cost solution, train the users on the solution

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Towards sustainable and inclusive ICTs
1) Key achievements, announcements, launches, agreements, and commitments

This session was an opportunity to share the highlights of the evidence-based research carried out by world renowned scholars on ICT-centric economic growth, innovation and job creation from various aspects such as governance, education, job creation, industrial transformation and socio-economic growth through digital and emerging technologies in the converged ICT ecosystem. Partnership and approaches among multi-stakeholders were explored and debated on the opportunities and challenges for accelerating digital transformation through ICT-centric innovation in cross-sectors, in order to contribute to the Sustainable Development Goals (SDGs).

2) Main outcomes highlighting the following:

I. Debated Issues

- A comprehensive, yet novel and analytical treatment of the subject and explained how ICTs can be utilized to efficiently achieve the Sustainable Development Goals.
- An increasing body of research showing that digitization is accelerating growth and development impact.
- Digital solutions are transforming the delivery of products and services.
- However, digitalization is still nascent in most emerging markets.
- Digital disruption will impact countries differently and could exacerbate global inequality.
• Several Financial Inclusion Solutions in the market.
• Countries have benefitted by technologies, and two such prominent example would be Kenya and India. Digital inclusion and the use of Aadhaar card, by Kenya and India, respectively, have been and will continue to be enablers for further development.
• Estonia would be another example of a digital society.
• China’s giant e-commerce platform, Alibaba, has helped skyrocket the number of small scale entrepreneurs.
• Digital Transformation needs to be accelerated, simultaneously, enhancing and building partnerships and various approaches among the multi-stakeholder ecosystem. Moreover, the critical role of the governments in enabling infrastructure, sustainable production, and regulations to name a few, need to enhance.
• Emphasized on financial services, especially on privacy and data protection.
• Based on a multi-stakeholder holder approach, research and academic institutions, civil societies and local governments to enhance partnerships, as these lead to a positive impact in the community.
• Importance of working with academia and research institutions and how such partners play a pivotal role in making research a backbone to the ICT centric innovation ecosystems as well as how capacity building (grooming innovators and entrepreneurs) is created through partnering with them.
• Three key factors to build sustainable in innovations:
  First, the Human factor; where we access the needs
  Second, Viability; which is the business actor
  Combining the above two factor, it creates;
  Feasibility; which is the technology
  Technology by all means is the main driver of innovation and is therefore an enabler in development considering the sustainable aspect of development and thus, we need to focus on:
  1) Target client needs
  2) Local capacity building> to make the business viable
  3) To create a global community and share knowledge
• Building a partnership around funding and emphasize on high quality, solid, technical solutions which are not going to break easily. In order to progress sustainably, we need solutions keeping in mind what is happening in the field at the basic level and understand where and how the technology is going to be used.
ICTs could help in:

- E-Government: Would support the organization, surge transparency, explore future opportunities and support both the actions of the state and the private sector.
- Infrastructure and sustainable production: ICTs’ investment is bigger than any other market, compared to gas, transport etc
- ICTs will help in smart energy systems, and increase payment options. Economies which have used ICTs have achieved better outcomes.
- Regulation by the governments is key enabling factor.

2ND ROUND OF INTERACTIVE DEBATE

Question from: **Economic Commission from Africa**

Ques. When one talks about innovation in Africa, they usually refer to mobile money. The infrastructure in Africa, for example, for 4G and the benefit of this mobile money seems limited. What are the drivers of innovation in Africa?

The 4th Industrial Revolution presents an opportunity for a growing digital economy. Using solar energy, climate change detection, farming and in many other sectors it may require more scaling up with partnerships in the private sector. Africa can learn from the developed countries and base their model accordingly towards future research. With no doubt, human capital and infrastructure are basic models to maximize the benefits of ICTs. Moreover, light was thrown at sustainability and emphasizes on local capacity building. If local people understand sustainability, it will be implemented thoroughly, simultaneously, giving network operators the infrastructure and the skills to grow with their growth. Furthermore, governments and the private sector should join hands and invest together. Also, joint Public-Private partnerships can augment the infrastructure that is needed to make the most of ICTs. When the governments are in the lead, they tend to be easy on regulations, depending from country to country.

II.  Main linkages with the Sustainable Development Goals: SDG 4, SDG 7, SDG 9, SDG 12, SDG 16 and SDG 17

III. Emerging Trends related to WSIS Action Lines identified during the meeting: Multi-stakeholder Partnerships
Thematic Workshop

Enabling Policy Environment for Digital Transformation

Business at OECD (BIAC)/OECD

Monday 19 March 2018
Room H2 - ITU

09:00 – 10:45

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/238#intro

1. Main outcomes highlighting the following:

I. Debated Issues

CONTEXT SETTING

Carolyn Nguyen:
- About the organizers: Business at the OECD (BIAC) is the voice of business at the OECD – BIAC consists of an international business network with global membership and diverse sectors. The Organization for Economic Co-Operation and Development (OECD) was established in 1961 to promote policies that will improve the economic and social well-being of people around the world.
- This session aims to create awareness of the substantive and thoughtful set of policy recommendations, principles, and guidelines that the OECD has created on the digital economy – and to explore opportunities to leverage some of this work as a foundation for governments looking at advancing the use and adoption of ICT and innovation to digitally transform their countries.

Mac Yokozawa: There are numerous global forums that are discussing digital economy policy issues. Furthering the complexity of these discussions is the variety of issues (categorized into “layers”) that need to be considered in digital transformation, including product manufacturing, network communications, services/solutions, contents/intellectual properties – all of which is influenced by investor’s confidence. An enabling policy framework needs to have harmonized and consistent policy principles across all these layers.

EXISTING FOUNDATION FOR AN ENABLING POLICY ENVIRONMENT FOR DIGITAL TRANSFORMATION

Molly Lesher:
- The OECD, since its founding, has been developing policy recommendations within a context of sustainable investment and inclusive economic growth, relying on an evidence-based approach and a process that supports multi-stakeholder consultation and openness to the perspectives of non-member partners. The OECD has developed a
substantive and thoughtful set of policy recommendations, principles and guidelines for its member governments that can serve as a positive foundation for an enabling policy environment. These include instruments such as

- The Internet Policy Making Principles from 2011 aims to preserve Internet openness and support a flexible, multi-stakeholder approach to Internet policy making. In addition to OECD members, they were also adopted by Colombia, Costa Rica, Egypt, and Lithuania.
- The Privacy Guidelines were updated in 2013 to address managing risks and enabling trust in a world with data abundance. The original Guidelines served as the first internationally agreed upon set of privacy principles, and still serve as basis for many of the privacy regulations around the world today. Two themes are reflected through the revised Guidelines: a focus on practical implementation of privacy protection through an approach grounded in risk management, and the need to address the global dimension of privacy through improved interoperability.
- The Security Guidelines were revised in 2015 to provide guidance on economic and social dimension of digital security risk. Digital security needs to be considered with reference to broader economic and social dimensions, and should be part of an organisation’s overall strategy and not left to an IT department; and
- The eCommerce Guidelines from 2016 address issues arising from relationships between consumers and digital platforms, including that people buying online are entitled to same protections as offline.

- Three Ministerials have been held on the digital economy:
  - eCommerce (1998, Ottawa): For the first time, at a Ministerial event, OECD countries sought the active participation of business, labour, consumer and civil society groups in an open and transparent effort to address important elements of cross-border commerce.
  - Internet Economy (2008, Seoul): The resulting declaration took a holistic view of the digital economy as a fundamental infrastructure with untapped potential to address a wide variety of economic, social and environmental issues. With this broad perspective, the Seoul Declaration provides a roadmap for advancing all of the key building blocks of the digital economy from further spurring the deployment of high-speed networks, to developing innovative applications for all sectors to strengthening confidence and security.
  - Digital Economy (2016, Cancun): Ministers met again in a multi-stakeholder setting to work together to ensure that the digital economy contributes to innovation, growth and social prosperity. The resulting declaration was signed by OECD members plus Argentina, Colombia, Costa Rica, Ecuador, Egypt, Indonesia, Latvia and Lithuania.

- The Going Digital project was launched in 2017, and will conclude with a high-level Ministerial meeting in March 2019. The project aims to help policymakers understand digital transformation and its impact on the economy and society – what it means for jobs, skills and the nature of work, for productivity, competition and market access, and for well-being and inclusion.
- The project provides policymakers with tools needed to develop a forward-looking, “whole-of-government” integrated policy framework. It is a truly horizontal effort to create a vision for digital transformation – bringing in more than 80 other policy committees from across OECD, e.g. transport, energy, competition, tax, labour and skills. It explores transversal issues such as digital security, policy design (how digital transformation can assist with policy development) and strategic foresight (to develop a set of plausible futures to try and ensure that policy frameworks put in place today will be resilient to deal with different potential outcomes).
GOVERNMENT IMPLEMENTATIONS OF ENABLING POLICY ENVIRONMENT:

• **Japan (Yukiko Tsuchiya):**
  o Japan has been active in thinking about how to foster the sound development of human-centric Artificial Intelligence (AI). As AI will be a driving force for economic development and for changing social structures, it is important to have an enabling policy environment for AI.
  o We can expect enormous societal benefits from AI, e.g. efficiency, added value; but also challenges around ethics, privacy and security. We are therefore addressing these social, economic, ethical and legal issues. In 2016, the government established an advisory expert group drawing from industry, academia and private sectors, to assess impact and risks of AI networking across society.
  o We have now released draft AI R&D Guidelines to increase benefits and mitigate risks in society by AI systems, partly with the aim of contributing to international discussions on AI, which are important given that services using AI will be provided across and beyond national borders. The G7 ICT and Industry Ministerial Declaration, Turin 2017, recognized the immense economic and societal benefits that AI could bring; shared a vision of human-centric AI which drives innovation and growth in the digital economy; and stated that all stakeholders have role to play in fostering and promoting an exchange of perspectives.

• **Mexico (Yolanda Martinez):**
  o It is important to recognize and develop a people-centric approach to the digital economy.
  o Three key factors in delivering digital transformation:
    ▪ Political leadership – a new Mexican government in 2012 made digital transformation a priority, and early actions included critical telecoms reform and making Internet access a constitutional right
    ▪ The right institutional framework – including having an independent regulator to help ensure a competitive marketplace and putting in place clear objectives. The Mexican government produced a clear policy document stating the 5 policy enablers and 69 action lines, and one of achievements so far has been increasing Internet coverage by 70% in the last 5 years
    ▪ The capacity to deliver – appropriate human and technical resources must be available to support implementation of policies

• **Estonia (Brett Makens):**
  o After gaining its independence in 1992, Estonia embarked on an innovative digital transformation strategy based on three important points:
    ▪ Development of an innovation enabling system – no permission is needed to innovate. Without legacy technologies, Estonia had a clean slate and jumped into the digital world at the same time as creating a digital legal framework and a digital backbone which provides very good privacy and security.
    ▪ Creation of an investment-friendly environment – a flat tax encouraged investment, but because it is such a small market of 1.3 million people, many looked outwards, investing in other countries.
    ▪ Transformation of the relationship between the private sector and government – Estonia has developed such a sophisticated approach to e-government that citizens only need to physically interact with government to register marriages, deaths and for notary services, with every other interaction (e.g. voting, taxes) done online.
  o One strength of OECD Recommendations is that they have brought together diverse experiences which have provided governments with cheat sheets which can then be applied in a way that works for each different country.
BUSINESS PERSPECTIVES OF ENABLING POLICY ENVIRONMENT

Dominique Lazanski:
• In order to create a vibrant and growing digital economy, there needs to be – education at all levels young and old, development of skills, affordability of Internet devices (including reduction of sector taxation), development of local content, development of a digital ecosystem including start-ups and SMEs (through tax breaks, hubs etc) and the deployment and use of e-government services.
• But outdated regulator policies harm in two ways – discriminatory regulation which includes different regulation for different sectors of the digital economy and static regulation in a dynamic and moving market which include prescriptive, ex ante regulation.
• What should policy-makers do? Policies should include three principles:
  o Regulation should be functionality-based and technology neutral. This means that they would be top level and cost effective.
  o Regulation needs to be flexible to adapt to changing markets. This includes a light touch approach.
  o Regulation should be thought about from the bottom up and not top down. In many cases, competition is the best answer. Bottom up approaches take into account the entire market, new entrants and innovation.
  • Overall, for the mobile industry specifically, but for the digital economy overall, these principles should be actively considered when regulation is considered in 6 important areas: access, removal of barriers to entry and exit of markets, privacy and data protection, merger and competition review, spectrum policy and universal availability and affordability.
  • With a truly multistakeholder and collaborative approach, the best policies can be found in each region for the challenges that they face.

Carolyn Nguyen:
• After decades of relatively slow progress towards fulfilling the promise of digital transformation, recent advances in computing are making that promise real – with innovations that foster sustainable growth both globally and locally.
• Digital transformation will affect all aspects of society, including changes in market structures and erosion of traditional business sectors. We should fully understand these effects in order to properly support innovation and development of healthy digital ecosystems that will deliver critical economic and social benefits.
• All of us – business, governments, civil society, technical community, and other interested parties – must work together to develop holistic policy and regulatory frameworks that would enable this vision of inclusive growth and innovation, and engender trust. Such holistic policy frameworks would need to consider:
  o the interdependence of economic, socio-cultural, technological, and governance factors
  o Incorporates needs of the different stakeholder communities (business, technical, civil society (representing consumer and worker needs), and governments),
  o be evidence-based,
  o and is focused on enabling sustained investment -- Investment is not possible without growth (from government, industry, international organizations, development banks, and other institutions). And without growth, realization of the SDGs and potential of digital transformation would be seriously hampered. So it is critical that the resulting policy framework focuses on creating an environment that would enable growth.
• Technologies move at a faster pace than rules and regulation are made and implemented. It is important that governments do not impede the future by regulating the past, and develop a balanced policy approach that includes a combination of self-regulations, voluntary- and market-driven standards and sharing of best practices, application of existing regulations, and where appropriate, updated policy and regulatory frameworks. The digital transformation will also need the development of healthy digital ecosystems, and require the sharing of responsibility of people, business, and governments.

II. Quotes

• **Mac Yokozawa**, co-chair, BIAC Committee on Digital Economy Policy, Kyoto University, and Nomura Research Institute: “An enabling policy environment that can realize the potential of the digital transformation needs to foster open and competitive markets, investment, and inclusive economic growth. Determining the best policies to pursue in each area will require a holistic policy framework that consider economic, socio/cultural, governance and innovation objectives. An evidence-based approach is essential to the development of such policy and regulatory frameworks.”

• **Molly Lesher**, OECD: “The OECD, since its founding, has been developing policy recommendations within a context of sustainable investment and inclusive economic growth, relying on an evidence-based approach and a process that supports multi-stakeholder consultation and openness to the perspectives of non-member partners.”

• **Yukiko Tsuchiya**, Ministry of Internal Affairs and Communications, Japan: “As AI will be a driving force for economic development and for changing social structures, it is important to have an enabling policy environment for AI that is human-centered.”

• **Yolanda Martinez**, National Digital Strategy Coordinator, Mexico: “It is important to recognize and develop a people-centric approach to the digital economy. There are three key factors in delivering digital transformation: political leadership, the right institutional framework, and the capacity to deliver.”

• **Brett Makens**, US Mission in Geneva: “One strength of OECD Recommendations is that they have brought together diverse experiences which have provided governments with cheat sheets which can then be applied in a way that works for each different country.”

• **Dominique Lazanski**, GSMA: “With a truly multistakeholder and collaborative approach, the best policies can be found in each region for the challenges that they face.”

• **Carolyn Nguyen**, Microsoft: “All of us – business, governments, civil society, technical community, and other interested parties – must work together to develop holistic policy and regulatory frameworks that would enable this vision of inclusive growth and innovation, and engender trust. Such holistic policy frameworks would need to consider the interdependence of economic, socio-cultural, technological, and governance factors; be evidence-based; and focused on enabling sustained investment.”
II. Overall outcomes of the session highlighting

- main conclusions reached during the discussion
- the vision for implementation of WSIS Action lines beyond 2015

The following conclusions can be drawn from the discussion:
- Realizing the potential of the digital transformation requires addressing a complex set of issues that needs to be driven by investors’ confidence.
- An enabling policy frame must address risks and challenges, but must be grounded in an economic context.
- A digital transformation strategy must be people-centric, be driven by high-level political leadership, enabled by the right institutional and policy framework, and realized with appropriate capacity to deliver.
- The work that the OECD has developed on the digital economy can provide a “cheat sheet” – a foundation – for a holistic policy environment to enable the digital transformation, that can then be localized to each different country.
- A people-centric and holistic enabling policy framework must: (1) consider economic, socio-cultural, technological, and governance dimensions; (2) incorporate needs of the different stakeholders (government, business, technical, civil society); (3) be evidence-based; (4) be focused on enabling sustained investment. Such framework must be agile and responsive.

III. Main linkages with the Sustainable Development Goals

- Goals 1, 3, 4, 5, 8, 10, 16, 17

IV. Emerging Trends related to WSIS Action Lines identified during the meeting

- C1: Cooperation among stakeholders is critical
- C6: The work that the OECD has done on the digital economy can be leveraged to accelerate government’s achievements of C6

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- Best practices for implementing enabling policy environment for digital transformation
- Measures of effectiveness for implementation of policy frameworks for digital transformation
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/157#intro

1) **Key achievements, announcements, launches, agreements, and commitments** (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

Announced launch of a novel online challenge-based coaching programme for mobile health, called Open Seventeen (www.openseventeen.org), in collaboration with WHO and ITU. This was launched during the week of WSIS and widely covered on social media.

2) **Main outcomes highlighting the following:**

   **I. Debated Issues**

Role of different stakeholders in Learning for SDGs, including on Panel representatives of Private Sector (HP Enterprise Solutions) and International Organizations (WHO, ITU and Global Humanitarian Lab), debated with representatives from Universities in Geneva, Beijing and Paris.

   **II. Quotes**

The quote that best captures the spirit of this discussion about Challenge-based Learning is one that was repeated from the famous Geneva education expert and child psychology pioneer, Jean Piaget.

“The principle goal of education should be creating men and women who are capable of doing new things, not simply repeating what other generations have done.”

   **III. Overall outcomes of the session highlighting**

The session generated strong interest in follow-up contacts and collaboration by persons representing education ministries and institutions from Brazil, Iran and several African nations.
IV. Main linkages with the Sustainable Development Goals

From the title, this session is clearly focused on learning for all SDGs.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Concerning International cooperation, this session clearly put in perspective both the opportunity to leverage online learning tools to go beyond one-to-many passive teaching (MOOCs) and prioritize many-to-many active coaching of ICT-based projects addressing SDG challenges, emphasizing methodologies that allow rapid scaling of effort at a global level.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

As 2019 will be the 30th anniversary of the conception of the World Wide Web, which was born in Geneva at CERN, and as the Web was originally conceived for science, we suggest a thematic aspect of Open Science on the Web. Open Science is a major theme internationally with growing support from governments and intergovernmental organizations. CERN is strongly associated with promoting the Open Science agenda globally.
Thematic Workshop

Inclusive Information Accessibility Service Environment Enables the Fruits of Technology Development Shared by All

Internet Society of China

Monday 19 March 2018 09:00 – 10:45
Room K2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/146#intro

1) Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

New technology brings new opportunities and challenges to information accessibility. Technology enables a more effective interaction with ICT systems meanwhile the interactive mode of mobile Internet is constantly changing and updated which may also cause various new barriers for users with special needs. The multi-stakeholder (including policy makers, civil societies, and private sectors) approach should be established to build the inclusive information environment for all the people through setting up guiding principle and standards, raising public awareness, and leveraging technology innovation (AI, Cloud computing etc.) to enhance the experience for all the users for access to the information for both web and mobile applications.

2) Main outcomes highlighting the following:

I. Debated Issues

   --Use of ICTs for Information Accessibility
   --Development of Policy to enabling Information Accessibility

II. Quotes

   -- As technology development enables a more effective interaction with ICT systems, standards for Mobility & Apps are needed to provide guidance for the accessible implementation of the various applications.
   -- ICT should be:
     Developed to be accessible and using universal design principles
     Available for those that need to access it
Implemented in a way that it ties into learning processes

--There are 4 Guiding Principles, which should underpin the vision of all policies: Rights Principle, Structural Principle, All-Inclusive Principle, Synergy Principle

--From the perspective of private sector, IBM is trying to eliminating barriers to information through:

· Establishing IT accessibility standards, and developing new accessibility innovations and industry solutions designed to enhance the human experience on any device so routines and interactions are more adaptive and intuitive.

· Ensuring that accessible technology is easier to use so designers and developers can streamline conformance of web and mobile applications to industry standards.

· Ensuring that accessible technology is easier to use so designers and developers can streamline conformance of web and mobile applications to industry standards

· Inventing new cognitive technologies that can supplement or enhance the human senses.

· Helping clients embed accessibility across the entire enterprise – from design to development to testing – to better manage compliance and improve the user experience through any contact point.

· Giving the growing aging population (and their caregivers) more control over everyday activities and helping them stay more connected with friends and family.

III. Overall outcomes of the session highlighting

The session showed the best practices of civil societies, related organizations and private sectors towards promoting information accessibility development through ICT innovations.

IV. Main linkages with the Sustainable Development Goals

Information Accessibility Will Promote Inclusive and Quality Education for All, Especially Empowering Women and Girls, and the disabled Group.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Gender Equality and Empowering Women and Teenage were Greatly Addressed during the Meeting.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Suggest to Add More Topics on Technical Innovation and Application, and ICT for Empowering the People Lived in Developing Countries/Regions.
1. **Key achievements, announcements, launches, agreements, and commitments**

We reach an agreement that with advanced IoV technologies basing on data collection, information sharing and connected network, we can allocate vehicles, goods and lots of traffic resources to improve the traffic efficiency, to ensure the driving safety, to reduce energy consumption and pollutant emissions. TIAA would like to cooperate with partners in developing countries and regions and which along the Silk Belt and Road to promote the usage of the advanced IoV technologies.

2. **Main outcomes highlighting the following:**

I. **Debated Issues**

   - Please capture highlights of the main issues debated and interactions with audience

   The main issue will be that the usage of the advanced IoV technologies in developing countries and regions and which along the Silk Belt and Road would be a long way.

   - Please highlight key achievements and challenges shared by the audience and/ or panelists

   We introduce the Demonstration Areas of Intelligent Vehicle and Intelligent Transportation in China, the usage of lots of advanced reliable active/passive safety solutions in commercial vehicles, Satellite+Mobile Internet basing on the Next Generation Broadcasting Network – Wireless, Autonomous Agricultural Machinery and E-bicycle which attract the audiences.

II. **Quotes**

   - Please provide two important quotes from the session and the names & organization of the person you are quoting
III. Overall outcomes of the session highlighting

- main conclusions reached during the discussion

Main conclusion is with advanced IoV technologies basing on data collection, information sharing and connected network, we can allocate vehicles, goods and lots of traffic resources to improve the traffic efficiency, to ensure the driving safety, to reduce energy consumption and pollutant emissions. Promotion of the advanced IoV technologies in developing countries and regions and which along the Silk Belt and Road will be an meaningful action.

- the vision for implementation of WSIS Action lines beyond 2025

Establishment of Demonstration Areas of Intelligent Vehicle and Intelligent Transportation in 5 cities will be completed. Some reliable ADAS and autonomous driving solutions will be used in commercial vehicles compulsively which will be promoted to be used in passager vehicles. Satellite+Mobile Internet basing on the Next Generation Broadcasting Network – Wireless will be promoted in the most scale of China. The first grains with the usage of autonomous agricultural machinery have come out and the autonomous agricultural machinery have been improved.

IV. Main linkages with the Sustainable Development Goals

V. Emerging Trends related to WSIS Action Lines identified during the meeting

The usage of the advanced IoV technologies will be spread in the worldwide.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Promotion of the advanced ICT technologies used in vehicles, transportation, even agriculture industry.
1. Key achievements, announcements, launches, agreements, and commitments

a) We identified the requirements in ICT from the experiences of the Great East Japan Earthquake and Tsunami on March 11th, 2011 [2].

b) We introduced the inclusive issues in disaster risk reduction.

c) We identified the issues of digital equity in disaster risk reduction and recovery including the work done at UN Women and UNESCO.

d) We showed the media literacy programme and its expansion adding the concepts of groups and institutions at UNESCO MIL Programme.

e) Accountability issues at the disaster response was introduced by audience, Ms. Martinez from Dept. of Finance, Government of Mexico.

f) For situation awareness, Open Property Map project in the U.S., Maryland Department of Planning was introduced by the audience, Bob Bishop at International Centre for Earth Simulation (ICES).

2. Main outcomes highlighting the following

I. Debated Issues

   • Please capture highlights of the main issues debated and interactions with audience

1. Accountability asked by Ms. Martinez from Mexico Ministry of Finance, according to her experience with the earthquake in September 2017.

2. After that they set up the platform Mexico which concentrated information mainly on finance from different ministries. According to her another important aspect of inclusion is accountability which was missing in our presentations.

3. In Mexico, what happened was there were a lot of data made available through SNS and by other means by volunteers without any standard format with disaster hash tags and the government was interested in making use of them. Her question was whether there are any tool or best practice to use such data.
- The answer to this question was that in Japan seven years ago, disaster managers had a problem to get information for situation awareness. At that time, SNS was not so popular as now. If we had the same situation now, we could make use of SNS.

- At the workshop we did not realise, however, seven years ago, we had two sources on safety information (i.e. whether people are alive or dead): one was from Police and the other was from a broadcast company which digitized what was broadcast, in which people at shelters declared their names and where they are. The problem was that those two sources were provided in different formats, so that we needed to take time to integrate to provide safety information on a cellular phone.

It takes a lot of work to integrate information in different sources and we need the common standard format on this.

4. Another question raised by her was at the recent earthquake in Mexico, the government needed to get the information on buildings and households which are not used anymore. There was no sanction at that time on contractors, which there will. According to her, Speed, Rhythm and Trust presented in our workshop were needed indeed. She would like to know any experience or tool to collect such information.

- An answer came up from the floor that there is a project on global Open Building Map over Open Street Map (OSM) and that could be of use (suggested by Bob Bishop from ICES.) It would be of use to understand the future vulnerability of a city or village. In particular, medical and schooling facilities should be immediately captured. Such a project is in progress. Moreover with the help of crowd sourcing, we can get camera images to understand the situations.

Together with other information such as what time people would be in a particular building, what soil underneath, and all that, we can have a scenario planning; scientifically we can deduce the future vulnerability. Accordingly a city manager can understand to what extent a disaster could hit the city. ICES as well as U.S. Geological Survey (USGS).

5. From the remote audience, there was a question on a link to encouraging communication networks and rebuilding digital economy.

- Alton Grizzle answered that it is a matter of encouraging community networks as well as rebuilding digital economy. Those two components are issues to be dealt with. Community networks may not be available and then we need some other traditional communication tools such as community radios. We need to make use of what is available for local communities at disaster to communicate each other. On the other hand, digital economy is a big issue as well and we cannot link so easily from community network view point.

- It could be a matter of the business continuity and need another workshop discussing on this topic.

II. key achievements and challenges shared by the audience and/ or panelists:

1. Inclusive aspect in disaster risk reduction were introduced well in the following sites (YouTube videos):
   - Leave no one behind with Disability Inclusive DRR
   https://www.youtube.com/watch?v=CbLTPQsF1AQ
   - "Barrier-free" - Including people with disabilities in disaster
   https://www.youtube.com/watch?v=uzSKfx2sbdY

2. We share what is required for ICT in disaster management.
Key elements in disaster management at the emergency response phase is: speed, rhythm and trust. We need to deal with emergency speedy no matter how perfect the solution could be. If we had a problem, solution could be coming if we keep contact with as many people as possible and that is called rhythm. Finally we need to try and construct trust when one communicate to the others from heterogeneous backgrounds at disaster.

We have to understand the nature of disaster communications between supporters during the emergency response phase ---i.e. first three months after disaster.

Required IT supports were presented as follows:
- Need a standard format to exchange information
- Open Source: e.g. Sahana[3]
- Need a well-known interface
- Killer Application for Cloud Computing!

3. Special attention can be paid to certain groups of the population, including women, children, youth and persons with disabilities, when promoting digital equity and inclusion for ICT. UN Women introduced that the innovation and ICT can be leveraged to provide education and vocational skills for women in crisis settings. Also UNESCO is helping women as well as youth to be educated in terms of IT.

4. The UNESCO Media and Information Literacy (MIL) Programme was introduced with its expansion adding the concepts of group and community and models.

5. Inclusive aspects need discussion on accountability. Accountability is yet another good aspect of DRR and includes issues of situation awareness at the beginning phase of disaster to grasp the size of the damage as well as to estimate the cost for recovery in case of the damage of the buildings.

6. Community networking is important for recovery of digital economy.

II. Quotes

Please provide two important quotes from the session and the names & organization of the person you are quoting

- The Gender Inequality of Risks in DRR and ICT by Toshihisa Nakamura with UN Women
  - “Digital equity and inclusion for ICT, in conjunction with the empowerment of women, can support reducing the gender inequality of risks to disasters.”
  - Priorities needed for DRR needs for individuals: Tim Francis with UNESCO

- Improve Digital Equity
- Support Traditional Media
- Strengthen Media Pluralism

- Media and Information Literacy (MIL) is expanded with the concepts of group and community: Alton Grizzle with UNESCO
  - “Accountability to be required at disaster”: by an audience from Mexico Ministry of Finance.
  - As an answer to the accountability, “use of crowd source: i.e. open building/property map ” by Bob Bishop with International Centre for Earth Simulation
III. Overall outcomes of the session highlighting main conclusions reached during the discussion
In disaster management with ICT, we need: Speed, Rhythm and Trust.
Special attention can be paid to certain groups of the population, including women, children, youth and persons with disabilities, when promoting digital equity and inclusion for ICT. UN Women introduced that the innovation and ICT can be leveraged to provide education and vocational skills for women in crisis settings.
Media and Information Literacy (MIL) is strengthened adding the concepts of group and community.
Accountability should be considered with inclusion. Use of crowd source and come up with an open building map could be a solution.
Digital economy and its recovery should be considered.
- the vision for implementation of WSIS Action lines beyond 2015
Disaster risk reduction aspects go easily with all the current action lines not only a few with “disaster” as a keyword. On the other hand, it is hard to include all the issues to be dealt with in one workshop.

In future version of action lines should include accountability of disaster damages, use of crowd source as well as trustworthiness of information.
This workshop included the issues of action lines: C2, C3, C4, C7(E-learning, E-health, E-employment, and E-environment) and C11. Future workshops could deal with more strategic issues with the other action lines.

IV. Main linkages with the Sustainable Development Goals
- Alert: alarm, information dissemination for evacuation, dependable communication systems (SDG 3)
- life and health/access to information/
  - Rescue: information on situation awareness/resource management (SDGs3)
- life and health/access to information
  - Immediate response: food and goods distribution, shelter information management (SDG 1-3,5-11,13)
- an adequate standard of living/adequate housing/adequate food/safe drinking water/
- sanitation/elimination of violence against women and girls/equality and nondiscrimination/privacy/
- access to information
  - Sustained response: restore functionality of critical systems (SDG 1,7,9-17)
- an adequate standard of living/adequate housing/access to information
  - Recovery: Scenario update, Socio-economic and environmental impact assessment (SDG7-9,17)
- work and to just and favourable conditions of work/an adequate standard of living/privacy/
- adequate housing/access to information
  - Awareness and Prevention: risk assessment and risk communications (SDG 3-5,7-17)
- life and health/access to information/education
  - Preparation: monitoring and warning, education, training, planning (SDG 3-5,7-17)
• education/life and health/access to information

V. Emerging Trends related to WSIS Action Lines identified during the meeting

The current action lines are all applicable to disaster risk reduction in different phases of the disaster management cycle. On the other hand, for disaster, future action lines should include accountability of disaster damages, use of crowd source as well as trustworthiness of information.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

This time we did not have enough time for discuss fully on digital equity and inclusive issues so that we shall have the one next year as well. Apart from that disaster risk reduction includes such vast amount of ICT issues and we shall keep having such workshops in future. We might need the following ones:

I. disaster strategic and policy issues,
II. technological issues including software and hardware tools (including robotics)
III. trust issues including trustworthiness of information as well as trust among supporters
IV. disaster psychology issues including
V. disaster economy

ICT issues should include the above so that they are more useful in the information society.
1. **Key achievements, announcements, launches, agreements, and commitments**

Initial & preliminary remarks made at the session:
- The Semantis WS covered migrations and diasporas issues in relation with ICT access and usage. As it was the only session to discuss these aspects did WSIS consider the matter not relevant or not enough documented at international level?
- It seemed also that the future deployment of new network architecture (ex: RINA environment) was not a priority for WSIS FORUM 2018. Participants considered these researches and open specifications for new network standards essential for economic and social development in order to achieve an “Internet for all”.

2. **Main outcomes highlighting the following:**

**I. Debated Issues**
- Please capture highlights of the main issues debated and interactions with audience
  - ICT as a major vector for integration of migrants in society through social work and cooperative set up.
  - Distributed network architecture will be highly beneficial for development, local business and education. Moreover content diffusion in local and native multiple languages will benefit from an open distributed architecture.
  - Measures to enhance Cybersecurity have a social impact and should be conceived and implemented following a democratic process.
    - Please highlight key achievements and challenges shared by the audience and/or panelists
- To set up a specific platform of exchange on WSIS achievements for migrants and diasporas communities.
- ICT as a social innovation scheme to be implemented through MDP and Semantis projects.
II. Quotes

- Please provide two important quotes from the session and the names & organization of the person you are quoting

**Louis Pouzin**, Eurolinc “After 40 years…flagrant obsolescence and deficiencies of the current Internet architecture”.

**Didier Van der Meeren**, Director MDP “Social economy rely on ICT developments”

III. Overall outcomes of the session highlighting

- main conclusions reached during the discussion

Semantis, Le Monde des Possibles, ECOSOC accredited NGO, will further liaise with UN Institutions and Organizations to promote the role of migrants and of social economy in the ICT sphere.

- the vision for implementation of WSIS Action lines beyond 2015

Be open to the new internets protocols and usages, more inclusive, more ethical.

IV. Main linkages with the Sustainable Development Goals

ICT social actors, interpreters from migrations and diasporas, lead to gender equality and dignity. Effective multilinguism on the internet is key to a quality and inclusive education for all. New internets will be a more resilient architecture.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

See above, the emergence of new social & technical standards for distributed network architecture.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- Migrations and diasporas worldwide in relation with Tunis Agenda.
- ICT as a main drive for social innovation.
- Progress in deployment and in public access to new network architecture/
- Cybersecurity and citizenship.
## Thematic Workshop

### Identifying and addressing problems that block women in ICTs

**OCAPROCE - Organisation pour la Communication en Afrique et de Promotion de la Coopération Economique Internationale**

**Monday 19 March 2018**  
11:00 – 13:00  
Room A - ITU

1) **Titre de session:** “Identifying and addressing problems that block Women in ICTs”

2) **Nom de l'organisation / organisation de la session**  
Organisation pour la Communication en Afrique et de Promotion de la Coopération Economique Internationale - OCAPROCE Internationale.

3) **Pertinence par rapport aux lignes d'action du SMSI** - veuillez préciser les lignes d'action C1 à C11.

Les lignes d'action touchées en lien avec les ODD sont :  
C3  
C4  
C7 e-business  
C7 e-learning  
C7 e-health  
C7 e-agriculture  
C8  
C11

4) **Principales réalisations, annonces, lancements, accords et engagements** (ceux-ci seront reflétés dans le communiqué de presse et le document sur les résultats du Forum 2018 du SMSI)

1. **Un Plan Cadre Innovateur (PCI)** pour l’éducation et la formation des femmes et des filles. Le **Plan Cadre Innovateur (PCI)** de formation et d’information d’OCAPROCE International est conçu dans un esprit de partenariat avec un objectif d’auto développement, qui permettra aux élèves au terme de la période à déterminer, de pouvoir poursuivre le programme de manière quasi autonome.

2. **LE PARTENARIAT** :  
Il y a nécessité de regrouper nos forces et d'initialiser une action Nord-Sud et Est- Ouest.
3. L’ACTION :
Une action globale doit s'adapter aux besoins spécifiques de chaque région, c'est-à-dire qu'elle doit répondre :
- aux besoins des populations,
- aux nécessités de l'environnement,
- aux attentes des femmes et des filles, aussi bien au niveau culturel, professionnel, religieux,
et à la spécificité sociale des régions.

4. LA DURABILITE :
- Rassembler les forces sous un « Label » et un plan d'action commun, c'est garantir l'échange d'expérience, la pluralité et une meilleure efficacité tout en restant spécifique dans l'action locale.

5. LE CONCRET :
- S'appuyer sur un plan d'action et des projets pilotes qui vont permettre, au fil du temps, de mettre en place des actions concertées.

6. LA PREVENTION :
Actions préventives dans tous les domaines sensibles liés à l'éducation et à l'autonomisation telles que :
- Le dérapage vers un mode de vie permanent dans la rue (prostitution etc…),
- Les dérapages dans les institutions,
- L'avenir en restant à l'écoute de la situation
- Les tentatives de récupération religieuses ou politiques.

7. Education et formation:
- Intégration des valeurs féminines dans la transmission des connaissances et de savoir-être ;
- Formation de formateurs, d'enseignants et d'éducateurs pour transmettre les valeurs d'intégrité et de savoir-faire dans les TICs ;
- Transmission dans les programmes collectifs et socioculturels.

8. Communication et échanges
- Organisation par les TICs, de l'économie locale avec gestion démocratique basé sur le block Chain (gouvernance décentralisée) ;
- Echanges optimisés pour le développement durable local, autonome et solidaire.

9. Accord de principe :
Le Plan Cadre innovateur, « PCI » a déjà reçu l'accord de principe du gouvernement camerounais (Minpostel) pour la réalisation d'un centre de formation multisectorielle pour l'éducation et la formation des jeunes filles.
5) Principaux résultats soulignant ce qui suit:

I. Questions débattues

• Veuillez saisir les points saillants des principales questions débattues et les interactions avec le public
  
  - Nécessité de reconnaître et intégrer clairement les valeurs féminines en synergie avec les valeurs masculines dans tous les processus des ODD activé dans les lignes d’action du SMSI et les formuler clairement comme facteurs essentiels pour un vrai changement de paradigme ;
  - Mettre en place des stratégies d’éducation et de communication positives ;
  - Identifier les formatages structurels et extérieurs dépassés, qui empêchent cette évolution vers la réalisation des ODD, vecteurs d’un nouveau paradigme ;
  - Activer les leviers éducatifs et de communication qui bénéficient à l’ensemble de la population de la planète, ainsi que les leviers structurels ;
  - Sensibiliser et Impliquer les femmes et les filles dans la formation et l’éducation pour les ODD avec le levier des TIC ;
  - Créer des applications et logiciels spécifiques qui développent l’économie et la prospérité locale et régionale qui permettent la mise en relation directe entre productrices, acheteurs et des consommateurs ;
  - Créer des applications et logiciels reliant éducation, informations, formation, alphabétisation et culture locale, comme leviers d’optimisation du commerce électronique et de l’économie numérique en faveur de la population et en particulier les femmes et les filles.

• Veuillez souligner les principales réalisations et les défis partagés par le public et / ou les panélistes

Dans sa présentation, l’Ambassadeur du Maroc préconise que les enjeux d’accès aux TIC pour les filles et les femmes en Afrique soient accompagnés d’actions concrètes comme suivent :

- Autonomisation des femmes et des filles pour qu’elles soient davantage au service du développement grâce au levier des TICs ;
- Appel à plus d’engagements des états dans l’encadrement et les financements des actions en faveur de l’accès des femmes et des filles aux TICs, dans les zones urbaines et rurales ;
- Comment utiliser le numérique pour valoriser les et des filles les protéger et les prémunir contre la radicalisation ;
- Tous les panélistes ont partagé les mêmes constats selon lesquels il y a un gap important au niveau de l’accès aux TIC pour les femmes en Afrique avec seulement 16% de femmes en 2016, soit 250 millions de moins que les hommes. Comment Réduire ce gap par l’accès aux TICs pour éradiquer ainsi les inégalités ?

II. Citations :

• Veuillez fournir deux citations importantes de la session et les noms et l’organisation de la personne que vous citez :
Il est primordial de défendre collectivement, au niveau national, régional et international, les principes de la dignité humaine, de l’égalité de chances et d’opportunités d’éducation aux TICs, car nous avons tous le devoir de soutenir les femmes et les filles en vue leur autonomisation économique et sociale à l’horizon 2030 » Princesse Micheline Makou Djouma, Présidente d’OCPAROCE Internationale ;


III. Résultats globaux de la séance mettant en évidence

- principales conclusions atteintes lors de la discussion
  Construire et équiper un Centre pilote de référence multisectorielle en faveur des femmes et des filles au Cameroun (voir Plan Cadre Innovateur)
  • la vision de la mise en œuvre des lignes d’action du SMSI au-delà de 2015.
    - Renforcement des capacités des femmes en vue de leur entrepreneur ;
    - Création d’un centre multisectoriel d’éducation et de communication en faveur des femmes et des filles en cours au Cameroun ;
    - Mobilisation des filles-mères pour leur implication dans le processus de l’économie Numérique.

I. Principaux liens avec les objectifs de développement durable

Tableau de liens entre actions WSIS et ODD

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II. Tendances émergentes liées aux lignes d'action du SMSI identifiées lors de la réunion

1)- Education qualitative des valeurs féminines et formation en vue de l’autonomisation économique, sociale et culturelle des femmes et des filles par et avec l’aide du numérique ;
2)- Mise en place d’une stratégie basée sur le Plan Cadre Innovateur (PCI) d’OCAPROCE International ;
3)- Meilleure communication permettant d’intégrer pleinement les femmes et les filles dans le processus de leur autonomisation ;
4)- Développement de partenariats en vue d’initialiser des actions des ODD.

III. Suggestions pour les aspects thématiques qui pourraient être inclus dans le Forum du SMSI 2019.

- Changer qualitativement en intégrant pleinement les valeurs féminines, du contenu des objectifs, des méthodes stratégiques, de la communication et de l’éducation.
- Travailler sur le fond en intégrant clairement l’apport des femmes dans tous les processus de mise en œuvre des programmes thématiques du WSIS 2019 ;
- Utiliser les TICs pour une gouvernance partagée et démocratique qui facilite le respect des droits humains dans les secteurs de la vie individuelle et collective.
Thematic Workshop

Building Vibrant ICT Centric Innovation Ecosystems- Session 2: Good Practices for Accelerating Digital Transformation

Office of Electronic Communications (UKE), Poland and International Telecommunication Union (ITU)

Monday 19 March 2018 11:00 – 13:00
Room C1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/211#intro

1) **Key achievements, announcements, launches, agreements, and commitments**

This session focused on the successful actions taken by stakeholders including universities, major industry players and international entities to leverage ICTs in all socio-economic sphere through innovation. The practices behind each successful case was discussed in a guided exercise format.

2) **Main outcomes highlighting the following:**

I. **Debated Issues**
   - There are commonalities in the National Strategies of Poland, Portugal and Brazil.
   - We need to be ready for Industry 4.0 and build appropriate capacity to that effect. With only 25% of executives surveyed saying that they have the right workforce, we need to rise to the occasion and have focused actions to fill the labour market gap through
     - Early education and primary school lessons to teach children 4.0 skills
     - National Competency Centers churning skilled human resource
   - Digital transformation is only beneficial if society can use it. The DESI 2017 Index identified issues in human capacity Government should focus on National Programs for Support Training in Digital Skills in Higher Education and a National Initiative for Digital Competencies e2030
   - Startups supported by government programs show a much higher survival rate, which demonstrates the success and importance of those programs
   - University speakers fully demonstrated the fact that the goal is to create innovations that can go to market, not just patents registered, but commercialization of their inventions.
• We need to create and to find opportunities to facilitate industry partners to implement solutions, to create companies and generate partnerships to reach markets.

• Working together increases opportunities, talents, funding potential and networking. Learning by doing, by listening and by social interaction are key.

• Innovation is created through collaboration between academics and students, to better compete globally in a knowledge society.

• Decision makers should focus on fostering an innovation-friendly environment.

• Expert communities help and foster digital transformation. Women expert communities bring innovative and different perspectives.

• Focus on women in digital, women in panels not just panels on women.

• Please highlight key achievements and challenges shared by the audience and/or panelist

• Some country level challenges include
  o Lack of digital skills, innovation, high connectivity costs, and lack of broadband access. Lack of startup investment leads to startup failure. DDOS attacks, Data security and Cybercrime remains a challenge

• A key challenge is finding the same language between business and academia

• Council of ministers to discuss Digital Innovation Profile and find new ITU collaboration projects

• Poland, Portugal and Brazil have national programmes to build capacity [from early primary] and connect local stakeholders [especially universities and business] and are monitoring their national progress in ICT-Centric Innovation

• Universities present shared amazing achievements to be given even further exposure. This is an inspiration for the youth world-wide.

• It is easier to achieve success through innovation, if the research is carried out by interdisciplinary teams, consisting of people with different education and different skills who can complement each other.

• Session presented how important it is to understand the obstacles and challenges of digital transformation, in particular taking into account the necessity of multistakeholder oriented approach and collaboration between administration, academia and business.
II. Quotes

“Innovative ICT solutions can help bridge the digital and innovation divides, creating a more equal world where more and more people can enjoy the benefits of ICT.” *Houlin Zhao*, ITU Secretary-General.

“As the President of UKE I believe that innovations are very important because they improve the quality of our lives. This is why last year we used the opportunity of WSIS Forum to present our innovative SMEs start-ups to present their business achievements. This year, we decided to present our contribution to the youth education and the inventions of the students from the University of Science and Technology in Wroclaw. We should do our best to facilitate the transfer of academic knowledge to business and administration. I hope that this workshop co-organised by ITU and UKE will inspire innovative solutions and present good examples of success stories”. *Marcin Cichy*, President UKE

III. Overall outcomes of the session highlighting

- main conclusions reached during the discussion
- the vision for implementation of WSIS Action lines beyond 2015
  - Accelerating, building up and creating digital skills, – focus on SMEs not just big companies which stand up after failure and have a mentality to learn.
  - Digital competences, not just digital skills are key. Citizens need to understand digital transformation – Collaboration is key.
  - Governance structure is important not only to create and regulate but also to implement. Coordination and collaboration is key.
  - Keep in mind all stakeholders, future workforce, and skills, modern technology.
  - Access to education- equal access, disability, gender – Digital inclusion
  - We have to focus on equal inclusion across the board and only than can we realize the actual value of a true knowledge society.
  - Better education to better equip students and young people.
  - Removing barriers, to talent, to the right to innovate, to access
  - Digital Transformation needs to be understood, developed and measured.

IV. Main linkages with the Sustainable Development Goals SDG 9 and SDG 17

V. Emerging Trends related to WSIS Action Lines identified during the meeting:
Measure Digital Transformation

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019:
Innovation for Digital Transformation & Rethinking resource optimizing and synergies in this context, Fostering Innovation and Industry 4.0
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/132#intro

1. **Key achievements, announcements, launches, agreements, and commitments**

   Identification of the vital role of schools with protecting children online and their capability in this regard.

2. **Main outcomes highlighting the following:**

   **I. Debated Issues**

   How well children are equipped to survive and thrive in this technological revolution? How do they acquire the necessary skills? The EU Kids Online report concluded that:

   "Schools are best placed to teach children the digital and critical literacy skills required to maximise opportunities and minimise risks. Schools are also best placed to reach all children, irrespective of socioeconomic status and other forms of inequality. For both these reasons, schools have a key role to play in encouraging and supporting creative, critical and safe uses of the internet, crucially throughout the curriculum but also at home or elsewhere.

   In certain countries, however, there are gaps in provision or insufficient/obtained provision of ICT in schools. More widely, there are difficulties in ensuring that digital literacy in general, and internet safety in particular, is addressed as it arises across the curriculum (not simply in ICT classes) by teachers who have been recently and appropriately trained, and with adequate resources at their disposal. Further, in many countries, schools have tended to regard children's use of the internet at home or elsewhere (outside school) to be beyond their remit. Nonetheless, the resources of the school outstrip those of many parents, making schools the most efficient and effective way of advising children on use of the internet in any location"

   The workshop asked the question – what do you expect of your schools and how do you know what their capabilities are?

   The workshop debated how well schools are equipped to systematically protect their children online and shared the multi award winning 360 degree safe system in the UK and the 2017 WSIS award winning Aqdar eSafe School programme in the UAE. The workshop reviewed the educational standards and expectations of all schools but more importantly, with national data...
and research identified through these programmes, illustrated school performance in protecting and equipping their children.

Amongst some of the areas discussed, UK schools have good capability with regards filtering and policy whereas staff training is consistently a weak area. In the UAE schools have good reporting mechanisms but require improvements with managing personal data. In both cases systematic improvement can be evidenced.

Many questions were raised from the audience, particularly related to educational online safety resources and also how to support and engage parents.

II. Quotes

- “we have seen systematic improvement across the 12,000 UK schools using 360 degree safe in them providing the right education and support to protect their children over the last decade. It is great to see this approach being adopted and adapted in countries across the world for the benefit and protection of their children too; schools are critical to achieve national change” **David Wright** Director UK Safer Internet Centre

III. Overall outcomes of the session highlighting

- The role of schools in protecting their children online – what the expectations are with regards policy, infrastructure, education and standards
- Examples of how systematic change is achieved in this area via 360 degree safe

IV. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

How schools may further be engaged in supporting children with regards all aspects of Information Society.
1. Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

1) First achievement: further promote are playing key roles in a number of “risky” scenarios from health and children abuse to homeland security and law enforcement, crimes, trafficking (humans, drugs, weapons, artefacts, etc.), natural and human disasters recovery and management, and even safety on working places and mobility. WSIS may play a key role in this sector becoming the reference point for all those working in these sectors and those who may take advantage from their outcomes.

2) Second achievement: promote a multi-stakeholder forum on social, economic, ethical impact of the Information Society.

2. Main outcomes highlighting the following:

I. Debated Issues

On the occasion of the recent editions of the WSIS Forum MEDICI organised different workshops to showcase on the one side the richness of applications and services provided by ICTs in the field of safety, security and disaster recovery and management and to contribute to provide a reference point for all those working in these sectors and those who may take advantage from their outcomes. This year we continued this path selecting additional international case study both to approach new sectors and enrich the platform of skills and competences involved.

Safety and security are integral part of human rights; we must provide all the efforts in order to guarantee such rights (as stated in art 3, 22, 25 - The Universal Declaration of Human Rights). In addition, a number of SDGs are tightly connected or rely on safety and security: SDG 2, SDG3, SDG6, SGD6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17. Some of the specific fields are: food & water security, human security, safety, critical infrastructure resilience, drugs security and more.
Nowadays the demand for "safety & security" in all its forms has increased, especially quantitatively and qualitatively, making clear the need for new approaches to enable the entire sector to ensure better results.

Looking from a different perspective: we outline the role of ICTs in risks assessment and management. They are playing key roles in a number of “risksy” scenarios from health and children abuse to homeland security and law enforcement, crimes, trafficking (humans drugs, weapons, artefacts, etc.) and even safety on working places and mobility.

Of course, technology it is not enough to solve problems, it is well known and demonstrated that a holistic, interdisciplinary approach and a culture of “safety & security” taking adequately into account human factors are the basis in order to obtain good results in this area.

We must promote an interdisciplinary approach and a “culture” of safety & security, they are the basis in order to obtain good results in this area; foster the exchange of experiences and best practices among countries and promote research thanks to the WSIS.

On the occasion of previous editions of the WSIS Forum (e.g. 2014, 2015, 2016) some eminent speakers underlined the key-role played by ICTs on the occasion of natural disasters and other critical events, they said that cyber technologies have fuelled the hope of people affected by the natural disaster. The availability of low price high performance devices and the proactive activity of clever developers have boosted the production of a number of smart solutions spread in different countries all-over the world. Due to the actual “silos” segmenting these sectors it is quite difficult to have a comprehensive vision on these resources and success stories, there is a need for a holistic approach and best practice sharing. Internet of things, machine learning, grids, network of sensors, remote sensing as well as near field communication and, why not, unmanned vehicles glued by networking are some of the building blocks of safety and security in different fields.

The nine case study presented by the distinguished speakers on the occasion of the ICT for Safety and Security led to the following outcomes: there is a need to improve the visibility of ICT applications devoted to safety and security raising the same level of awareness actually limited to cyber security. The case study presented on the occasion of the workshop this year and the one already presented in the last editions of the WSIS have strengthened this need. Achievements in these fields positively impact the human rights and must be shared among researchers and countries. The WSIS Forum is the key forum for discussing the role of ICTs as a means of implementation of the Sustainable Development Goals, if we consider ICTs as powerful means to implement SDGs we must include and adequately take into account ICTs applied to safety and security in a broad sense, they are relevant part of SDGs as outlined many times both within the UNGA Overall WSIS Review and the UNDP 2030 Agenda for Sustainable Development SDGs.

An additional relevant issue emerged on the occasion of the workshop, as sometimes happens after revolutions, revolutionaries wonder if what they achieved is actually what they were hoping for. The original idea of computer scientists in the “hippies” counterculture era was aimed to empower citizens and provide them much freedom.

Almost fifty years later, after the chimera of the “happy cyber-world”, some of us have started thinking that the foreseen Orwellian “1984” has simply come true ten, fifteen years later: globalisation, always on devices, position tracking systems, CRM’s and users’ profiles, CCTVs and IoT; are those technologies framing citizens? Thoughts for some time have circled around how the speed of the new information revolution renders us less capable develop a critical approach able to foresee the social, ethic, economic impact of such revolution in a long-term perspective. So, in recent times we started facing a wave of criticism about the evolutionary path of the information and knowledge society, for quite a long time ICT gurus and humanists didn’t interact too much, the true power of
cyber technology was largely unexpressed, there were some alerts as Artificial Intelligence, Virtual Reality, Robots often seen from humanists as potential danger for the mankind, but nothing concrete happened. The turning point was probably the exploitation of the Internet and the dissemination of information. Information is built on top of single or aggregation of data, for quite a long-time people use to think that cyberspace is a “black hole” without memory where you pour data without any side effect. Young generations shared on line sensitive information in order to access a videogame or chat with friends and more recently posted images and clips about their private life; does this mean “goodbye privacy?” As a consequence of a lack of “culture” in the use of emerging technologies now we have to deal with serious problems related to information ownership, use, abuse and misuse, not mentioning cybercrimes. An additional drawback is due to the deep technological intrusion affecting our daily life, we feel framed by cyber devices more than supported.

Some evident outcomes of this feeling are the “right to disconnect” - controversial reform of French labour law by the labour minister Myriam El Khomri back in May 2016 and the “right to obsolescence” or the “right to be forgotten” due to Viktor Mayer-Schonberger, the author of “Delete: The Virtue of Forgetting in the Digital Age”. All these to do not mention the cultural, social and economic impacts not always positive especially in a long-term perspective.

Technologies originally conceived by idealists to provide much more freedom and wellness to humans took then a wrong path framing humans due to all the constraints placed upon us with new technologies. For instance, as liberating as they are – by providing flexibility and instant connectivity - we have become enslaved to our devices, fearful of losing out information and access in an increasingly competitive and fast-paced world. Consequently, our bodies have suffered, as have our minds (due to information overload), what of our work-life balance -- and this is just to begin with! Ranjit Makkuni’s paper “Betrayed IT Revolution” and presentation outlines a vision for new design of devices, clutter-free access to web documents to create deeper learning experiences. At the implication level, the project rethinks implications for new design of web mark-up languages that support the creating of ‘privacy’ based secure browsing.

In conclusion we would like to stress the positive effects due to the WSIS process and its outcomes, panellists suggest to establish in the WSIS framework a global observatory on ICTs for safety, security and disaster recovery and to include and promote a wider range of “security” topics under the WSIS umbrella endorsing a holistic approach to the “Safety, Security, Disaster Recovery and Management” sector. As a follow-up of the active discussion raised by the “IT betrayed revolution” panellists and some distinguished participants decided to activate a working group to further discuss about this relevant topic identifying the WSIS as the perfect framework to approach the human wellness centred development of the information society. The seeds for such a debate were already present since the 2003 Geneva phase of the WSIS, at that time Ethics and Info-Ethics have been a key discussion topic.

The full set of abstracts of the contributions follows:

Herve Rannou (CityzenData, France): **Time series and geo time series: a disruptive approach in detecting weak signals in security and cybersecurity.**

Traditional IT architectures are driven by business applications related to relational databases. If it is adapted to transactional applications, it leads to silos of data including formats and semantic that differ depending on the business, application, organisation. Time Series is a disruptive approach in which the key data is not related to the business content but it is just the time and the geo location. Originally designed for sensors and IoT data, Time Series appears is the most performant and efficient way to cross different sources of data and to detect weak signals, anomalies … including predictive analysis, Artificial intelligence for all kind of data according they are timestamped. All major digital companies and now major groups use Time Series database
technologies. Geo Time Series is an evolution of Time Series in the case the data can be geolocated. For security and cybersecurity, it becomes an opportunity to cross any kind of data to look for weak signals in the flow of big data: any event on internet access or operation, any event on social network, event related to a mobile phone, travel ticketing, police control …

The today Big Data reproduces the model of silos, Geo Time Series appears as disruptive technology to explore data in a scalable perspective.

Nadia Saad Noori (Teknova, Norway): Next Generation ICT and Machine Intelligence enabling safe and secure societies. Today, we are witnessing a multifaceted digital revolution with high-performance computing, broadband communication, sensing and artificial intelligence integrated in our daily human life. However, societies in the digital age became more complex and new vulnerabilities emerged with this borderless digital medium. Freedom and connectivity was the bright side of a digital age connecting cyber and physical worlds (e.g. IoT, UAV). Unfortunately, a dark side is hidden away in the corners of the dark web where criminals and terrorist organization exploited such tools for malicious purposes. Recent years have witnessed high-profile security challenges on major occidental cities in e.g. France, UK, Belgium and USA such that law enforcement agencies are confronted to extreme situations. Crime organizations are getting networked with international constellations for a more organized planning and execution of the threats using the newest technologies. In this talk, I will present few results from our research on how these trends will impact towards safe and secure societies by involving smart sensing and machine intelligence. Example applications on surveillance, security and disaster management will be provided for illustration of the impact of this next generation ICT.


ICT’s are almost certainly a powerful tool in building citizens resilience to crises and have certainly contributed to societal changes with regard to their uptake and impact, as the world of crisis informatics has shown. Yet, it is important to go beyond a technological determinist view of ICTs in this realm, to a wider consideration of the organisations, economic and social considerations that impact uptake and therefore their usefulness. This presentation explores how organisational, economic and societal considerations can impact the adoption of tools and their use to build citizens resilience. It concludes by considering next steps in research and development in this field, emphasising the need for co-design practices that engage with ethical, legal and social considerations. Keywords: Social Media, Preparedness, Resilience, ICT, Social Considerations, Ethics & Privacy


Sarah Jane Fox (Middlesex University, UK): Policing Society: Utilising “cool gadgets and tools”. As the WSIS Forum acknowledges, ICT can present solutions to SDG’s: “Robots, Drones, Virtual Reality (VR), Applications and Online platforms are more than just “cool gadgets and tools” they can be used to contribute added value to humanity.” This paper forms part of on-going research, which explores this concept and the use of such technology in today’s civil society. And, whilst the research acknowledges the value of new advancements, the research has as an objective, to explore both the challenges and opportunities presented by the use of such technology; which, whilst, to some may be received with enthusiasm, being perceived as ‘cool;’
to others, they are viewed as tool that are to be feared and met with trepidation. Therefore, one of the key challenges with advancing technology is to achieve equilibrium between these viewpoints. This particular paper, presented at the WSIS-2018-Forum, relates to the use of drones; wherein, the specific focus is to showcase the positive contribution to humanity when used by the police to assist in their role – which invariably includes:

• protecting life and property;
• preserving order;
• preventing the commission of offences; and,
• bringing offenders to justice.

So, whilst differences of thought of such technological may continue to exist, this presentation provides a unique understanding of the success of such tools. This paper therefore recognises a key goal of MEDICI, which is to promote the use of digital and other advanced and emerging technologies, which aim to support social and economic development, whilst additionally protecting our society – and invariably keeping us safe and secure. KEYWORDS: Drones, Policing, Safety and Security

Alessia Golfetti (DeepBlue, Italy): Human Factors for safety and security: case studies and challenges.

Human Factors is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system. Human factors experts adopt a systemic approach to understand the interactions among: 1) people who do the job; 2) actions and tasks they perform; 3) resources and technologies necessary to complete the job; and 4) the social, economic and physical environment in which they work. The presentation will outline what it means to use and adopt a Human Factors approach in different safety and security contexts. It will explore the different interactions among humans and other elements of a system by providing concrete examples taken from three European projects in the field of cyber security (Hermeneut - Enterprises intangible Risk Management via Economic models based on simulation of modern cyber-attacks), crowd management in public transport terminals (IMPACT - Impact of Cultural aspects in the management of emergencies in public Transport), and crowd management at mass gathering events (LETS-CROWD - Law Enforcement agencies human factor methods and Toolkit for the Security and protection of CROWDs in mass gatherings). Hermeneut shows that HF can deliver effective solutions to improve the security level of one organisation, by designing human contribution into the defence barriers. It is not enough to focus on hardware and software components. Organizations need to address HF aspects of cybersecurity by cultivating an informed and proactive workforce. Impact has analysed the role played by socio-cultural factors in the management of large groups of crowds in transport hubs i.e., airports, ports, underground and train stations, both in normal and emergency situations. Impact has applied a HF model to identify socio-cultural hazards that may affect crowd management in transport hubs and their potential consequences. The methodological approach provides a means for front-end operators to identify and discuss issues they encounter in their interactions with the public in transport hubs such as communication breakdowns with passengers due, for instance, to language barriers; misreporting of security threats; and uncooperative behaviour in case of emergencies. Let’s Crowd aims to build an extension of the European security model especially thought for the protection of crowds during mass gatherings which builds upon the analysis of the human factors for designing security strategies and methodologies. HF methodologies will be used for developing supporting tools that will help security practitioners to prevent, anticipate and mitigate the criminal or terrorist attacks in mass gatherings.
Lynn Thiesmeyer (Keio University, Japan): *Transboundary Community Security Issues in Southeast Asia: Monitoring Causes and Consequences.*

Within the research sites of Northern Myanmar, Laos, and Thailand, large rural populations seem left behind by the Sustainable Development Goals. Living along the borders, marginalized not only geographically but also in terms of the modern economy and social development, they are acutely, and not always positively, impacted by the advance of large-scale development projects into their livelihood environments. Projects that convert large areas of land and water can bring about cumulative losses to the ecology and local livelihoods that are known as “slow-onset disasters.” These slower-evolving disasters, in turn, give rise to security threats, not only in terms of livelihoods but in terms of violent conflict as well. Such slower-onset security threats are reflected in low progress towards the SDGs, especially those of economic livelihood opportunities, health, and resilient, sustainable communities. They also contribute to, and worsen, rapid-onset disasters. In the example of the China – Myanmar border development project areas, long-term violent conflict results, due to increasing loss of resources. The specificity in geographic origin, and diversity in spread, of slow-onset disasters and security hazards make on-site, real-time field surveys imperative. In this situation our research relies increasingly on mobile technologies that can provide Small Data, with pinpoint spatial accuracy for peculiarities and minute changes in terrain along with pinpoint time data. Slow-onset disaster areas can, in this way, become accessible to quick and accurate prevention and response. Keywords: Southeast Asia, Transboundary, Rural, Low SDGs, Socio-ecological Systems.

Dina Simunic (University of Zagreb, Croatia): *Security Challenges of Applicable IoT Key Technologies in Health.*

The challenges in application of existing and future IoT key technologies are high, especially due to the fact that health is the most important category of human life. On one hand, IoT is already giving fantastic opportunities for following the personal health status, but on the other there is a significant risk related to possible stealing or misusing data or even misusing IoT network. Therefore, the paper discusses security and privacy of a recently developed system for IoT health, "Portable Medical Laboratory" (PmLAB), with Mobile Ad Hoc Networks as a self-configuring infrastructure for health data transmission. PmLAB is the IoT system operating with the server and data base, web application and mobile application. Data can be sent by wire or wirelessly, for example, by using Bluetooth Low Energy or WiFi modules. Medical doctor can reach the data base either via mobile or web app. Every patient has the corresponding identification number, which enables one-directional assignment. The patient can also use mobile application. In the paper, PmLAB system is initialized for every node to be considered untrustworthy. Behaviour of the nodes is being tracked, with the growing reputation. The nodes update continuously the other nodes' reputation. The overall reputation is stored in the central entity. The security has been checked for the part of the mobile application.

Ranjit Makkuni (Sacredworld Foundation, India): *The Betrayed IT Revolution* - *For those of us who have missed the IT revolution, consider yourselves lucky, we may not have missed a thing!*

When the original vision of the Dynabook (later to become the laptop) was conceived by Alan Kay's team at Xerox PARC in the 1980s, computational tools were envisioned as a tool for creativity and leisure. Indeed the first slides of the Dynabook showed people freeing themselves from the shackles of their offices, lying in sprawling natural landscapes, pursuing their artistic creativity. Nearly 50 years later that vision has become a nightmare, with deep impacts on society: at levels of connection, health, psychological well-being, and deep questions to privacy and fundamental freedoms and 'Truth' loom and await answers. While in the past decade, social media addressed the human being re-'presented' as a collection of measurable and rapidly transportable
artefacts (i.e., ‘non material’ computational files such as images, videos, text blurbs). But the idea of deep connection, palpable localized connection, in situ connection still haven't been addressed or have been ignored. Almost all of the world's civilizations have discovered or invented, after 1000s of years of 'traditional' social media innovation, the recognition of concepts such as site-based power places, sacred geography, and places of geomantic power, places of direct communion between Man and Natural forces. Many 1000s of years of observation, reflection and creativity, reflections of solar and lunar cycles, the motions of the planet earth around stars and its relative position with respect to planets, gave rise to a rich space and experience of rituals, fairs and festivals. The collective participation of physically present individuals in groups, large and small, situated in 'places' have never been addressed in modern media, except through the homogenized, limited formats of 'glass' computational screens. Indeed, social media forces people to disembody the world around themselves, become dislocated in order to access the benefits of access to large amounts of information. However, the benefits of Information access come at the risk of health and psychological issues. Indeed one could summarize the energy invested in virtual connection could be proportional to match the pain of societal alienation and ill health that result from people's primary communications with devices. Contentment and calm have been replaced by anxiety and constant displacement! With the rising power of evolving information technology, rapid changes that are taking place (with changes in 30 years being equivalent to changes in 300 years and more), smart cities exist with data-smart but emotionally un-smart, unhappy citizens.

With rise of robotics and intelligent thinking machines, nations which have struggled with unemployment and poverty and who have just barely managed to remove poverty are suddenly confronted with the challenges of new unemployment resulting from automation and confronted with new ways to reinvent themselves in an era of unpredictability and never ending change. These nations feel short-changed by the IT revolution because they have traded their ecological resources and traditional social capital in terms of harmonious communities and eco systems, in the promise of a 'smartness' revolution that has never delivered.

The question for us, as humanity, is to ask, when can we catch our breath and “just be?” Add to this, governments in debt, honing the data powers of track individual’s activities, widening tax nets by making banks into ‘sensors and retinas’, and the resulting invasion of privacy, the resulting questions of private property in the era of ubiquitous computing are open for reflection, discussion and new action. Fundamental questions on individual freedoms, that have been painstakingly achieved through spilling of blood and revolution seems to have gone in vain, especially considering that ‘freedom’ has been snatched away under the guise of surveillance. Amidst this new whirlwind of the IT revolution, new media, news, opinions presented on homogenized devices that ‘occupy’ peoples’ eyes, hands, homes and offices, the minds of people can be easily manipulated. Not to mention the links between new media communication and the clutter of advertisements that occupy people’s subconscious minds. Indeed we will need to rediscover Descartes’ notion of “I [need to re-] think, [inorder to be who] I am”. My paper asks the question, despite the positive advances of technology that have undoubtedly contributed to many dimensions in our lives, but, given the tremendous negative impact of people’s health and well being, and rooted-ness, are we at a tipping point where we would need to rethink innovation afresh? Just as, in the past, across many cultures, people returning back into the solitude in the forests, connecting with local communities and sacred geography was an important ritual for renewal, can we, as an information society, relearn perennial and fundamental values once again?
Quotes

• ALESSIA GOLFETTI (DeepBlue, Italy): “When we work in complex systems we cannot deny the role of humans. Safe and secure performance should be cultivated at all levels. A shift from a technological centred perspective to a human centred approach is needed for looking at the entire ecosystem with people as part of that. As pointed out by the new strategic research agenda for the aviation domain, it is important to adopt a holistic approach where security is not only matter of technology, policy or procedures. It becomes effective only when it is able to ensure the human involvement throughout the overall lifecycle. Developing a culture of cyber awareness, organisations would be able to better handling cyber security threats.”

• RANJIT MAKKUNI (Sacred World Foundation, India): “With the rising power of evolving information technology, rapid changes that are taking place (with changes in 30 years being equivalent to changes in 300 years and more), smart cities exist with data-smart but emotionally un-smart, unhappy citizens.”

More quotes from the workshop:
• LYNN THIESMEYER (Keio University, Japan): “Mobile technologies work best when accompanied by mobile human capacities.”

• NADIA SAAD NOORI (Teknova, Norway): “Digitalization is receiving considerable attention for security, manufacturing and production with the aim of increasing effectiveness and boosting (European) industries and societal development (e.g. Industrie 4.0 in Germany; Brilliant Industry in Norway). Therefore, it is critical to develop the capacity in manpower and knowledge for enabling successful digital processes and services with pioneer capabilities in innovation.”

• NADIA SAAD NOORI (Teknova, Norway): “As the world is witnessing the Fourth Industrial Revolution, we at Teknova believe we a responsibility to bridging research with the technological trends. It is a strategic objective to bring leading edge ICT technologies and outstanding research ideas to industrial prototypes within the key markets of its partners and customers that are the energy, transport, and security sectors. As it is a core competence of Teknova to bring technologies like smart sensors, complex systems analysis, big data analytics, industrial mathematics for automation, digitalization and virtualization of processes to many; we also make sure that our solutions address the needs of promoting a culture of responsible integration of technology towards safer working and living environments.”

• SARAH JANE FOX (Middlesex University, United Kingdom): “The central public service in a modern state remains the police. Advancing technology and the digital infrastructure are essential components for keeping citizens safe and secure. The use of such technology has become essential, and yet, there is an expectation that the service will also ‘police’ much of the technology going forward – such as artificial intelligence, autonomous vehicles and drones – without suitable (and consistent) framework and approaches being established. There must be clear guidance, legislative controls and supporting infrastructure put in place for advancing technology - its use, and for any offences and breaches that may subsequently occur.”

- “The positive use of technology must be promoted; when used by the police, technology, such as drones – can save lives and enhance security. This requires constructive communications
(including through social media) to ensure that this is emphasized to the public and misconception and inaccuracies do not undermine the use and advantages of such."

• PAVAN DUGGAL (Pavan Duggal Associates, India): “Cybersecurity is a paramount factor for all stakeholders today. However regulations on cybersecurity starts bringing forward large number of legal, policy and regulatory challenges which need to be adequately addressed both at international and national levels”

• RANJIT MAKKUNI (Sacred World Foundation, India): “But, ideas of deep connection, palpable localized connection, in situ connection still have not been addressed or have been ignored by the Web”.

• RANJIT MAKKUNI (Sacred World Foundation, India): “The benefits of Information access come at the risk of health and psychological issues. Indeed, one could summarize the energy invested in virtual connection could be proportional to match the pain of societal alienation and ill health that result from people’s primary communications with devices”.

• RANJIT MAKKUNI (Sacred World Foundation, India): “The body has been dematerialised and actively disembodied! Contentment and calm have been replaced by anxiety and constant displacement!”

• RANJIT MAKKUNI (Sacred World Foundation, India): “Just as, in the past, across many cultures, people returning back into the solitude of the forests, connecting with local communities and sacred geography was an important ritual for renewal, can we, as an information society, re-learn perennial and fundamental values once again?”

II. Overall outcomes of the session highlighting

There is a need to identify a reference point for researchers, companies and involved stakeholders in the field of ICTs for safety, security and disaster recovery/management. The role of reference point can be perfectly carried out under the umbrella of the WSIS. There is as well a need to promote an interdisciplinary debate on the implementation of the information society in the light of a social, ethic, economic, healthy long term perspective.

The implementation of the WSIS action lines beyond 2015 must adequately take into account the dynamic evolution and reshaping of technologies posing new problems and sometimes concerns at an increasing pace. If universal goals, representing universal general values, may be valid for a long period of time, action lines use to refer to specific fields and strategies and, as a consequence, must adapt time to time to the evolving scenario.

III. Main linkages with the Sustainable Development Goals

SDG 2, SDG3, SDG6, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3: Ensure healthy lives and promote well-being for all
Goal 6: Ensure access to water and sanitation for all
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all
Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation
Goal 11: Make cities inclusive, safe, resilient and sustainable
Goal 16: Promote just, peaceful and inclusive societies
Goal 17: Revitalize the global partnership for sustainable development

More in detail:
SDG 2 END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE - > food & water security

SDG 3 ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES
3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks - > Safety & Security

SDG 5 ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS
5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women - > human security, safety

SDG 6 ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL
6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies - > Water Security, critical infrastructure resilience, etc

SDG 7 ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL
7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support - > C5, critical infrastructure resilience, etc.

SDG 8 PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services - > C5 safety & security
SDG 9 BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all
9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

SDG 11 MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE
11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and decrease by [x] per cent the economic losses relative to gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

SDG 16 PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS
16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children
16.5 Substantially reduce corruption and bribery in all their forms
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime

SDG 17 STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT
17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology
17.16 Enhance the global partnership for sustainable development, complemented by
multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries -> C5 safety & security
17.17 Encourage and promote a active public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships. -> C5 safety & security

IV. Emerging Trends related to WSIS Action Lines identified during the meeting

C5, C7
DINA SIMUNIC: The overview and offered solutions related to security challenges of applicable IoT key technologies in the health sector shows that there is a lot of concern, but at the same time also care for the citizens' privacy and security. This is especially the case now in EU, due to the close date of GDPR enforcement, with its data subject rights, especially in the application of privacy by design in coming future communications systems.

C5,C7
HAYLEY WATSON: ICT’s are almost certainly a powerful tool in building citizens resilience to crises, and have certainly contributed to societal changes with regard to their uptake and impact, as the world of crisis informatics has shown. Yet, it is important to go beyond a technological determinist view of ICTs in this realm, to a wider consideration of the organisations, economic and social considerations that impact uptake and therefore their usefulness.

C6,C7,C8,C10
LYNN THIESMEYER: Change, motion, and dynamism in environments, populations, and events can be digitally captured in short time “frames.” How can we capture the longerterm changes, movements and events that are part of slow-onset disasters and their security threats?

C5, C7
NADIA SAAD NOORI: We are witnessing a multifaceted digital revolution with highperformance computing, broadband communication, sensing and artificial intelligence integrated in our daily human life. As the lines of separation between the physical and digital worlds are blurring, societies in the digital age became more complex and a host of new vulnerabilities emerged with this borderless digital medium. Freedom and connectivity was the bright side of a digital age connecting cyber and physical worlds (e.g. IoT, UAV). Unfortunately, a dark side is hidden away in the corners of the dark web where criminals and terrorist organization exploited such tools for malicious purposes. Therefore, we are have a responsibility to invest in the developing the tools and means to tackle the vulnerabilities brought by the digital revolution and address their impact on the physical world and the human life.
RANJIT MAKKUNI: The betrayed revolution - My thoughts for some time have circled around how the speed of the new information revolution renders us less capable of critical thought, due to all the constraints placed upon us with new technologies. For instance, as liberating as they are - by providing flexibility and instant connectivity – we have become enslaved to our devices, fearful of losing out information and access in an increasingly competitive and fast-paced world. Consequently, our bodies have suffered, as have our minds (due to information overload), what of our work-life balance -- and this is just to begin with!

What if we can connect with like-minded colleagues all over the world to discuss how we may begin to shift this paradigm, and how technologies can be a central aspect of our lives without owning us. As you discussed, there are several initiatives in various parts of the world (your session at WSIS included) that are doing this in their own way. Can these initiatives be connected or brought together to make this a stronger voice, stronger demand? Can we start the process at WSIS 2018 and build the momentum for next year?

Civil society and citizens' voices are increasingly being compromised in many ways and at many fora. Can we use this opportunity to our advantage and begin to think of changing the tide?

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

ALFREDO M RONCHI: To include and promote a wider range of “security” topics under the WSIS umbrella endorsing a holistic approach to the “Safety, Security, Disaster Recovery and Management” sector.

ALFREDO M RONCHI: Ethic and Juridical aspects concerning the extended use of artificial intelligence (e.g. e-Transportation, e-Health, e-Government …).

NADIA SAAD NOORI: The artificial intelligence and the perils of mathematical equations biases. How can we ensure AI algorithms and training datasets will not produce decision based on race or stereotyping? Humans in the physical world have been fighting for decades such biases, so how can we import these principles to the digital world to teach the AI algorithms? For the sake of safer, secure and balanced societies!

PAVAN DUGGAL: Protection and preservation of cybersecurity.

RANJIT MAKKUNI: Rethinking the role of digital technologies for a human centred society.
Thematic Workshop
ICT Access and Use in the LDCs, LLDCs and SIDS
ITU & UNCTAD
Monday 19 March 2018 11:00 – 13:00
Room K1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/180#intro

1) Main outcomes highlighting the following:

I. Debated Issues

Information and Communication Technologies (ICTs) enable the world’s most vulnerable countries to tackle key development challenges, including in areas such as financial inclusion, poverty reduction and health. They are a key building block of the digital economy and for the development of e-commerce. For Landlocked Developing Countries (LLDCs), the Internet and e-commerce open up new possibilities and trade routes.

While ICT access has increased substantially, more than half of the world's population remains offline and only one in six people in Least Developed Countries (LDCs) currently uses the Internet. The share of people using broadband is lower still, hampering the ability of many countries to take advantage of the evolving digital economy. Pacific Island countries have made great effort to improve access/connectivity and there have been significant public and private sector investments in undersea cables. Now the focus is moving from access/connectivity, to its use and to mainstreaming ICTs into the delivery of services, including government services. The ICT potential in the Pacific Islands is still largely untapped.

Public privates partnerships are important to drive ICT uptake: while the private sector has an important role to play in investing resources and in ensuring that ICT infrastructure is available, policy makers need to provide the right regulatory framework. National coordination is critical to ensure that ICTs are mainstreamed across all sectors.

II. Quotes

“For landlocked developing countries, the Internet is the sea” – Jane Coffin, Internet Society
“E-commerce is helping businesses do more, and do it better” - Andrea Giacomelli, Pacific Islands Forum

**Overall outcomes of the session highlighting**

There are many examples of impressive leapfrogging triggered by enlightened policies in LDCs/LLDCs and SIDS and a number of studies identifying key recommendations for policy makers. These include the ITU’s ICTs, LDCs and SDG report, UNCTAD’s Rapid eTrade Readiness Assesments, and ISOC’s SIDS and LLDC and reports (to be published, shortly). Key recommendations include:

1. Policy makers need to make ICT a priority: High level commitment and strategic ICT sector plans are key components of driving ICT uptake and use. Policy makers are also encouraged to foster national coordination to ensure that ICTs are mainstreamed across sectors. Ownership of the process at the country level- and at the highest level possible- is a key enabler to effective ICT mainstreaming.

2. ICT use is cross-cutting and is therefore important to mainstream ICT through the entire spectrum of the policy arena

3. Countries need to have sufficient international Internet bandwidth (including through undersea cables) and build a robust domestic backbone, including core Internet infrastructure, such as IXPs and datacenters.

4. Policy makers need to foster competitive markets and rationalize taxation to improve connectivity.

5. In many countries resources from Universal Service Funds could be liberated and used to build infrastructure and develop ICT projects in such areas as community networks and IXPs

6. New business models and innovation in technologies, especially in last-mile connectivity, can be used to connect rural and remote areas. Public-private partnerships models should be explored

7. Skills remain critical to ensure that more people benefit from the opportunities of ICTs: while most people today are covered by, and have access, to networks and the Internet, many still do not make use of them. The lack of skills is also a key reason why pilot projects are not sustainable and eventually fail. Donors need to invest not only in infrastructure

but also in skills. This includes investing in public institutions and building government employers’ skills, as well as community skills.

**IV. Main linkages with the Sustainable Development Goals**

SDG 9, 10, 17
1) **Key achievements, announcements, launches, agreements, and commitments**

In the forum, we presented what kind of ICT achievements have been made in the fast years and we are carrying on forward. The content includes how to connect unconnected areas and vulnerable groups through construction of communication infrastructure. Moreover, building confidence in using ICT is also concerned by all levels of stakeholders in China’s whole country. In this case, we shared experiences and achievements in protecting harassment or fraud calls, which not include the scheme and practice, but about how can we promote it into other areas or countries with the same situations. How 5G can boost the development of industry and its use case in different fields in China have been revealed. Moreover, the fundamental function of 5G which was specified by the Government has been explained.

Furthermore, the workshop also clarified and outlined how ICT is deeply influencing Chinese society, include influences on education, biodiversity, express delivery and etc. These include how China is working on building a bridge between the left behind children and ICT solutions for migrant workers. A smart solution for the Government to supervise the express delivery and biodiversity has also been introduced.

The workshop aims to reflect Chinese ICT achievements in different fields, and also aims to show how China is working on the realization of SDGs through ICT means. Moreover, these innovations are also laying the foundation for China’s knowledge society.
Main outcomes highlighting the following:

I. Debated Issues
How China Mobile is helping the Government in working on bridging the education divide between poverty areas and cities. The host and one audience questioned that the online education platform requires lots of software and hardware criteria, and the solution looks similar to other same like solutions. China Mobile has achieved 70,000 new base stations and completed nearly 200,000 village access tasks, and the platform has enabled more than 20 million left-behind children to enjoy online learning with computers through the education line and the 4G network.

The problem is that how to better cover the whole country through the system and how to further implement the communication service, vocational skills training and reemployment for the public and vulnerable groups. Most importantly, the problem of how to better transport these achievements and ideas into other countries and how to exchange ideas and cooperation in the global scale is also being considered.

II. Quote
Through a mobile phone, we solve the problem of information asymmetry in poverty alleviation——Kang Li, China Mobile Online Services Co., Ltd.

Information accessibility means that anyone, whether healthy or disabled, whether young or old, can obtain information and use information equally, conveniently and without obstacles under any circumstances. ——Jing Chen, Information Accessibility Research Association

III. Overall outcomes of the session highlighting

The mixture of ICT and different fields is obviously happening in China, and the informationization foundation for knowledge society is being laid in a daily basis. However, how to better expand the influence and coverage of this kind of practical usages still needs to be considered. Moreover, how to better foster these achievements in a global basis and how to overcome technical and policy difficulties in the process should also be figured out. The vision for implementation of WSIS Action lines beyond 2015

Through new technologies and the deep mixture of ICT with other fields, China is Working on carry out more practical cases in the perspective of WSIS Actions Lines. Under this foundation, China will explore more integration on ICT and industry to better fulfill the WSIS Action Lines.

IV. Main linkages with the Sustainable Development Goals

The topics discussed in this workshop gave insights to promoting SDG in China, including standpoints on how to bridge the digital divide through infrastructure construction; themes on how to better utilize international cooperation to foster the realization of SDG; detailed information on how ICT impacts on different fields in China, which finally results in the realization of SDG.

This workshop thus not only gives views on the development of ICT in China from policy to practice, but also gave standpoints on how to better prepare China for the realization of SDG.
V. Emerging Trends related to WSIS Action Lines identified during the meeting

China is now greatly working on bridging the digital gap in poverty areas in China and is helping less-educated and vulnerable groups access to ICT.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

How to better introduce national ICT standards and policies to other countries to reach a global consensus and how global ICT standards can better fit into different situations in different countries should be discusse
Thematic Workshop
Youth, Access to Knowledge and SDGs Strategy for Building Youth Skills in Digital Technologies

UNESCO
Monday 19 March 2018 13:15 – 14:00
Room Popov 1, ITU

1) Key achievements, announcements, launches, agreements, and commitments:

- Reinforced the role that UNESCO YouthMobile Initiative can play in improving access to knowledge. The YouthMobile Initiative builds on the experience of many worldwide initiatives and introduces young people to computer science programming (learning-to-code) and problem solving (coding-to-learn). It targets young women who are vastly underrepresented.

- The Smart Campus Cloud Network was highlighted during the session. The Network is a joint initiative of Terre Policy Center and UNESCO that connects educational campus communities through a cloud platform powered by big data, IOT and AI to enhance access to scientific knowledge for students. The key aim of the initiative is to make campuses and its graduates SDG-ready and enhance their employability.

- The role of Youth as torchbearers in the promotion of Science and Technology was underlined and the need to make science open and inclusive highlighted.

2) Main outcomes highlighting the following:

I. Debated Issues

The 3 hour session debated issues related to the Access to information (C3) and e-science (C7) action lines. As the processes toward SDGs have placed a special demand on young people as the knowledge torchbearers, this session examined how Youth’s need for Access to Knowledge (A2K) and Access to Scientific Knowledge (A2SK) is changing. The session provided an opportunity to examine how ICT usage in terms of tools, content, and processes is changing for youth. In this regard, the session examined a few key technological breakthroughs in A2K and A2Sk, such as Smart Campus Cloud Network (SCCN) and the UNESCO YouthMobile Initiative. The session also discussed inclusive digital policy for the youth and the need for advocacy,
capacity building, research and innovative technology development. Lastly, the session also discussed strategies to develop Youth-sensitive content and youth-focused learning tools to prevent radicalization and violent extremism.

II. Quotes

“The prevention of radicalization leading to violent extremism on social media is a major challenge that will persist in the years to come. It requires long-term mobilization and greater consistency in the application of the described remedies. Only a firm commitment to meet this challenge can guarantee the success of our collective effort for a safer cyberspace that our youth and the future generations certainly deserve. In that sense, the empowerment of young people remains a crucial priority. This is why we cannot invest just in technology - we must invest in public policies fostering quality education and upholding universal ethical and moral value systems that give women and men the ability to own their destinies, to face the reality in which they live with no groundless fears. This is precisely what UNESCO stands up for with conviction and determination." Mr. Boyan Radoykov, Chief of Section for Universal Access and Preservation, Knowledge Societies Division, Communication and Information Sector, UNESCO.

“E-waste is killing a score of people every year and is considered as one of the biggest invisible human health risks. Youth involvement and maximum use of ICTs can help to reduce pollution exposure and also help in planning of this risk.” Mr. Rolph Payet, Executive Secretary, Basel, Rotterdam and Stockholm Convention, UNEP, Geneva

“Campuses are breeding grounds for tomorrow’s policy makers and entrepreneurs. SCCN connects these campus communities by using smart technologies like IoT and Cloud Networking to contribute to SDGs. Project-based learning in the campuses, by doing and by sharing, sets into motion positive competition among youth and builds ecosystem for innovation for sustainable development.” Mr. Rajendra Shende, Chairman TERRE Policy Centre, Senior Expert UNEP TEAP, Advisor IIM Rohtak Bizdome, Advisor MediaIndia Group, Former Director UNEP.

“Software is a vehicle for information. The UNESCO YouthMobile Initiative holds all key ingredients that can foster the understanding of technology among youth by learning how to make Apps.” Mr. Davide Storti, Coordinator of YouthMobile Programme, Knowledge Societies Division, Communication and Information Sector, UNESCO.

“Most young people don’t possess the skills needed to work in the digital economy.” Mr. Md. Afzal Hossain Sarwar, Policy Specialist (Educational Innovation), Access to Information (a2i) Programme, Prime Minister’s Office (PMO), Bangladesh.

III. Overall outcomes of the session

The panel observed that the global vision of universal Knowledge Societies is increasingly relying upon free, open and trusted use of new technology that can enable people to access information and knowledge from around the world, as well as contribute to local and global communities. The panel noted that access to information and knowledge has emerged as a game changer in the
sustainable development discourse as it encompasses the vision of universal access, not only to the Internet, but also to people’s ability to seek and receive open scientific, indigenous, and traditional knowledge online, and also produce content in all forms. The panel agreed that this requires building initiatives for freedom of information and the building of open and preserved knowledge resources.

The panel noted a high rate of penetration of ICTs and mobile communication devices in contemporary society. The Internet and the digital revolution is impacting all spheres of public and private life, including crucial issues related to access to information and knowledge. As the ICT revolution is changing lives and livelihood, it has also generated a meaningful way forward as a tested tool to accelerate the pace for the achievement of the SDGs.

The workshop emphatically noted that a significant majority of the current users are young people and thus focus on youth as well as youth led initiatives are important to achieve SDGs. The workshop reflected that access to digital technologies is not only transforming the way young people are communicating, learning and interacting with each other, but is also providing them with new possibilities to gather and share information. Therefore, youth’s access to knowledge needs to be examined differently as the process to achieve at least ten sustainable development goals depends on their active role to provide continuous information. As Youth are now taken as one of the driving forces behind achieving the SDGs, there is a need to re-examine the entire ecosystem of Access to Knowledge. The session categorically mentioned the need to enhance employability of young people and noted an alarming demand-supply gap in soft and digital skills.

The workshop noted that from the context of achieving climate resilience to creating a condition for food and water security or managing hazardous e-waste, much will depend on how information and processed knowledge will be exchanged between and among young people. This shift will have to be realized in terms of how young people as the knowledge torchbearers will get involved in development processes. This will also have to be examined within the changing context of the use of ICTs – defined in terms of tools, contents and processes.

The session noted that groundbreaking initiatives such as Smart Campus Cloud Network (SCCN), and UNESCO’s YouthMobile Initiative need to be further strengthened and reinforced to reap the benefit of new and smart technologies to make young men and women SDG ready.

The session also discussed inclusive digital policy for the youth through advocacy, capacity building, research and innovative technology. The session equally touched upon strategies to develop Youth-sensitive content and youth-focused learning tools, especially strategies to reduce radicalization and extremism while ensuring access to information. The session noted how access to information over the Internet has been associated with rising challenges with young people, including through the emergence of gated communication and virtual communities, which can lead to isolation and marginalization, and, in their most extreme form, may present a security issue.
IV. Main linkages with the Sustainable Development Goals

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 6: Ensure access to water and sanitation for all

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Goal 11: Make cities inclusive, safe, resilient and sustainable

Goal 13: Take urgent action to combat climate change and its impacts

Goal 16: Promote just, peaceful and inclusive societies

Goal 17: Revitalize the global partnership for sustainable development

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Youth’s need for A2K and A2SK are increasing and therefore there is a need to develop special campus based programs.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

High Level Panel on Youth and A2K: How can New and Smart Technologies assist in bridging the digital and soft skills gap.
1) Key achievements, announcements, launches, agreements, and commitments

The Institute of Federal Telecommunication (IFT) and the eWorldwide Group agree to collaborate to promote gender equality, diversity and inclusion;

Identifying and promoting gender role models working as technopreneurs/ICT professionals

Designing interventions with stakeholders to encourage the study of ICT/STEM by girls in secondary schools.

The General Women’s Union and the eWorldwide Group agree to collaborate to identify and promote gender role models working as technopreneurs/ICT.

eWorldwide Group join hands with Empowerment lab to promote girls inclusion in STEM through innovation and creativity programs across the MEA region.

eWorldwide Group and International Commission on Cyber security Law agree to join hand to establish a series of cybersecurity centric accelerator to promote cybersecurity innovations and cyberpreneurs & start-up in partnership with regional stakeholder.
Thematic Workshop

AI For Good Global Summit

ITU

Monday 19 March 2018

Room A - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/244#intro

Please follow the link below to see the complete presentation:

AI For Good Global Summit Presentation
Thematic Workshop

Cyber security best practices for the 2030 SDGs: Navigating the global security landscape of the UN family and its partners

United Nations International Computing Centre

Monday 19 March 2018 13:15 – 14:00
Room C1, ITU

Please find in the link below, more informations regarding the workshop:
https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/124#intro

1) Key achievements, announcements, launches, agreements, and commitments

1. Collaboration and follow-up between ITU and member state Regional CERTs with ICC.
2. Information sharing from global to local levels to improve global cyber security posture.
4. Proposed ICC partnerships with Regional and Country CERTs.

2) Main outcomes highlighting the following:

I. Debated Issues

1. Oman’s National cyber defense committee - lessons learned
2. Capacity building (awareness, use of youth talent and skills development)
3. Cyber security threat intelligence for the UN family
4. ISO 270001 standards adoption for national e-Services
5. International cooperation and public-private partnerships
6. Centralized hub to share cyber knowledge
7. Standards-based information security frameworks
8. Benefits from cyber security best practices and information sharing for Regional CERTs
9. How do you balance the need for a strong cyber security environment with fundamental constitutional rights (Kenya constitution)

II. Quotes

Oman’s cyber security best practices have led to Oman’s being ranked first in the Arab world and 4th globally in the Global Cyber Security index GCI. They also have contributed to regional and international efforts carried out by the ITU Regional Cyber Security Centre in Oman in its mission to promote and enhance cyber security. Eng. Badar Ali Al-Salehi, Director General of Oman National CERT
ICC is working with over 20 UN Partner Organizations to establish or improve information security programmes by framing and delivering information security governance, risk management, and security awareness as per industry best practices. The organization is keen to ensure that these best practices are reaching regional and field office locations and that the good work done can be shared across the UN family. Tima Soni, Head of Information Security Services at ICC

We are working to provide comprehensive cyber security services for our Clients including setting up platforms for information security awareness and phishing campaigns. This is an area where we see much more possibility for knowledge sharing and collaboration. Fabio Maggiore, Information Security Officer at ICC and CISO for the World Meteorological Organization (WMO) and Acting CISO, the World Health Organization (WHO)

Our Common Secure service shares threat intelligence and IOCs with participating Agencies, helping to build a strong risk posture and mitigate potential attacks. Networking among different UN Agencies provides benefits in keeping UN family data and systems safe. Bojan Simetic, Information Security Specialist at ICC

III. Overall outcomes of the session highlighting

1. Expansion of threat intelligence sharing programme
2. Shared information security awareness framework, hub and best practices
3. ICC partnerships with Regional and Country CERTs and regional cyber security entities
4. Extended regional and global platforms for National CERTS to cooperate
5. ICC work with ITU to define and promulgate BYOD policies
6. Wider knowledge sharing

IV. Main linkages with the Sustainable Development Goals

4, 7, 8, 9, 11, 13

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Improved knowledge sharing and partnerships

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Cyber security best practices for the 2030 SDGs.

Threat intelligence network for the UN family.
1) Title of your session

Oral History of the Internet (OHI)

2) Name of Organization/s organizing the session

Cheung Kong School of Journalism and Communication at Shantou University

3) Relevance with the WSIS Action Lines – please specify the Action lines C1 to C11

C8. Cultural diversity
C8. Cultural exchange and information
C8. Cultural heritage
C8. Traditional knowledge.
C11. International mechanisms
C11. Regional action plan

4) Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

Based on “Oral History of the internet (OHI)”, the speakers from Western countries and non-Western countries discussed how internet changed their society and, further, integrated into their society differently.

As the internet is facilitating unprecedented, the project of OHI which is worked by internet research center at Shantou University in China provides multi-faceted interactions about the internet development around the world. In this panel, the researchers present how they went globally to take video recording oral testimonies from the worldwide Internet pioneers about their extraordinary contributions to the development of the internet in their own countries or fields.
Launched since 2007, the OHI project aims to build a virtual monument that is committed to documenting personal narratives from the Internet Pioneers who have made extraordinary contributions to the development of the internet around the world. The mission of it is to “Recording the first 50 years of the internet so to embrace its next 50 years”. So far OHI has interviewed nearly 200 Internet Pioneers and plans to interview more Internet Pioneers across the world which will attain the total number of 500 by 2020. From the perspective of the history of the Internet development, by reviewing history and summing up experiences, we tried to explore the sustainable development of the Internet. Through the oral history project, we can better summarize the first 50 years of the development of the Internet. In the future, it will serve as a bridge for better communication and cooperation between different countries for the global Internet development.

5) Main outcomes highlighting the following:

I. Debated Issues

- Please capture highlights of the main issues debated and interactions with audience

(1) When everyone is paying attention to the actual utility of ICT in Internet applications, is it meaningful to trace the history of Internet development?

(2) Could Oral History comprehensively or objectively present the history of the Internet development through personal narratives from the perspectives of different Internet Pioneers?

- Please highlight key achievements and challenges shared by the audience and/ or panelists

(1) The early research on the development of the Internet focused more on technical level. However, the Internet is not only a tool for technical protocol agreements. With the global development of the Internet, the application of the Internet is also presenting collision and integration in different regions. In this case, more challenges will be faced in the future, not only confined to technical issues, but also involving legal, political, and commercial issues.

(2) The Oral history provides very important record that collects and keeps the original data in the era of internet history. Although the recording may presented very different opinions in a event which is expressed by the interviewees, that is part of history of the internet.

(3) OHI project should not solely quote academic literature. It should also quote stories and data from media such as newspapers, for increasing the abundance.
II. Quotes

- Please provide two important quotes from the session and the names & organization of the person you are quoting

Louis Pouzin (Father of internet in France) When reviewing internet history and sum up internet experience, it is necessary to discuss how culture in involving in technology exchange in different countries and different cultural-language area

Marc Weber (internet history program curatorial director, computer history museum) The Oral history is a most important record that collects and keeps the original data in the era of internet history

III. Overall outcomes of the session highlighting

- main conclusions reached during the discussion

1. When reviewing internet history and sum up internet experience, it is necessary to discuss how culture in involving in technology exchange in different countries and different cultural-language areas, besides the issues of technical exploration and the internet development globally.

2. The OHI project does not only records the history of the Internet from a technical perspective, but also traces its history from the perspectives of media, culture, and language. It still need more attention from government and professionals to support the project of oral history which has been working for ten years.

- the vision for implementation of WSIS Action lines beyond 2015

IV. Main linkages with the Sustainable Development Goals

V. Emerging Trends related to WSIS Action Lines identified during the meeting

The importance of the history of internet development should be better understood. There is a need to develop more special programs to discuss internet fragmentation.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

To understand the involvement between the cultural exchange and information technology in different countries and areas, and how global ICT standards can better fit into in different countries which have different cultural backgrounds and economic status.
1. Key Achievement and commitment

The global change research data publishing and sharing will be kept as the long term action and will be focused on the SDGs for benefiting to all.

2. Main outcomes

I. Debated issues

The debated issues includes the following 3: (1) policies of the global change research data accessibility for all; (2) research data quality control and (3) bridging digital divide in research data.

II. Quotes

Professor Liu Chuang, Chair of Data Publishing sub-group of CODATA Task Group in developing countries and Professor of Institute of Geographical Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences, indicated that the global change research data is part of critical data for reaching SDGs, especially for Goal 1, 2, 6 and 15. The peer review by scientists is the key procedure for data quality control; the open access to the research data for all based on the intellectual property right is the key for keeping the research data openly available sustainable. Professor Tao Xiaofeng, Member of Multistakeholder Advisor Group of IGF and Professor of Beijing Telecom and Communication University indicated that the IGF open access activities and WSIS action line in e-science should be coordinated, which could benefit both. Mr. Kiiya JK, Chief Executive of National Child Helpline, Sema Magazine, Tanzania indicated that listening to the children speaks and providing knowledgeable internet based on the global environmental changes are also important issue, especially in developing countries. Dr. SHI Ruixiang, Associate Chief Editor of Global Change Research Data Publishing and Repository (GCdataPR for short), indicated that the GCdataPR was awarded to be the Champion of WSIS Prize 2018 in e-Science, which was supported by the IGSNRR, Chinese Academy of Sciences.
Sciences and Geographical Society of China, it was the joint efforts from more than 600 contributors from 11 countries, 36 academic journals. It was the long term action as commitment.

III. Overall outcomes of the session highlighting

- Main conclusions of reached during the discussions
- Open access to the global change research data is important in e-science action line;
- The vision for implementation of WSIS action Lines beyond 2015
- Keep the global change research data publishing and sharing sustainable development with the GCdataPR platform ([http://www.geodoi.ac.cn](http://www.geodoi.ac.cn))
- Capacity building in re-using and publishing research data by training program in developing countries will be held each year
- Show cases and best practices will be implemented in data publishing sharing for SDGs.

IV. Main linkages with the SDGs

SDGs: 1, 2, 6, 15

V. Emerging trends related to WSIS Action Lines identifies during the meeting

e-Science

VI. Suggestion for the thematic aspects

The dates of IGF and WSIS forums held may be half year between.
1) Key achievements, announcements, launches, agreements, and commitments

The prevention of early onset of hearing loss due to recreational use of personal music players has many fronts. During this thematic workshop, we introduced the problematic to the attendance and explored two essential aspects to succeed in this Initiative:

a) the role that will be played by a technical standard being prepared by ITU (F.SLD) on how to implement safe listening systems; and

b) the identification of effective communication strategies to engage the target public as well as the public health and consumer protection sectors, and the industry.

2) Main outcomes highlighting the following:

I. Debated Issues

The audience was introduced to the incipient global epidemics of early onset of hearing loss due to excessive exposure to recreational content – music and videos in particular, and asked questions to understand better the key issues. The audience was acquainted with the development of a technical standard being developed in ITU Q28/16 together with WHO and experts, which will assist manufacturers in the development of personal music players that can help users listen to music safely.

II. Quotes

‘Over a billion young people are at risk of permanent hearing loss due to unsafe listening. This could be avoided through raised awareness and use of safe listening devices’
III. Overall outcomes of the session highlighting
Timely development of a technical standard for safe listening systems is paramount, as is communication of the risks and mitigation techniques to end users, as well as raising the issue to large key stakeholders, such as governments and industry.

IV. Main linkages with the Sustainable Development Goals
Prevention of early onset of hearing loss due to recreational use of personal music players will contribute to achieving SDG#3 – good health and well-being

V. Emerging Trends related to WSIS Action Lines identified during the meeting
Consumer Protection

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
Progress on efforts to conserve hearing also addressing the needs for safe listening in public venues – such as concerts, shows, cinemas, etc.
1) Main outcomes highlighting the following:

I. Debated Issues

Prof. Dr. Slawomir STANCAK, Fraunhofer-Institut für Nachrichtentechnik Heinrich-Hertz-Institut, gave a remote presentation on machine learning for the 5th generation mobile networks (5G).

The tactile Internet where machines are connected into control loops with humanoid reaction times in the sub-millisecond order is anticipated as a revolutionary leap after the mobile Internet and the Internet of things. The tactile Internet brings many advantages through a paradigm shift from transmitting information for humans to networked control systems; example applications are industrial manufacturing, networked autonomous car driving, collaborative driving, networked virtual reality, augmented virtual reality, or serious gaming. Yet, a number of technical challenges such as performance and efficiency needs to be overcome to make the tactile Internet happen.

The 5th generation mobile network (5G) is planned to outperform 4G networks with respect to ultra-reliable and low latency mobile communications, for massive machine type communications, and by providing enhanced mobile broadband. 5G networks require more than a 1000-fold increase in throughput as compared to 4G networks. This massive leap can be realized by 5G architectures compared to 4G networks through a higher spectral efficiency and massive MIMO technology antennas, much smaller cells, and 10 times wider bandwidth in millimeter part of spectrum. Those new requirements demand new approaches addressing reliability, handling system complexity, and performance, and the ability to handle many inherent unknowns.

Machine learning methods are not only widely used in traditional communications for optimization, identification, adaptation and prediction, but are used in many other applications too. Machine learning helps to cope with the massively increased complexity of systems, enhances efficiency and robustness, enables self-organizing networks, and provides robust predictions. An example for machine learning in wireless communications is the prediction of trajectories, or the estimation of load and of capacity maps for cellular hand-off among antennas. Machines are able to learn from past collected data, and using some other context information, are able to adapt their models for forecasting. Simulation of such learning algorithms yielded already very promising predictions of good quality. For example, machine learning can optimize the wireless infrastructure for energy-saving when deactivating unused systems according to the predicted traffic forecast. Still, a number of engineering and technical challenges need to be overcome to make machine learning more robust, versatile, and efficient.
In conclusion, machine learning has great potential for applicability in mobile and wireless communication.

The ITU-T Focus Group on Machine Learning for Future Networks including 5G (ITU-T FG-ML5G), which is open to the public, is addressing standardization gaps in that domain, and works on specifications for machine learning (ML) for future networks, including interfaces, network architectures, protocols, algorithms and data formats. ITU-T FG ML5G next meeting is in Xi’an, China, 24, 26-27 April 2018 with the workshop on 25th.

Quotes

Please provide two important quotes from the session and the names & organization of the person you are quoting

- The tactile Internet is anticipated as a revolutionary leap after the mobile Internet and the Internet of things. (Prof. Slawomir, FH-HHI)
- Machine learning has great potential for applicability in mobile and wireless communication. (Prof. Slawomir, FH-HHI)
- AI/ML will help to decrease the mismatch between theory and reality.

II. Overall outcomes of the session highlighting

Machine learning has great potential for applicability in mobile and wireless communication. It contributes to removal of uncertainty’s.

III. Main linkages with the Sustainable Development Goals

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation: Self-optimization of future 5G network infrastructure using machine learning techniques.

IV. Emerging Trends related to WSIS Action Lines identified during the meeting

Artificial Intelligence, Machine Learning, Tactile Internet.

Main outcomes highlighting the following:

I. Debated Issues

Please capture highlights of the main issues debated and interactions with audience

Low enrollment of females in engineering & IT fields, even in developed countries

Cultural, traditional and social barriers for the inclusion of women in the economic sector

Lack of self confidence

According to World Bank, in 155 countries out of 193, there is at least 1 law which makes it difficult for women to do business as compared to men

Retention of women in ICT sector
Lack of opportunities for women in ICTs Lack of women role models

Challenges at work place for women

Women participation in ICT labor force is low (18%-30%)

Lack of access to free and secure internet Gender digital divide

Job environment is challenging

Equal pay is not accepted in society Gender exclusion in IT a global issue

Please highlight key achievements and challenges shared by the audience and/ or panelists

Lack of assistance and funding from governments for women centered programs

Lack of Government support in crating strategic opportunities and as a result, most qualified women end up in low positions

II. Quotes

Please provide two important quotes from the session and the names & organization of the person you are quoting

Haidar Fraihat, Director, Technology for Development, UN-ESCWA

‘ICTs help enhance women productivity’ ‘Women and ICTs are intertwined together’

‘Digital economies provide a borderless opportunity fo women and girls, as we as empowering home bound ‘people’

‘We need to agree on a regional approach for addressing gender and technology, stressing the importance of multisector cooperation to reach gender equality through ICTs, where every stakeholder has a designated role’

NK Guyal, Professor, Technological University, India

‘We need special training for life balance’
III. Overall outcomes of the session highlighting

Main Outcomes of the Session

- ICTs can enable home bound workforce to be more productive Internet freedom means smart economics
- Increase access without limiting human rights
- Government, families & society need to work together to support women’s in ICTs
- Special trainings are required to enable women to maintain work & life balance
- Whole system in a country should encourage both men & women to enroll in universities
  - ICTs provides new opportunities for women’s & reduces gender bias
- Universities & schools should focus more on technical education for women
- Government should provide more specific & tailored programs for women’s
- Bridge educational divide in universities and colleges
- Women should create a network to create space for women in the field of IT
  - Government & private sector should create enabling environment
- Girls should focus on long term goals
- Governments needs to create tailored strategies for ICTs specifically for women
- Governments needs to facilitate women technopreneurs to establish their businesses
- Abandon the idea of quota system in ICTs as women are equally capable Women should focus on long term goals & plan their careers
- Maximize the potential of human capital

- Keep cataloging women who are doing good in different fields to create more visibility for female role models main conclusions reached during the discussion

- Great opportunity to promote female role models as technopreneurs/ICT professionals

- Governments and industry should create jobs opportunities for female ICT professionals and support female technopreneurs

- Cataloguing women technopreneurs/ICT professionals

- Create space for girls to enhance their capabilities in the field of ICTs at schools and universities

- Ensure gender consideration in trade policy and e-commerce

### IV. Main linkages with the Sustainable Development Goals

- **Goal 1: End poverty in all its forms everywhere**
  
  Through engagement of women technopreneurs/ICT professionals in economic and civic engagement to promote sustainable livelihoods, sustainable economic and financial well-being and reduction in poverty

- **Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**
  
  Through specific recommendations for the enhancement of curriculum in STEM and entrepreneurship in education institutions (schools and universities) to ensure the successful engagement of women as ICT professionals and technopreneurs

- **Goal 5: Achieve gender equality and empower all women and girls**
  
  Through women technopreneurs/ICT professionals inclusion into the economy, ensure reduction in gender inequality and empowerment of women at grassroots
• **Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all**

  Through policy enhancements for governments and industry to enable women and girls to successfully and safely pursue their careers as ICT professionals and technopreneurs

• **Goal 17: Revitalize the global partnership for sustainable development**

  Through specific recommendations for governments, policy makers, development agencies, development practitioners, industry and civil society to cooperate for the design and implementation of key initiatives, programs and interventions to holistically include and engage the women at the local, national and regional levels

□ **Emerging Trends related to WSIS Action Lines identified during the meeting**

**C3. Access to information and knowledge**

- Need for greater sharing of global experiences and lessons learned

- Need for greater industry collaboration and participation during WSIS and the need for innovative programs to promote and enable women’s participation as ICT professionals and technopreneurs

**C4. Capacity building**

- Need for the enhancement of curriculum in STEM and entrepreneurship in education institutions (schools and universities) to ensure the successful engagement of women as ICT professionals and technopreneurs

**C6. Enabling environment**

- Need for specific recommendations for policy enhancements for governments and industry to enable women to successfully and safely engage with STEM as ICT professionals and technopreneurs

**C8. Cultural diversity and identity, linguistic diversity and local content**

- Need for sharing global experiences and recommendations to enable women’s holistic inclusion and engagement across digital ecosystem and STEM
C11. International and regional cooperation

- Need for governments, policy makers, development agencies, development practitioners, industry and civil society to cooperate for the design and implementation of key initiatives, programs and interventions to holistically include and engage the women at the local, national and regional levels.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- Dedicated session on AI for SDGs

  Dedicated session led by University student from 4 regions of the world discussing the development agenda and the role ICT & AI can play to achieve the SDG.
Thematic Workshop

African Coordination meeting on WSIS Implementation

ITU, UAT/AUC, and UNECA

Monday 19 March 2018
Room Popov 2 - ITU

14:00 – 16:00

Please find more information on the workshop here:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/315#intro

1) Key achievements, announcements, launches, agreements, and commitments

The meeting was briefed on the outcome of the regional review held in 2017. Following the outcome of the General Assembly in 2016, a recommendation was passed to hold an annual regional WSIS meetings. As a result, the AU Ministers meeting in 2017 adopted a resolution to organize one forum and hence the first WSIS review meeting was held in Addis Ababa from 20-24 November, 2018. The meeting noted that African economies have sustained a solid growth rate over the past two decades after the previous decades of stagnation and decline. It was observed that, in the last decade, many African countries have been growing faster than they had previously. Several African countries have chosen to put “ICT for Transformation towards sustainable and resilient societies” at the heart of their long-term plans. Mainly the frameworks these countries have chosen to put in place in order to implement the WSIS action lines prove this. Nevertheless, several challenges remain, among which are: the lack of access to affordable and reliable ICT technologies and services; low digital inclusion of children, youth, persons with disabilities, older persons, women and communities in remote and rural environments; and the lack of content development. In effect, the digital divide is today widespread in Africa with a very low rate of connectivity. There are less private sector participation from Africa and therefore currently approaching them to join ITU as SMEs at a low cost so that ITU can patent their technology hence earning them good revenue.

Upcoming Event

- 2-4 May, 2018 – Africa SDG Forum in Dakar, Senegal by ECA
- 3-6 July, 2018 - WSIS Africa Regional Forum, Tunisia
- Pan Africa on Digital Economy and Growth meeting – The venue and dates to be confirmed
- ECA, ATU and ITU invited the delegates to visit respective websites for an update on the upcoming activities.
2) **Main outcomes highlighting the following:**

**I. Debated Issues**
The meeting was attended by all the stakeholders which addressed the following questions:

- Where are we now on the implementation of WSIS outcome?
- What is the role of ICT development in achieving SDGs?
- Is ICT in the national agenda and the AU agenda 2063?
- Skill Development
- Market access – what kind of rule do we need to put in place to allow access?
- Investment in the sector: Role of Government and Private sector
- Is there a right skill for digital transition?

**II. Overall outcomes of the session highlighting**

- Integrate WSISI process in the agenda of the SDGs: In this regard, organise Africa Regional WSIS Forum within the Africa Regional Forum for Sustainable Development to give more emphasize to the vent as well to highlight the role of ICT for achieving SDGs.
- Align the WSIS Theme with the HLPF theme
- Create a good enabling environment for investors
- Government and the private sector have to work together to put in place the right infrastructure
- Include it in the school/education curriculum for skill and content development
- Provide finance and market access
- Innovation
- ECA in collaboration with its partner to set up a Task Force to follow and monitor contributions of ICT to achieve SDGs and the level of ICT in the region
- Member states to see how to encourage youth to embrace an innovative skill in order to develop applications nationally
- Member states to open up the market to the private sector by providing guidelines
- All countries to work together to know what the other is doing
- The need for ECA, ATU, AUC and ITU on the need to come together to support its membership.

**III. Main linkages with the Sustainable Development Goals**

The meeting facilitates the continued discussion of best ways of harnessing ICTs to support the implementation of the SDGs. Discussion focused on the contribution of ICT to the achievement of Goals 6, 7, 11, 12 and 15 and 17. Of particular importance, was an open debate on, and discovery of, realistic mechanisms and instruments capable of helping African countries to implement the 2030 Agenda SDG (in line with UNGA Resolution A/70/1).

**IV. Emerging Trends related to WSIS Action Lines identified during the meeting**

- Innovation is key for sustainable development
- ICT on climate change should be more emphasize in the WSIS Review 2018/19
V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- ICT on climate change
- Disaster Risk Management
- Private Sector Development
Thematic Workshop

Women in STEM as a business case for a better society: Let’s be visible at last?

International Network of Women Engineers & Scientists

Monday 19 March 2018 14:30 – 16:15
Room Popov 2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/141#intro

1. Key achievements, announcements, launches, agreements, and commitments

We signed a high-level letter of intent between the high-level signatories listed below:

• H.E. Thomas Schneider, Ambassadeur et Directeur des Relations Internationales, Office Fédéral des Communications, Suisse

• H.E. Aurélie Adam Soulé, Ministre de l’Economie et la communication Numériques, République du Bénin

• Mario Alberto Fócil Ortega, Titular de la Unidad de Administración, Instituto Federal de Telecomunicaciones, México

• Dr Brahima Sanou, Directeur du Bureau de Développement, Union Internationale des Télécommunications

On the common activities to be conducted under the priority actions listed below, aligned with INWES vision and ITU/WSIS strategic principles that are to build a better future worldwide through our Engineering and Scientific societies, including men and women’s participation in ICTs.

Concretely we have 3 outputs:

1. INWES will continue to work in collaboration across our global platform with partners and governments: We will provide expertise, workshops and projects to support the engagement, recruitment and retention of women in ICTs.

2. INWES will share good practice in ICTs for women and girls: we will provide programmes for mentoring for women and girls in ICTs; resources and materials to reach all young people; technology and leadership programmes to empower women to be influencers, creators and developers of ICTs.
3. INWES will build on past campaigns to raise awareness at the highest levels of gender issues in ICTs: we call now on governments and policy-makers to implement gender mainstreaming in ICTs.

2. Main outcomes highlighting the following:

I. Debated Issues

Please capture highlights of the main issues debated and interactions with audience.

Please highlight key achievements and challenges shared by the audience and/ or panelists

On Monday the 19th March 2018 we organized two successful workshops led by women Engineers & Scientists working in ICTs and in inclusive projects around the globe. We were supported by the Swiss Ambassador to the UN and the Benin minister of Digital Economy, together with a key partner from the regulatory world: IFT de Mexico and the Director of the BDT Dr Sanou.

The workshops put the light on the role of women engineers & scientists activities in implementing solutions for inclusiveness and access to the Internet and ICTs for all, while bringing sound and sustainable economic development and contributing positively to poverty reduction strategies and actions.

II. Quotes

Prof. Liliane Dorveaux, vice president for industrial relations, INWES: “The gender equality issue is the key challenge from now for Companies: there is a need to change mindsets, working towards diversity at large”

Mario Focil, head of Administration of the Mexican telecom operator, IFT – Instituto Federal de telecomunicaciones: “the inclusion agenda of 21st century is the inclusion of women and girls. If we do not include girls and women we will be losing not just money, we will be losing the future”

III. Overall outcomes of the session highlighting

Main conclusions reached during the discussion the vision for implementation of WSIS Action lines beyond 2015

Our priority actions are aligned with INWES vision and ITU/WSIS strategic principles that are to build a better future worldwide through our Engineering and Scientific societies, including men and women’s participation in ICTs.
Concretely we have 3 outputs:

1: INWES will continue to work in collaboration across our global platform with partners and governments: We will provide expertise, workshops and projects to support the engagement, recruitment and retention of women in ICTs.

2: INWES will share good practice in ICTs for women and girls: we will provide programmes for mentoring for women and girls in ICTs; resources and materials to reach all young people; technology and leadership programmes to empower women to be influencers, creators and developers of ICTs.

3: INWES will build on past campaigns to raise awareness at the highest levels of gender issues in ICTs: we call now on governments and policy-makers to implement gender mainstreaming in ICTs.

IV. **Main linkages with the Sustainable Development Goals**

Serving humanities through achievement of the WSIS action lines and quick strategies for SDGs implementation, with the high contribution of engineering societies in the World, while mainstreaming Gender at all levels, will help align strongly to the adopted SDGs, including the following Goals:

- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all
- Goal 10: Reduce inequality within and among countries
- Goal 16: Promote just, peaceful and inclusive societies
- Goal 17: Revitalize the global partnership for sustainable development

As women engineers and architects are included in the process, on equal basis, we believe our major strength is to propose clearly to contribute to GOAL 5. Of course, we also are contributing to major development goals listed above.

V. **Emerging Trends related to WSIS Action Lines identified during the meeting**

- Strategic partnerships with private and public sector and INWES being the facilitator
- Helping regulators to pursue modern ways of Human Resource Management

VI. **Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019**

- Strategic Human Resource in the Telecom Regulation world!
- Challenge 50/50 : women and men on equal basis @WSIS:! 
Maximising impact for sustainable development: how core business activities can achieve a multiplier effect through equal opportunity sourcing from women owned businesses.

ITU/ITC/UN Women/WeConnect
Monday 19 March 2018 14:30 – 16:15
Room K1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/195#intro

1) Key achievements, announcements, launches, agreements, and commitments

The goal of the session was to raise awareness of the opportunity to, and impact of, equal opportunity sourcing from women owned/managed businesses. This is an emerging practice that has taken root in other sectors, but is relatively new to the ICT/tech sector. Given gender imbalance in the sector, gender responsive sourcing promoting supplier diversity is a key approach to both strengthening supply chains and empowering women - a multiplier effect for sustainable development and business success.

2) Main outcomes highlighting the following:

I. Debated Issues

- Women face many barriers in trying to grow their businesses, including financial and social and cultural barriers.
- E-commerce can level the playing-field – according to an ITC survey, women-owned businesses achieve parity in numbers in online business, whereas only 25% of businesses engaging in offline trade are women-owned.
- Women face a delicate juggling act in trying to balance the many different demands on their time, as well as expectations of their roles.
- How taking an intentional approach to ensure equal opportunity sourcing from women’s owned businesses makes business sense and is the right thing to do.
II. Quotes

- **Anna Mori**, Partnerships Officer at ITC – “the #SheTrades initiative to connect one million women to international markets by 2020. This might seem ambitious, but it is achievable, and ITC is working with a wide range of partners to achieve this”.

- Andrea Fimian, EMEA Supplier Diversity Program Manager at IBM – “IBM launched its Supplier Diversity Programme in the US in 1968, 50 years ago, before the Civil Rights Act, to encourage out-of-the-box thinking and diversity of inputs and supplies from minorities. And we took it global in 2003, with great success – we won the European Diversity Award for our Global Supplier Diversity Program in 2017”.

- **Ms. Christine Lőew**, Director, UN Women Liaison Office in Geneva: “UN Women with inputs from WeConnect developed a Guide to Gender-Responsive Corporate Procurement developed in 2017, explaining the problem and what we can do to solve them. This guide is very handily made, it will be accompanied by online materials for corporations, but also for the other side to train women and SMEs to see what they can do better and what they have to learn to have better access”.

- **Pippa Biggs**, ITU – “EQUALS is a global partnership for gender equality in the digital age with a focus on access, skills, leadership and research. ICT Ministries and tech companies can benefit women, while improving their procurement / supply chains by adopting equal opportunity sourcing from women owned/managed businesses. It is a key way of positively impacting women’s entrepreneurship and employment.”

III. Overall outcomes of the session highlighting

- Equal opportunity sourcing from women owned/managed businesses is a strategy that has been successful to strengthen government and business’ supply chains as well as strengthen women’s entrepreneurship with the associated benefits for gender equality and the economy.
- Some governments have already made commitments and set policies across their departments for procurement along these lines.
- Some tech companies already have long experience with such supplier diversity policies and practices.
- There is a huge opportunity to scale up such policies, practices and commitments in tech with benefits for governments, businesses, women, families and economies.
- Bringing women owned/managed businesses online has a major impact on the growth of those businesses.
- As with many other dimensions of gender equality, partnerships are key to achieving greater reach and impact.

IV. Main linkages with the Sustainable Development Goals
SDG 5 and SDG 8.

V. Emerging Trends related to WSIS Action Lines identified during the meeting
The majority of women-owned businesses tend to be smaller.
A growing trend towards sourcing to women-owned and women-controlled businesses

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
The importance of bridging the gender digital divide.
Thematic Workshop

ICT Professional’s Duty of Care in protecting everyone in the Fourth Industrial Revolution

International Federation for Information Processing IFIP IP3

Monday 19 March 2018

Room K2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/170#intro

1) Key achievements, announcements, launches, agreements, and commitments

IFIP IP3 recently accredited the Professional certification scheme of Information Processing Society Japan. This furthers our work in developing ICT as a Global Profession, with ICT practitioners maintaining and updating their knowledge, skills and competence, and behaving ethically and being accountable to society for what they do.

2) Main outcomes highlighting the following

I. Debated Issues

- How do we get ICT providers to comply with requirements without regulation? There is some discussion about a “Hippocratic Oath” for those who create Artificial Intelligence products, but what sanction is there for those who break the oath. Compliance will come but usage – when companies and governments only employ certified professionals, it will become a de facto requirement even though it is not legislated. The same applied to those that provide products.

- Cyber-physical systems comprise three clusters: Physical (4D printing, IoT, …), Digital (transformation), Biological (CRISPR, Cloning, Synthetic life).

- CASAL are four forms of life: Classic, the modern form of our species existing for tens of thousands of years and represented by panel members and member states
  
  - Augmented, those of us, who are already augmented by technology wearables and implants
- Synthetic, early fully synthetic genomes, which are appearing in labs this year with humans appearing in under ten years.
- Artificial, early AI children evidenced by Sophia (Robot), as a hint of what is to come—sharing.accelerating their development and knowledge through a Mind Cloud.
- Trust as a multi-disciplinary concept.

II. Quotes

- “Predictability, consistency and transparency are all requirements for systems.” Ansgar Koene, University of Nottingham
- “There is such rapid change in technology, and we take technology for granted. When we hear about progress in Artificial Intelligence, and Robotics we realize that machines are getting smarter, but maybe also more malicious”. Marilyn Cade, IGF
- “Moore’s law is kinda running out of steam … [we need quantum computing to] create all of these rich experiences we talk about, all of this artificial intelligence.” Satya Nadella, Microsoft CEO (quote contained in presentation, not from audience).
- “We used to believe that the world would end by a cataclysmic natural event, such as those predicted by Nostradamus. But in the 21st Century, given our almost total reliance on technology, it is more likely that a cyber-breach could cause the end of the world as we know it.” Moira de Roche, IFIP IP3 Chair (Presenter)
- “Industry 4.0 technologies will impact all of the 17 Sustainable Development Goals.”, Stephen Ibaraki, IFIP IP3 Vice-Chair (Presenter)

III. Overall outcomes of the session highlighting

- We have a duty to promote Trust and the Duty of Care on both the provider and consumer side of ICT Products and services. The vision for implementation of WSIS Action lines beyond 2015.
- The rapid developments in Artificial Intelligence make trust and security imperative—we must catch up because we are not there yet with systems already in daily use.

IV. Main linkages with the Sustainable Development Goals

Ai will contribute to:

- SDG! – used to track poverty levels
- SDG3 – Diagnosis of illness
- SDG4 – development programs and education
- SDG8 – Micro-finance
- SDG9 – Innovation & Infrastructure, Hybrid manufacturing using e.g. 3D printers
- SDG 11 & 12 – Greenhous emissions & Smart Cities
- SDG 17 – Global partnerships
• Trust & Duty of Care – Intersect all SDGs because they ultimately rely on safe, secure ICTs

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Action Line C7 – ICT and applications are affected by Industry 4.0 technologies

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

How can we use Industry 4.0 technologies to prevent cyber-attacks?
Thematic Workshop

How to apply and achieve the 17 SDGs in a world where the evolution of technology is exponential and where nearly all social and economic models are disrupted? The key prerequisites, the tools and methodologies, structures and cultures

Raymond Morel, Philip Koenig, Mohamed Balghouthi from IFIP, G4, Social IN3

Monday 19 June 2018 14:30 – 16:15
Room M - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/318#intro

G4 is a societal civil society movement; we impact and act upon 5 axes:

G4 as Global Goals for Greater Good:

1. Actualized sciences and technology of 21st century are underutilised levers and accelerators for the SDGs and corresponding complex societal intertwined transformations. In particular we need to integrate faster and better embody human sciences, neurocogitivism, epigenetics, STEM, NBIC (Science Technology Engineering Math; Nano, Bio, Cognitive). Furthermore, wisdom of Great Traditions and First Nations can also to be integrated faster into sciences and our schools for all ages, in order for each of us and our organizations to become more integral and holistic. This is our belief; it is based on the life experiences of the cofounders of G4. This is also what today speakers’ support is: let’s leverage further our updated knowledge & wisdom.

2. In order to become regenerative by 2030 via the Agenda 2030 process, we would need about 7000 city regions to engage effectively into the societal SDGs / NDCs transitions by 2020. To have an effective & efficient diffusion process, we would need many voluntary city regions: about 20 lighthouses representing all continents and different socio-economic realities, and 200 pioneers’ exemplary city regions, that will pilote, test, validate options before glocal replications for the greater good. G4 uses this foundational scientific principle - See theory of diffusion of innovation. Federal states, the 17 “not at war” countries, and the 5 Small States are well positioned countries to work with Geneva, Switzerland and UNOG on this project.

3. The project architecture and governance required for these voluntary city / regions needs to be codesigned and orchestrated with new mindsets, new approaches, new organisations and cultures in order to seamlessly move between
design thinking, development and operational transformation: hire **systemic thinkers and actors**, use **systemic approaches and processes**, incl. for governance and systems, and cocreate **living labs**, as defined by MIT. Engaged city regions are more effective, can reduce costs by 40%, by implementing a. an architecture of Living labs around current public, private and civil society organisations b. populate Living labs with systems thinkers and actors, c. use the latest systemic systems - [resilience.io](https://resilience.io) - and computers, and a systemic governance in the sense of global goal number 17. *The cofounders of G4 have experienced the emerging power of these systemic dimensions, and support the build up of systemic capacity and capability This is what Andrea Bassi, Bob Bishop will also address.*

**G4 as Greater Geneva for Global Goals**

4. The international Greater Geneva ecosystem is unique and should join forces, work as one, be exemplary to support the acceleration of the global opportunities for the global goals: i.e. **to find, engage and monitor the core team city regions**, foster world wide best practices, share 21st century sciences & technology progress, embody wisdom of first nations via UNOG, WEF, WBCSD, CERN, ICRC, ...

5. The **local Greater Geneva societal players, should be such a lighthouse** for Switzerland and the world, for all the international delegations passing thru Geneva and UNOG; it should work hand in hand with the international Greater Geneva and should involve and engage all local players like, **Cantons of GE and VD, Lyon and Grenoble, IMD, EPFL, UNIGE - UNIL, HUG - CHUV, ...**

Link to session: [https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/318#intro](https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/318#intro)


**1. Key achievements, announcements, launches, agreements, and commitments**

- **HDRR (Human Digital Rights & Responsibilities)** - we invited various member-countries to support the drive the proposal up to the UN GA; With WSIS Support, further members could be willing to accelerate and support this movement.

- **City Olympics** - apply basic scientific principles of the theory of diffusion of innovation, in order to effectively leverage the SDGs transformations across countries via city regions. UN SDG labs will be conduits to accompany the process.

- **Local autonomy in drinkable water, sustainable energy & biological food**: We strongly suggest to urge the UN to also look into novel desalination technology to produce clean water for everyone and into inventions of unconventional energy and propulsion systems. We think that we would not have to be faced with a water or energy crisis at all, but **we would have to re-build our economic system.**
- **Systemic capacities and capabilities** - from a HR, leadership, neurosciences perspective, it becomes necessary to address these human underutilized / understood potentials, as much in public, private as civil society organizations. confer: **G4 is a societal civil society movement; we impact and act upon 5 axes**

- **Sense of urgency** to get willing and capable city regions to adhere to the transformational movement. If we need to have reached NDCs by 2030, we will need to have 7000 city regions up and running into a systemic SDGs / Agenda 2030 process by 2020. A core team of 20/30 cities needs to be set up as soon as possible and linked with the UN SDGs Lab, supported by WEF, WBCSD, UN Global Compact, UNOG (cf above point 2 of **G4 as Global Goals for Greater Good**)

- **Systemic reporting** - follow the excellent example from Japan and potential others who are already engaged into a **systemic perspective**.

2. Main outcomes highlighting the following:

I. Quotes

**From Dirk Helbing: Participatory Resilience**

“Today, the resilience of cities and systems is becoming ever more important. It means the ability to withstand a crisis, to quickly recover from a disaster or to deal with unexpected developments. Anti-fragility is a related concept, aiming to use challenging events as opportunity to re-organize a system in such a way that a higher level of functionality or performance is reached.

Systemic resilience can be further strengthened by diverse and decentralized/modular solutions as well as by bringing different local resources together efficiently with next-generation sharing economy platforms. These should be decentralized (and thereby independent from the functionality of an operation center), and they should offer everyone the opportunity to contribute knowledge, ideas, talent, resources, products or services in a responsible and fair way.

The potential power of such systems became clear during an Earthquake resilience hackathon organized in San Francisco in collaboration with Swissnex.[1] There, one smartphone app (“Amigocloud”) was proposed to report damaged infrastructures and other problems by uploading it to a map with peoples’ smartphones in a geo-located way. Another app (“Helping Hands”) offered the possibility to request help in the neighborhood, offer support or resources, and coordinate supply and demand locally. Autonomous charging stations using solar panels (“Charge Beacons”) would allow people to recharge their smartphones. Taken altogether, and extended by ad-hoc networking and a decentralized payment system, potentially based on blockchain technology, this could become a powerful survival tool that would allow people to help themselves and help each other, even if centralized infrastructure would be interrupted. Complementary, one could also consider to add energy-autonomous fab labs or maker spaces, in order to be able to locally fabricate objects and tools as needed.

In conclusion, participatory resilience could mobilize the full response capacity of society by **empowering people and mobilizing civil society.**”
CONCLUSION:
According to IFIP position 15 years ago (Engineering the Knowledge Societies), and it was the first workshop of the WSIS at that time, we are happy to notice that WSIS process is adjusting to societal and human needs first and not only technology and systems evolutions.

We expect next year’s WSIS Forum 2019 to be more transformational in its content & proc
1) Key achievements, announcements, launches, agreements, and commitments

The presenters announced the launch of the online consultation process of the Digital Literacy Global Framework. The UNESCO Institute for Statistics (UIS), through the Global Alliance to Monitor Learning, is committed to pave the way forward to the first globally comparable data on digital literacy and how these critical skills are understood and assessed by countries around the world.

2) Main outcomes highlighting the following:

The session presented the work of the Global Alliance to Monitor Learning (GAML) task force on SDG thematic indicator 4.4.2, regarding digital literacy skills. Mr Alexandre Barbosa, Head of the Regional Center for Studies on the Development of the Information Society (CETIC.br), who moderated the discussion, stressed that in order to monitor country progress in the framework of SDG target 4.4 on skills for work, “it is necessary to establish a proper framework for measuring digital skills”.

Mr Manos Antoninis, Director of the Global Education Monitoring Report (GEMR), in his capacity as Chair of the GAML Task Force 4.4, presented the draft Digital Literacy Global Framework, which has been prepared by a team at the Centre for Information Technology in Education at the University of Hong Kong. He explained that it built on the European Commission’s Digital Competence Framework for Citizens, or DigComp 2.1, as the base framework. The team “collected digital literacy frameworks and use case examples from different regions and sectors around the world” and then “conducted in-depth consultation interviews with experts from different regions to seek their feedback” before opening it on public consultation on March 7.

The session was further strengthened with the participation of Ms Tatiana Jereissati, from CETIC.br and Ms Diana Parra Silva from the Agency for e-Government and Information and Knowledge Society, Office of the President of Uruguay, where they both shared the national experiences of Brazil and Uruguay in measuring digital skills.

The main outcome of the session has been informing WSIS about the latest developments of the draft Digital Literacy Global Framework and inviting the WSIS
participants to take part in the online consultation. Following that, existing assessments will be mapped on to the framework and gaps will be identified in assessments that would need to be addressed in the next phase of the project.

It is suggested that the WSIS Forum 2019 considers a session to review developments in the mapping of existing assessments on the final Digital Literacy Global Framework.
1) Key achievements, announcements, launches, agreements, and commitments

This session focused on a key requirement for building vibrant ICT Ecosystems - funding. The discussion was around investing in and funding of bankable projects for sustained development with immediate and long term measurable socio-economic impact. Examples of successful ICT4SDG projects fostering digital transformation were presented. Mechanism of crowd funding was presented drawing attention to new opportunities for inventors and stakeholders driving ICT centric innovation.

2) Main outcomes highlighting the following:

I. Debated Issues

- GIZ and Government ministry are funding projects in digital transformation in many countries.
- SIDA has euro1.5b funding for development aid, but only 1% is dedicated to ICT. Decision makers need to shift this spending allocation.
- Bangladesh “whole government” approach based on a common language of TCV is accelerating transformation. Several instrument such as the innovation fund, the PPP funding on big infrastructure, funding of micro-entrepreneurs to deliver government services, crowdfunding and acceleration services platform, as well as the incubation iLab are helping transform the funding landscape.
- Ghana’s GIFEC use of USF fund in a tripartite model (PPP) with ministry, telco and vendors is helping accelerate access in rural areas.
- WEF is trying to build a platform that will link both demand and supply side to fund projects that accelerate digital transformation. WEF focus is how to get more investment to last mile. To deliver on this, WEF is building a platform for matching projects to funding.
- SAMENA: Money is available with operators, mechanism are available but incentives are not there. If the infrastructure that is there is not sustainable, we cannot deploy our investment.
- Wecan.fund: crowdfunding as another way to fund projects. Different type of crowdfunding model. If you have the community, it is easier to get the funds. Wecan.fund vision believes that crowdfunding can fund any projects. The company is a technology provider who can offer an API to broker: any type of crowdfunding, multi-currency, customizable, automated, etc. Wecan.fund offer technology platform to offer funding mechanism to stakeholders.
- Intel finance ICT education programs and affordable broadband programs for low income persons.
- Political support and coordination between different institutions is critical to get digital transformation programs going. Existing national investment should be directed to have ICT components.

**II. key achievements and challenges shared by the audience and/ or panelist**

Funding for development aid is available but is not dedicated to ICT. Funding for ICTs when available is lacking the win win model and incentive to get all stakeholders on board. Crowd funding and other new approaches to funding projects need to be looked into. World Banks and other regional Banks’ view on the matter would be needed.

**III. Quotes**

“From telecom operators’ perspective, there is fund available for driving Digital Transformation. The question is how to apply win-win business models that caters for all stakeholders to tap into this fund” **Mr. Bocar A. Ba, Chief Executive Officer of SAMENA Telecommunications Council**

“New financing mechanisms, for ICT Centric innovation ecosystems, should be further explored and applied. We should continue working together with all stakeholders to strengthen the ICT element in National Sustainable Development Strategies unlocking new opportunities for supporting the countries to accelerate Digital Transformation.” **Jaroslaw Ponder, Head of ITU Office for Europe**

**IV. Overall outcomes of the session highlighting**

Digital Transformation needs to be understood, developed and measured. Traditional as well as innovation funding mechanisms are required together with new forms of partnership and new business models

**V. Main linkages with the Sustainable Development Goals**
SDG 9 and SDG 17

**VI. Emerging Trends related to WSIS Action Lines identified during the meeting**
Funding models for Digital Transformation

**VII. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019**
Innovation for Digital Transformation & Rethinking resource optimizing and synergies Crowdfunding and other new approaches to mobilizing funds. World Banks and other regional Banks’ view on the matter would be needed.
1) Key achievements, announcements, launches, agreements, and commitments

ESCWA held a thematic workshop of consultations with the Arab experts participating in the WSIS Forum 2018, during which the participants reviewed the vision on how to support the Arab region in the area of digital technologies for the attainment of the 2030 Agenda for Sustainable Development and its 17 goals.


Participants discussed the main ideas of the new Report under conceptualization and the key research questions it would seek to answer and addressed the means of collaboration between ESCWA and the various partners on the new Report.

The participants called on ESCWA to hold a periodical pan-Arab review and conference on the information society and the digital economy to sharpen, coordinate and follow up the efforts of the Arab region in the coming decade.

2) Main outcomes highlighting the following:

The event covered the main topics of priority in Technology for Development Horizon 2030, and the use of technology for Government transformation, with status, gaps, and vision 2030 with benchmarks and necessary policy changes essential to reduce development gaps expected in 2030.

The discussion focused on:

- Concept and focus of the 2019 edition of ESCWA Publication on Arab Digital Technologies for Sustainable Development Report 2019
Collaboration between ESCWA and different parties in the first version of the Arab WSIS Forum 2019.

I. Debated Issues

- ESCWA role in the past years in supporting the Arab region in digital technology to achieve the 2030 agenda vision for Sustainable Development.
- Concept of the 2019 report on Arab Digital technologies for Sustainable Development
- Future collaboration between ESCWA and various organizations in the Arab region to enhance their status in achieving 2030 goals for Sustainable Development
- Launching the first version of the Arab-WSIS during 2019

II. Quotes

- “We believe that ESCWA is well positioned to assume that Role of Regional Review on WSIS 2030 Agenda.” Head of Omani Delegation
- “We are ready to jointly work with ESCWA to convene Arab WSIS-Like conference in 2019.” ITU-ARO Representative

III. Overall outcomes of the session highlighting:

- To launch an Arab WSIS-Like process led by UN-ESCWA.
- The vision for implementation of WSIS Action lines beyond 2015
- Review of SIS Action Lines should be more holistic rather than line-by-line.

IV. Main linkages with the Sustainable Development Goals

- Goal 3: Ensure healthy lives and promote well-being for all
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all
- Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 16: Promote just, peaceful and inclusive societies
- Goal 17: Revitalize the global partnership for sustainable development

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Grouping lines according to ESCWA ISDEHAR framework where political, economic, and social and Environmental SDGs are tackled in clusters.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

ESCWA will launch the Arab WSIS 2019 in partnership with various organizations in the Arab region.
Thematic Workshop

“Free Flow of Data: Panacea or Danger?” AND “Concentration in Internet Services”

Association for Proper Internet Governance/JustNet Coalition

Monday 19 March 2018
Room H1 - ITU

16:30 – 18:15

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/144#intro

1) Main outcomes highlighting the following:

I. Debated Issues

Data is the new oil: its monetization funds many Internet services at present. Users are not always fairly compensated for the value of the data they provide. Monetization of data has a significant impact on personal privacy, which is a fundamental human right. Consequently, the question of whether data should flow freely is complex and must not be discussed as if it were merely a technical or a Trade-related issues.

We are seeing increasing concentration of providers of Internet services, and some instances of abuse of dominant positions. The concentration is favored by network effects and economies of scale. Traditional anti-trust law is not necessarily adequate to deal with the issues that are emerging, in particular because Internet service providers are global companies and thus national competition authorities find it difficult to evaluate their actions.

The key achievements are a growing understanding of the issues outlined above. The key challenges are to further educate all stakeholders, and to find solutions that will result in benefits for all.

II. Quotes

“Data is the new oil. Nobody would give away their oil for free. So why data should be given away in exchange for services whose value is much lower than the value of the data?”
Richard Hill, Association for Proper Internet Governance

“The Internet was supposed to favor competition, and it has in many areas. But base Internet services such as searches, social networks, and online retail, are becoming increasingly concentrated. There is a need to address this at the international level.”
Richard Hill, Association for Proper Internet Governance
III. Overall outcomes of the session highlighting

Data flows, both within a country, and cross-border, raise financial and human rights issues that require serious discussion. There is a need for ways and means to ensure competition at the international level for base Internet services. A detailed summary is found at: https://dig.watch/sessions/free-flow-data-panacea-or-danger-and-concentration-internet-services

IV. Main linkages with the Sustainable Development Goals

Goals 8 and 10

V. Emerging Trends related to WSIS Action Lines identified during the meeting

There is a clear need for a global data protection regime, and for global action to maintain competition in Internet services at the international level.
Thematic Workshop

A Dialogue on different cooperation models for approaches to Internet Public Policy development

Internet Corporation for Assigned Names and Numbers (ICANN)

Monday 19 March 2018

Room K2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/196#intro

1) Key achievements, announcements, launches, agreements, and commitments

This was a very constructive and informative session on the first day of the WSIS Forum. It explored a number of pertinent issues and where, for many of the organisations present, multistakeholder approaches had made a significant contribution to their initiatives and successes. In contrast was noted that while there were effective multilateral solutions, in cyberspace there had been problems. The WSIS Forum approach to inclusiveness was recognised as was the IGF (and NRIs) and the ICANN IANA Transition. Was thought that Cybersecurity was possible most significant Internet issue on which progress (and solutions) were required.

2) Main outcomes highlighting the following:

I. Debated Issues

- The uniqueness of ICANN’s policy space, the result of its bottom up policy process, and the fact that ICANN embodies multistakeholder practices
- The flourishment of the Internet governance ecosystem and the mushrooming of different initiatives that look at only one part of the problem; the emergence of “theme silos”;
- In view of current national and international challenges, governments needed to use mechanisms to get closer to the private sector and civil society.
- Although there are growing efforts to collaborate at the national and international level, such as at WSIS, the Internet Governance Forum, and events like E-Commerce Week, it is often hard to work on Internet issues given silos; continue to be closed in their silos.
- Several ITU activities now include members from the private sector, civil society, and academia. Aside from the Plenipotentiary conference, there are other multiple events and initiatives, such as the World Telecommunication/ICT Policy Forum (WTPF) and
the ITU Council Working Group / Open Consultation on International Internet-related Public Policy Issues (CWG-Internet) that are open to stakeholder participation.

- The lack of effectiveness of recent initiatives concerning regulating cyberspace and the need to look for alternative venues, institutions or mechanisms, to deal with cybersecurity policy-making.
- The complexities surrounding Internet governance, and that multistakeholder processes, such as the IGF provide good opportunities for constructive discussions and the development of effective solutions;
- The need for honesty when simple consultation processes are defined as multistakeholder processes; which they are not.

II. Quotes

“We have to be more honest as to what is and what not a multistakeholder process is”

Tatiana Tropina

III. Overall outcomes of the session highlighting

There were no specific outcomes as such; but there was a better understanding of current processes, including the current lack of effective of governance arrangements concerning cyberspace.

IV. Main linkages with the Sustainable Development Goals

There were no specific linkages identified, apart from the overall linked goal of achieving universal connectivity (through appropriate policies) which then feeds into further enabling marginalized societies affordable education and perhaps other on-line services.

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

The overall governance of cyberspace may be a good theme for the Forum in 2019’
Thematic Workshop

Is Africa ready for a Digital Transformation?

ACSIS - African Civil Society on the Information Society

Thursday 20 March 2018

Room Popov 2 - ITU

09:00 – 10:45

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/169#intro

1. Key achievements, announcements, launches, agreements, and commitments

Digital transformation is very challenging in Africa due to accurate priorities such as Energy, Access, Literacy, Language barrier, basic education, size of some countries, security in some countries, broadband, misuse of ICT and the Internet, low financial impact ICT sector in Africa

2. Main outcomes highlighting the following:

I. Debated Issues
   - Digital transformation
   - Access
   - Support innovation
   - Excellent in some countries like Ghana (e-services, digitalization port activities, e-procurement, new companies in 24 hours, 5 marine cables, ), Senegal (more than 49 e-services are online), Mali (conflicting priority, barriers to digital transformation eg. size of the country, the security issue, etc.); Benin (large band in all municipalities, e-government, francophone network of ICT Minister)
   - Conflicting priorities

II. Key achievements and challenges shared by the audience and/ or panelists
   - Africa is moving with good case studies (RDC, Chad, Senegal, Rwanda, Tunisia, Benin, Ghana)
   - Necessity to develop more skills
   - Benefit more from the financial resources coming digital economy
   - Develop e-attitude among civil servants (training on Internet governance)
   - Ratify the convention on cybersecurity across the continent
   - Opportunity of the Continental Free Trade Area and link it with e-commerce
   - Develop a continental leadership on critical issues

III. Quotes

“ICT is an enabler. Digital transformation is not a competition. It should be qualitative through fulfilling some priorities in Africa and priorities” le Lièvre et la tortue
IV. Overall outcomes of the session highlighting

- Main conclusions reached during the discussion Africa is ready for digital transformation. Africa is moving. Africa needs more resources for innovation and have the resources.
- the vision for implementation of WSIS Action lines beyond 2015 Develop a general framework plan for digital transformation in Africa Training and sensitization

V. Main linkages with the Sustainable Development Goals

- Training and education (skills, Internet Governance) Applications for all sectors
- Mobilization of financial resources from the ICT sector
- Mobile banking
- Gender and ICT

VI. Emerging Trends related to WSIS Action Lines identified during the meeting

Digital transformation plan for Africa
E-commerce and the digital economy
Convention on cybersecurity
Continental Free trade zone
Thematic Workshop

The Need for an Evidence-Based Approach to Tackle the Gender Digital Divide

EQUALS Global Partnership for Gender Equality in the Digital Age

Thursday 22 March 2018                      9:00 – 10:45
Room C2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/ wsis/forum/2018/Pages/Agenda/Session/281#intro

1. Key achievements, announcements, launches, agreements, and commitments

- The goal of the session was to raise awareness on the need to collect sex-disaggregated data to tackle the gender digital divide, and overall the need for evidence to drive policy. This workshop invited participants to eagerly engage with the panellists, to share gaps in research, to evaluate their successes and challenges, and to discuss the benefit of joint forces to bridge the gender digital divide in the tech sector.
- The session also called for collaboration on the EQUALS Action Map, which helps to democratize and promote information exchange, and identify potential synergies among stakeholders to maximize impact.

2. Main outcomes highlighting the following

I. Debated Issues

How to turn research into policy? How do we actually push research into implementation? How do we see change happen?

- We need a more nuanced understanding of gender, and of intersectionality - this is where we see a divide

The gaps in data:

1. Data in the global south is largely unavailable
2. National supply side data done by governments often is not sex-disaggregated
3. Informal sector is neglected
4. Overlapping forms of oppression and how this shapes engagement/experiences with technology
5. The need for crowdsourcing: to share, learn from practitioners, share best practices and key lessons learned.
II. Comments from the audience

i. Life-long learning:
1. A participant from the audience raised a concern on the lack of focus on the intersection of age and gender. She called for a life course approach where mature and older women are integrated in discussions concerning digital training and education.

ii. Quantifying the qualitative:
1. A representative from the Centro Regional de Estudos para o Desenvolvimento da Sociedade da Informação, and EQUALS Research Group member, asked to share their experiences in conducting, addressing, and measuring more complex issues, such as privacy and online violence.

III. Quotes

1. "We need meaningful data. I’m astonished when I realize not only in the emerging areas, but in Germany and Switzerland, how few people understand that there is a problem”- Beate Degen, EY Germany

2. “We really need new understanding of what privacy means to women and people with intersectional identities. In-depth evidence of how to realize these obligations and rights. It’s not simply the responsibility of the institutions from top-down. What the reality is on the ground?” – George Anthony Giannoumis, Oslo and Akershus University of Applied Sciences

3. “When we look at local communities, different chapters around the world, working on digital literacy projects, what they often face is that they have no ground to work on, the baseline is very different. When we look at the variety of research that have very relevant data but very different, and they have different approaches, what EQUALS does is to pull these data together and drill down to specific access-related issues and look beyond connectivity” – Joyce Dogniez, Internet Society.

IV. Overall outcomes of the session highlighting

- We need to promote a culture of collaboration
- Lack of female participation and inclusivity – digital systems constructed without the input of women
- Consistent, robust, actionable evidence that is comparable is key.
- The value of partnership to bring diversity of stakeholders and actors together to address this challenge
- More nuance is needed for policy makers to create the correct interventions.

V. Main linkages with the Sustainable Development Goals

This session is linked most closely to SDG 5B and 17. EQUALS is a ground-breaking global network delivered by a committed partnership of corporate leaders, governments, non-profit organizations, communities and individuals around the world working together to bridge the digital gender divide – by bringing women to tech, and tech to women – and in so doing, bettering the lives of millions worldwide.

VI. Emerging Trends related to WSIS Action Lines identified during the meeting

a. Issue of meaningful data
b. Intersectionality

c. The need for collaboration

VII. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

a. The importance of bridging the gender digital divide.
b. Data-driven and evidence-based approaches to tackle the gender digital divide
c. Intersectional research agenda to address digital inclusion

Workshop on Achieving an inclusive society by designing and implementing accessible ICTs
Thematic Workshop

Promotion of the ideals and principles of the United Nations among the youth

GIMUN

Thursday 22 March 2018

Room H2 - ITU

9:00 – 10:45

1) Key achievements, announcements, launches, agreements, and commitments

1. Discussing the different sectors (civil society, academic, private, UN and governmental) roles in powering youth access to ICTs.
2. Presenting different experiences on helping youth in the UN and private sector
3. Showing the role of government on education regulation regarding ICTs

2) Main outcomes highlighting the following:

I. Debated Issues

Some attendees have interferences regarding the classical education system and what changes can be done on this system to have better outcomes. A lady from the audience asked the speaker to be initiative and take actions as a young people and representatives from different sectors to make more efficient education system.

A discussion about empowering students to have more influence and being able take actions regarding public policy through ICTs.

In addition, a speakers and audience discuss the negative effect of ICTs and their role of making people more isolated and that technology should be always used carefully.

Key achievements and challenges shared by the audience and/or panelists

1. Showing how greater access to ICTs would gain more benefits for youth, in addition to get skills required for first years of their career path.
2. Clarifying the role of ICTs vs classical education system and how they integrate each rather than compete.
3. Highlighting some problems with classical education system.
II. Quotes

1. “We should start educating the youth from their school years by providing them with the tools they need to face the real world and the future, we should not only teach them how to study, but we should also teach them how to analyze”, Michel Sleiman from Triend as a private sector representative.

2. “Everything looks closer with technologies and it’s really important to see the link between us and the rest of the globe, if 80 years ago train and plane bored people closer it’s nothing compared to ICTs ” Benjamin Aebi from the Young Christian Democrats party as a governmental sector representative.

III. Overall outcomes of the session highlighting

1. Some transformation should be done to educational system refine outcomes and make youth more ready to start career path with a lot of soft and technological skills required.
2. Educational system and ICTs should be integrated to fill the gap between what is required from new graduates for work market and what is they really have.
3. Different rolls are required from different sectors to empower youth access to ICTs.
4. the vision for implementation of WSIS Action lines beyond 2015 Suggest some changes for the educational system from the governmental sector by empowering access to ICTs during the educational process.

IV. Main linkages with the Sustainable Development Goals

Linked with SDG number 8: decent work and economic growth.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

In addition to original action line 3 (Access to information and knowledge) it could also be related to action line 4 (Capacity building).

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Transformation in the educational system for more integration with ICTs.
The workshop called “Achieving an inclusive society by designing and implementing accessible ICTs” organized by ITU-T Joint Coordination Activity on Accessibility Human Factors (JCA-AHF) was held on Thursday 22nd March at WSIS 2018 Forum. During this workshop, the first trial within ITU of remote American Sign Language (ASL) Interpretation was successfully conducted with the ASL interpreters being based in Florida USA and received at ITU headquarters. It was not possible to hire any ASL interpreters in Europe to be available onsite. Remote SL interpretation will not replace onsite SL interpreters but will fill a gap in cases of an emergency and where it is not possible to get an onsite SL interpreter in a specific language at any given time.

The workshop addressed ITU-T accessibility standards, including telephone relay services for persons who are deaf and hard of hearing (ITU-T F.930); audio-based indoor network navigation system for persons with who are blind or with severe vision impairment to be able to be able navigate places like subway or metro networks (ITU-T F.921); and accessibility profiles for IPTV (Internet Protocol TV) systems which make it possible to have open and closed captions, sign language, and audio description (ITU-T H.702). Standardization will improve accessibility, and interoperability of products produced by different manufacturers which will lower cost of operation and purchase, etc.

It was suggested that the following future actions to be followed 1) Further cooperation and coordination among ICT SDOs, e.g., agreement on accessibility vocabulary; 2) the creation of an “inclusive ICT society” index, i.e. KPIs to show how inclusive a society, community or country is, taking the UNCRPD as the first reference. These proposed actions will be further discussed among stakeholders via emails and at the next JCA-AHF meeting.
1. Universal Design as a mechanism for SD

Universal Design is the design of products, environments, and communication to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. Essentially, if it works well for people across the spectrum of functional ability, it works better for everyone. Universal Design provides a useful mechanism for approaching the achievement of the Sustainable Development Goals (SDGs) by helping create standards, benchmarks and context surrounding the intersection of sustainable development and technology. The SDGs represent complex social, political, economic, technological problems. Only by understanding how we can design technology that’s usable for everybody across the diversity spectrum can we truly achieve equality and move towards achieving Sustainable Development in all different areas of life.

2. Oslo Metropolitan University

Oslo Metropolitan University is Norway’s newest university, and a leading centre of excellence for universal design of ICT. OsloMet focuses heavily on involving students in research, and providing opportunities for innovation to flourish, while also facilitating interdisciplinary international projects. The university’s collaboration with the ITU has brought forth many new collaborative efforts.

3) First of its kind workshop connecting universal design principles with sustainable development practices

The first-of-its-kind workshop connected universal design principles with sustainable development practices. The panel consisted of representatives from different fields, including students, entrepreneurs, educators, policy makers and leaders of disabled people’s organizations (DPOs). Two student-led initiatives were presented during the panel - Cozin and SAGA. Cozin focused on providing a universally designed carbon dioxide and carbon monoxide sensor for households using solid fuels for cooking, while SAGA presented a digital storytelling platform, focusing on providing access and means for technology use for women and girls, in particular women and girls with disabilities.
All panelists committed to identifying and removing barriers that everyone, including persons with disabilities, experience accessing and using technology as part of the sustainable development agenda. Panelists also agreed to continue advancing the field of universal design for sustainable development through multistakeholder initiatives, including the research and development of universally designed technological solutions.

4) Main outcomes:

The main outcomes of this workshop highlighted the following:

The role of DPOs in universal design for sustainable development cannot be underestimated. Civil society organizations, which work on the ground with those most affected, provide a key link between policy and practice.

Legislation, as mentioned by Jorge Manhique, can lead to a standardization of accessibility laws in countries like Mozambique, which is crucial for providing a solid foundation for sustainable change. “(...) the idea of promoting Universal Design and ICT and accessibility should include enforcement mechanisms and specifically give power to People with Disabilities themselves to be able to claim when their rights are essentially violated”

Innovative universally designed solutions such as Cozin and SAGA bring sustainable development practices to a wider audience, and provide a platform for entrepreneurs to have a positive impact.

5) Debated Issues

We are at a point now where we know universal design provides a useful basis to examining the inclusion of persons with disabilities in sustainable development. Information and communication technology can act as a mechanism for realising the SDGs, yet to date, not enough is known about universal design for sustainable development. New knowledge is needed to understand the intersection that occur among overlapping forms of discrimination and disadvantage.

6) Quotes

According to Jorge Manhique, program officer for Disability Rights Fund, “[Persons with] disabilities also have multiple identities. So they have disability but they’re also women, or they’re belonging to a sexual minority group, you have to think how disability intersects with other identities.”

7) Emerging Trends related to WSIS Action Lines identified during the meeting

By considering the barriers that everyone including persons with disabilities experience accessing and using technology, the WSIS Action Lines can ensure that no one will be left behind.
8) Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Suggestions to include in WSIS Forum 2019 Following the success of this year's workshop, it can be suggested that the following thematic aspects be included in the 2019 WSIS Forum: By having a continued focus on universal design as a mechanism for sustainable development, the operationalization of universal design principles in reference to specific sustainable development goals and criteria can start. In the upcoming years, these principles can also align themselves more heavily with the WSIS action lines, and become an integral part of the forum process.
1) Main outcomes highlighting the following:

I. Debated Issues
- Evolution of cyber-attacks, their increasing sophistication and damaging impact.
- Collaboration between stakeholders in responding to cybersecurity incidents, like vulnerability announcements, to ensure trust in the use of ICT.
- Role of governments in ensuring stakeholder collaboration - UN GGE Report (UN GGE Norms, Capacity Building Measures and Confidence Building measures).
- Role of industry in ensuring stakeholder collaboration.

II. Quotes
N/A

III. Overall outcomes of the session highlighting
- Need for agreement and collaboration between stakeholders in responding to cybersecurity incidents, like vulnerability announcements, to ensure trust in the use of ICT – all panelists agreed that trust cannot be mandated, it needs to be fostered by taking adequate measures and ensuring parties (government and industry) live up to their commitments.
- Need for government and industry to work on capacity building.

IV. Main linkages with the Sustainable Development Goals
Looking at cybersecurity through the lens of the Sustainable Development Goals (SDGs) demonstrates the socio-economic importance of trust in and security of the digital environment. Effective use of innovative technologies is critical to the realization of many of the SDGs, and the path to those goals would be substantially undermined in the absence of appropriate cybersecurity practices – either by reducing trust and therefore ICT adoption,
or simply through the financial and personal costs of cyber-attacks. Following are some examples of how select SDG goals can be furthered by the trusted use of ICTs:

- Develop industry, innovation, and infrastructure (SDG 9): ICT can enable better management of infrastructure roll-out and maintenance, increase agricultural productivity, and provide additional business opportunities and market intelligence through online services.
- Achieve gender equality and empower all women and girls (SDG 5): ICT can enable access to information and services that empower women to participate and succeed in academia and business. Capacity building and user education on staying safe online can boost technology use to this end.
- Make cities inclusive, safe, resilient and sustainable (SDG 11): ICT can enable sensing and communication technologies to more efficiently use resources, detect and mitigate natural disasters.
- Revitalize the global partnership for sustainable development (SDG 17): ICT can connect people and institutions, enable sharing of information, and ultimately further the cross-pollination of ideas and innovation across industries.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Cooperation between stakeholders
Investment by governments and industry in capacity building

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Use of new technologies – e.g., blockchain - to increase accountability and improve cybersecurity
Need for a larger pool of cybersecurity experts (men and women) – what measures can governments and industry take to achieve this?
Thematic Workshop

Broadband Commission Dialog at WSIS Forum

The Broadband Commission Secretariat

Thursday 22 March 2018

Room Popov 1 - ITU

13:15 – 14:00

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/136#intro

1. Key achievements, announcements, launches, agreements, and commitments

- Key achievement: promotion of the Broadband Commission’s Targets 2025, fostering of cooperation between main stakeholders involved in the functioning of the Commission.
- Agreement/commitment: none.

For your information, the Broadband Commission for Sustainable Development 2025 Targets:
1. By 2025, all countries should have a funded National Broadband Plan or strategy, or include broadband in their Universal Access and Service (UAS) Definition.
2. By 2025, entry-level Broadband services should be made affordable in developing countries, at less than 2% of monthly Gross National Income (GNI) per capita.
3. By 2025 Broadband / Internet user penetration should reach: 75% worldwide, 65% in developing countries, and 35% in least developed countries.
4. By 2025, 60% of youth and adults should have achieved at least a minimum level of proficiency in sustainable digital skills.
5. By 2025, 40% of the world’s population should be using digital financial services.
7. By 2025, gender equality should be achieved across all targets.

2. Main outcomes highlighting the following:

I. Debated Issues

Main issues debated and interactions with audience:

- Presentation of the Broadband Commission for Sustainable Development, history of its creation, how the Commission works, who are the members of the Commission, what are the main outcomes of its work and impact, presence of specific working groups.
- Presentation of the new Targets 2025 recently launched by the Commission during the World Economic Forum held in Davos in January 2018.
• Discussion with panelists and audience on practical approaches and potential solutions to reach the Targets 2025.

II. Key achievements and challenges shared by the audience and/or panelists:
• Achievements: common recognition of importance of setting up targets for connecting the world’s population not connected to the internet, common recognition of importance to have high collaboration of concerned stakeholders (governments, private sector, civil society, academics, etc.).
• Challenges: how to connect people to internet without the proper infrastructure in place e.g. lack of access to electricity in Africa (concerned raised by a member of the audience), what is the rationale behind the target selection (why removing/adding some of them), how to make sure that the ICT policies are created, discussed and further implemented given that other policies take precedence in certain countries.

III. Quotes
• Ms. Doreen Bogdan Martin, Chief, Strategic Planning and Membership, ITU; Executive Secretary to the Broadband Commission.

  “As a group we come together and we send a specific message to major gatherings so that there is a further understanding of broadband and technology in sustainable development” Mr. Patrick Nyirishema, Director General, Rwanda Utilities Regulatory Authority (RURA).

  “The work of the Commission finds its ways directly in policy, influences and concretizes our thinking in Rwanda. As example - the Broadband Commission started in 2010 and about that time we had discussion in our country on deliberate effort to bring broadband access to the whole country. Our government invested money in rolling out optic fiber in the country, (…) we have been revising our national ICT plans every 5 years. In 2015 we adopted Smart Rwanda Master Plan, which included gender equality as a target for 2020, which is reflection of the Broadband Targets of the Commission.” Mr. Paul Mitchell, Senior Director, Technology Policy, Microsoft.

  “Those targets are all about creating equality of access all around the world, for people in developing countries and in economically disadvantaged situations” Mr. Tomas Lamanauskas, Group Director Public Policy, VEON.

Talking about Expert Group report with recommendations: “There is difficulty to achieve the targets if we don’t have a roadmap for that” (…) “I really hope that governments again will read those recommendations and would use that as a roadmap”
IV. Overall outcomes of the session highlighting

Main conclusions reached during the discussion:
- Importance of broadband cannot be underestimated, collaboration of all stakeholders is crucial, recommendations of the broadband commission have to be further carried out.

The vision for implementation of WSIS Action lines beyond 2015:
- Achieving the Targets 2025 can contribute to the implementation of WSIS Action lines beyond 2015.

V. Main linkages with the Sustainable Development Goals
- Recommendations of the Broadband Commission and Targets 2025 can indirectly contribute to reach the SDGs 1 to 8 and 10 to 17.
- Recommendations of the Broadband Commission and Targets 2025 can directly contribute to reach the SDG 9.

VI. Emerging Trends related to WSIS Action Lines identified during the meeting
- Advancing gender equality in internet infrastructure access and in digital skills

VII. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
- Implementation of the Digital Strategies – how to ensure the impact,
- Monitoring and Review of the Global Advocacy Targets 2025 – main challenges/lessons learned
1. Main Outcomes Highlighting the following

I. Debated Issues

- The objectives of the session was to introduce the Ljubljana OER Action Plan to discuss its implementation strategies. In particular, it focused on examining elements form the Ljubljana OER Action Plan adopted at the 2nd World OER Congress 2017 and their contribution to a UNESCO OER Recommendation to be developed in the 2018/2019 period further to a decision of the UNESCO General Conference at its 39th Session (November 2017). The five areas for action highlighted in the Ljubljana OER Action Plan are: 1) the capacity of users to access, re-use and share OER; 2) issues relating to language and culture; 3) ensuring inclusive and equitable access to quality OER; 4) changing business models; and 5) the development of supportive policy environments. During the session, Zeynep Varoglu, Programme Specialist, ICT in Education, Knowledge Societies Division, Communication and Information Sector, outlined the Ljubljana OER Action Plan and its follow up, including the decision of the 40th UNESCO General Conference in CI Commission to develop a draft OER Recommendation. Mr Gasper Hrastelj, Deputy Secretary-General, Slovenian National Commission to UNESCO presented the Ljubljana OER Action Plan from a Governmental Perspective and Dr Sophie Touzé, President of the Board of Open Education Consortium (OEC) presented on the Ljubljana OER Action Plan from an Institutional and NGO Perspective. This presentation was followed by an interactive session which focused on discussion on key issues, actions and actors for each of the 5 areas identified above in the Ljubljana OER Action Plan. In the report back session, participants presented the outputs of their working group sessions on the five areas of action.

II. Quotes

The government has started to initiate a nationwide movement for OER In countries, and this movement needs to provide enough guidance for the people working on it. **Ali Alyafei, Ministry of Education, United Arab Emirates**
III. Overall outcomes of the session highlighting

- Main conclusions reached during the discussion: OER provides an innovative means to reach the goals of SDG4.
- the vision for implementation of WSIS Action lines beyond 2015: OER provides an innovative development in the area of e-learning

IV. Main linkages with the Sustainable Development Goals:

SDG4 ‘Inclusive Quality Lifelong Learning’

V. Emerging Trends related to WSIS Action Lines identified during the meeting:

Importance of OER for achieving SDG4
Thematic Workshop

Free To Air as the enabler of original local content

European Broadcasting Union in partnership with World Intellectual Property Organisation & UNESCO

Thursday 22 March 2018 13:15 – 14:00
Room C1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/158#intro

1) Key achievements, announcements, launches, agreements, and commitments

EBU (as part of the World Broadcasting Unions) will continue its efforts to sustain the migration to digital of the broadcasters in the developing countries, starting mainly in Africa and Asia.

WIPO will continue its efforts (for instance through a pilot project currently conducted in Africa) to build a culture of copyright and of fair remuneration of the audiovisual products, because this is the precondition to ensure sustainability of the local industries.

UNESCO – Through its efforts on identifying Universality, indicators for the Internet that could measure favorable conditions for the development of local contents, in local languages, produced by local creativity - will help in defining a model that could be sustainable for Cultural diversity and in line with 2005 UNESCO Convention principles.

2) Main outcomes highlighting the following:
   I. Debated Issues

In the introduction, Elena Puigrefagut (EBU) explained that the Free-To-Air model (including both public and commercial services) is a successful media distribution model in Europe that facilitates social inclusion and can bridge the digital divide. It easily coexists with pay-TV platforms (see examples in the footnote i).

- FTA funds most domestic content in Europe (and outside). Without that funding, domestic TV production would be at risk. Other new pay-TV players (e.g. Netflix, Amazon) may contribute but at least in the short term and most likely long term will not compensate the role of European FTA players (see examples in the footnote) ii.

- This successful FTA model is based in a strong regulation imposing clear content obligations and robust funding models For instance In EU countries: the Audiovisual Media Services Directive (AVMS Directive) governs

EU-wide coordination of national legislation on all audiovisual media, both traditional TV broadcasts and on-demand services, suggesting to provide to the audience 50% of local contents.
In many countries like France and the UK national content obligation on FTA players (and in some cases pay TV players) are much higher than EU obligations. But this is not only a European prerogative. Recently also regulators in Kenya, Tanzania and Senegal have introduced minimum percentage of offer of local contents in the new DTT channels and even percentage of investment in local contents.

Carole Croella (WIPO) reported, for instance, that as per a 2015 study conducted jointly by ABU and AIBD (Asia-Pacific Institute of Broadcasting Development), NHK (Japan’s public service broadcaster) is the primary producer of Japanese local content. Its market share vis-à-vis local content is roughly 75-80%. Similarly for Sri Lanka, the market share maintained by Sri Lanka Rupavahini Corporation (SLRC – Sri Lanka’s PSB) with respect to local content since 1992 is 45-49%. Six other private channels contribute the remaining balance to local content with ITN coming closest at around 28-30%.

Walid Sami (EBU) stressed that the most practiced form of Free to Air distribution is provided through Terrestrial broadcasting networks (TV and Radio), that are still the main means to distribute Free to Air broadcasting in many countries (see item 1 below) and that –in order to do so- they need suitable spectrum (see item 2 below).

1. Terrestrial broadcasting has always been the main distribution means of Free-to-Air media. Reasons:
   - The infrastructure is under national control and therefore can easily be bound to national media regulation;
   - Terrestrial broadcasting is important for and used by Public service broadcasters because it meets all their distribution requirements: Free-to-air, Universal availability, Quality of service, Ease of use, No gatekeeping, Service integrity, Findability/Prominence, Accessibility, Reachability in emergency situations.
   - Terrestrial broadcasting is also appreciated and used by commercial free to air broadcasters, which rely mainly on advertisement for their income. It provides the required prominence and flexibility of coverage that helps better targeting their Audience.

2. Terrestrial broadcasting needs suitable spectrum:
   - Low frequency bands (below 1 GHz) are most suitable for large coverage sites, which is essential to ensure cost efficiency of terrestrial networks;
   - Sufficient amount of spectrum is needed for attractive and competitive offer with regard to other distribution platforms;
   - The same spectrum is usefully shared between terrestrial broadcasting and Programme Making applications, like radio-microphones, used for local and national content production;
   - However, the same spectrum is contemplated by other Radiocommunication services. Significant reduction, more than 40%, has been operated already on spectrum used for terrestrial television in the context of the digital dividend;
   - The spectrum reallocated to other Radiocommunication services is not useable any more for the Programme Making applications mentioned above;
   - Further discussions are still foreseen in future World Radiocommunication Conferences (WRC) regarding spectrum allocated for terrestrial broadcasting. Long term certainty of access to spectrum for terrestrial broadcasting is essential.

According to Xianhong Hu (UNESCO) the project to define Internet Universality indicators aims to build a framework of indicators through which to assess levels of achievement, in
individual countries, of the four fundamental principles included in the Internet Universality concept. These promote an Internet that is based on human Rights (R), that it is Open (O), Accessible to all (A) and nurtured by Multistakeholder participation (M).

The draft Internet Universality Indicators released for consultation contain about 10 indicators related to local content and languages. These covers issues about the access and use of local scripts and languages online and locally generated Internet content. The challenges is to define the local content in digital age and identify valid indicators to measure it in different languages and countries.

Cath Westcott (BBC) remembered that the mission of the most famous Public Service Media of the world is exactly in line with the SDG. In the mission of the UK’s main public broadcaster - constitutionally established by a Royal Charter and funded by a licence fee, in fact it's written that it has to act in the public interest and serving all audiences. The main five public purposes for the BBC are defined in the BBC Charter as such:

1. To provide impartial news and information to help people understand and engage with the world around them
2. To support learning for people of all ages
3. To show the most creative, highest quality and distinctive output and services
4. To reflect, represent and serve the diverse communities of all of the United Kingdom’s nations and regions and, in doing so, support the creative economy across the United Kingdom
5. To reflect the United Kingdom, its culture and values to the world

Please highlight key achievements and challenges shared by the audience and/or panelists

The current situation of the digitalization of the world shows that the main obstacle that affect access to the Internet and its services is not only the lack of infrastructure and of investments, but also what is generically defined as "digital divide". A term that put altogether monetary reasons, lack of education and of skills, lack of attractive contents and of useful services in the language and cultures of the world's citizens. So in order to really tackle the digital divide it's crucial to look to other existing successful models that have been able to reach all the population. Such as it is the radio and TV FTA model as it exist since 100 years today.

II. Quotes

Carole Croella (WIPO): "FTA has been one of the most successful models for broadcasting across the world. The model is fueled today by the digital switchover to digital television taking place in many developing countries and notably in Africa where FTA drives the process. Turning this technological opportunities into economic benefits, requires a commitment to protect and secure intellectual property rights associated with the production and distribution of local content across free to air channels. It also to require protect the rights of broadcasting organizations who invest in content production and their dissemination to the public, against signal piracy. A sound, balanced and solid legal framework, based on the WIPO Treaties, needs to be put in place to stimulate investments in local content creation as well as their efficient monetization. Right holders and professionals investing in the creation and distribution of content need a reward for their output and market incentives to keep delivering their essential contributions for education, entertainment, culture, economic growth, in line with the SDG's".
Xianhong Hu (UNESCO): "One of the pre-conditions for a successful access to Internet is the availability of relevant content, including content which is generated locally and concerned with local issues. This is necessary if people are to use the Internet in order to improve their quality of life or livelihoods, and to contribute to national development. The availability of content in languages, which are used by local populations, is also critical to the value of Internet access, particularly for minority languages speakers.

III. Overall outcomes of the session highlighting

Panel agreed on a common definition of what is Free-To-Air (FTA) model: Radio or television content that is distributed without any form of encryption and is available to the audience free of charge beyond an obligatory licence fee and costs due to the acquisition of receiving devices. iv

FTA has been recognized as the enabler of original national / local content production and as a tool to support SDG n. 4 - 10 - 11 - 12

In digital society, where the multiplicity of network and offers push for fragmentation and division, Free To Air (FTA) transmission is one of the few glues to keep together today's societies. Still today the largest part of local / national contents that facilitates societal development, cohesion and democracy are supported and financed by institutions or companies using FTA to reach their audiences/citizens.

The FTA model has been one of the engines that have allowed in Europe and in other part of the world the flourishing of a sustainable form of audio-visual industry based on local creativity and able to provide local contents in local languages. This successful mix offer has allowed TV offer to reach 90% of the world population and radio offer to reach 98% of world population (against 60% of the Internet).v

The FTA offer facilitates inclusion and can bridge the digital divide. But in order to continue to produce its beneficiary's effects also in future FTA offer requires a certain number of conditions, such as:

- An adequate separate distribution platform: (today terrestrial/ DTT is the main FTA platform in most countries, satellite being the second one
- Spectrum availability and a long term certainty for investment for FTA offer in order to continue to reach all citizens through DTT or satellite (at least until similar conditions could not be guaranteed also over the Internet). vi
- Appropriate regulatory frameworks and business models to incite and sustain local production in local languages to ensure cultural diversity
- Appropriate copyright regulations to ensure the sustainability of local industries through the remuneration of the circulation of local contents across the various distribution platforms.

The vision for implementation of WSIS Action lines beyond 2015

This path deserve to be explored and better defined in the next WSIS, IGF and similar fora, to set up a replicable model that could be shared in order to ensure that access to Internet will guarantee access to local, useful and needed contents, suitable for each population across the world, without discrimination of education, race or wealth.

Among other things, this would means that condition similar to the ones today guaranteed by the FTA model (through DTT and satellite) will be replicated and guaranteed over the internet.
IV. Main linkages with the Sustainable Development Goals

GOAL 4: Quality Education - because FTA offer can reach virtually all the population already today with the existing platforms. BBC provided as a concrete example the BBC School Report initiative. This involves BBC staff working directly with schools and 11-18 year old students. This initiative helps them to produce and present their own local news reports which are then broadcast locally and nationally on radio, television and online.

GOAL 10: Reduced Inequality - because FTA -as the name indicates- is accessible to everybody and doesn't discriminate people that can afford from those that cannot, educated or non-educated, and so on.

GOAL 11: Sustainable Cities and Communities -
Because FTA offer help to create communities and to bridge gaps and divisions in society.

GOAL 12: Responsible Consumption and Production - Because FTA offer enables favorable conditions for local, national and language diversity based productions. And especially when is joined to copyright, create conditions for local creativity to flourish and access international markets and platforms.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

C2. Information and communication infrastructure
FTA offer and distribution is one particular form of service of the communication and information infrastructure

C3. Access to information and knowledge because FTA offer is the best and currently most popular way to guarantee access to audiovisual contents to 95% of the world population

C8. Cultural diversity and identity, linguistic diversity and local content
FTA is an enabler of cultural diversity and of local contents

C9. Media
FTA and copyright together create conditions for sustainable and diverse media

C10. Ethical dimensions of the Information Society the concept itself of FTA is based on an ethical dimension of society where every individual deserve respect and attention

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

The panel agreed that the interaction of the form of distribution with the copyright and the appropriate regulatory framework is the key to create sustainable conditions for the production of local contents and to guarantee social cohesion. European public service broadcasting model of financing local contents and to distribute those free-to-air could be seen as a potential best practice to inspire similar virtuous circles in other regions of the world.
Thematic Workshop

How Can We Prepare Kids For Jobs That Don’t Exist Yet?

IT STEP Academy
Thursday 22 March 2018 13:15 – 14:00
Room C2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/184#intro

1. Key achievements, announcements, launches, agreements, and commitments

The panelist decided to create larger event concerning this topic.

2. Main outcomes highlighting the following:

I. Debated Issues
   - Should be future of education for kids Tech or Non-Tech?
   - How to have a balance between Soft skills and Hard Skills?
   - How to ensure that skills gap for youth employment will be minimized in future?
   - Please highlight key achievements and challenges shared by the audience and/or panelists
   - If there is a quick solution for education?
   - Can be technology only by itself be a solution?

II. Quotes
   - Strietska-Iлина Olga, ILO, 10 years ago we expected that there will be less bank workers, but now there are even more, now we expected the same for farmers and drivers. The question is not how to find a replacement, but what new skills modern drivers and farmers have to have.
   - Tristan Jaquier, FutureKids.io, Technology is not transformative, only technology together with pedagogy.

III. Overall outcomes of the session highlighting

   - Technology itself is not a solution for the better education. Along with technology there should be innovative pedagogy.
   - the vision for implementation of WSIS Action lines beyond 2015
IV. Main linkages with the Sustainable Development Goals

a. Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. New technologies also make education accessible and inclusive. However, only technology cannot be transformative. We also need transformative pedagogy.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

a. Rich data, Internet and robotics.
b. Part-time and freelance jobs instead of usual jobs.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

a. How countries integrate technologies into schools.
b. How countries re-educate teachers and link students with market.
c. How countries cooperate in order to achieve greater results in education.
Thematic Workshop

Smart cities: Policies and regulatory frameworks to better align smart cities strategies with SDGs

Arianous ICTD Co.
Thursday 22 March 2018  13:15 – 14:00
Room G3 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/203#intro

1. Main outcomes:

The workshop was sponsored by Arianous ICTD and moderated by Dr Alireza Yari, head of the IT research faculty at Iran Telecom Research Center. The speakers addressed the policy and regulatory framework to align smart cities with the sustainable development goals (SDGs).

At first Mr. Pavan duggal, Advocate, Supreme Court of India, Chairman, International Commission on Cyber Security Law. He started by definition of smart city and the latest Smart solutions for the city of the future.

The session also focuses on regulatory big data, which is a main trend in ICT field. Using big data to provide high-quality solutions, consulting reports, data report and cloud services to all industries. Through big data, the country is more likely to build smart cities and to promote smart consumption model, reduce energy utilization, and better prevent some diseases.

Speakers elaborated it how to contribute to smart city. Pavan pointed the importance of privacy and data protection for introduced solutions, especially for smart cities cyber security management.

Dr. Yari started by affirming that most countries have their own different perceptions and definitions of smart cities. A legal framework to regulate smart cities primarily needs a conceptual definition of smart cities. In addition, the alignment of smart cities to the SDGs also depends on a definition frame. He said that cybersecurity in smart cities should be a priority for legislators. There is already regulation to preserve security in smart cities at national level in China, Japan, Russia, Australia, and Singapore. Besides cybersecurity, regulators should invest in data protection, considering that smart cities encompass a vast range of personal data. He concluded by stressing that the integrity of the network will be important in smart cities.

Mr Hojatollah Modirian, managing director of Arianous ICTD Co., is an artificial intelligence (AI) specialist and an international activist in the information society. He agreed with Yari that definitions of smart cities are numerous. They involve multiple stakeholders, including governments, citizens, and private sector actors. Smart city policies should be focused on three different aspects:

• Governance: services to the citizens, public administration, democratic processes.
• Urban infrastructure: transportation and protection of the environment.
• An innovation economy.

Modirian concluded by affirming that regulations on civil responsibility, competition rights, intellectual property, and privacy will have to be reframed and rethought for the smart city environment.

Mr. Keith Mainwaring, independent consultant and partner at Arianous ICTD, specialises in telecommunications standardisation and policy and is a technical leader in Cisco Systems. He began by defining sustainability. He said that the concept must articulate the input and output of any activity. In terms of input, an activity is sustainable when it uses renewable resources, consisting of energy and material. Regarding output, it has also to be renewable. He stressed that technological developments made sustainability harder. For instance, mobile phones use noble metals, such as copper, gold, platinum, and titanium. Consequently, the electronic waste is a rich source of these noble metals, which are commonly found in countries with issues of child labour and violent conflict. In addition, the waste of this material is often exported to developing countries, where it is recycled in conditions dangerous for human health and the environment. If, on one hand, smart cities defy the concept of sustainability, on the other they can be a driver for sustainable development by tracing food chains, implementing disaster warning systems, improving the public transportation efficiency, etc. For that, there is a need for social regulation.
Thematic Workshop

Multistakeholder Decision Making in Global Internet Governance

Noncommercial Users Constituency of ICANN

Thursday 22 March 2018 13:15 – 14:00
Room H1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/212#intro

Key achievements, announcements, launches, agreements, and commitments
Agreement to continue analysis and discussion of the use of multistakeholder decision making methods in other settings; announcement of the Internet Society’s Collaborative Governance Project

Main outcomes highlighting the following:

I. Debated Issues
1. Has the growth of multistakeholder decision making plateaued, or are there any plausible opportunities for it to progress in a helpful manner, e.g. with respect to cybersecurity?
2. Can the levels of multistakeholder input and engagement currently allowed by some intergovernmental organizations be meaningfully enriched in ways that would be value-adding?
3. Could anything be done to build upon the NETmundial and more issue-specific initiatives in order to strengthen the global Internet governance ecosystem?

4. Quotes
   □ “There are good reasons to believe that multistakeholder decision-making can succeed in some cases where other approaches have failed.” Larry Strickling
   □ “For Internet issues, it is increasingly difficult to imagine the successful negotiation of broad based multilateral agreements such as treaties that are legally binding. We need to look more to informal normative agreements but couple these with ongoing monitoring and reporting of follow-up and implementation in order to encourage compliance and goal attainment.” William J. Drake

5. Overall outcomes of the session highlighting
   □ Multistakeholder decision-making is not a panacea but can be a very practical addition to the toolbox of international collective action.
   □ Inclusive agreements that have broad governmental and stakeholder buy-in could greatly assist with the pursuit of WSIS Action lines beyond 2015.

6. Main linkages with the Sustainable Development Goals
8, 9 and 16. “An open, interoperable, universally accessible and thriving Internet environment is a key enabler of progress on the SDGs.” This session addressed approaches to creating the governance architecture needed to maintain that environment.

7. Emerging Trends related to WSIS Action Lines identified during the meeting
The Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society (UN GA A/70/L.33, 13 December 2015) notes, at paragraph 62, “the important regulatory and legislative processes in some Member States on the open Internet in the context of the information society and the underlying drivers for it, and call for further information-sharing at the international level on the opportunities and challenges.” Multistakeholder decision making modalities could contribute much in this context.

8. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
Systematic comparison and contrasting of alternative decision making architectures in global governance decision making
Thematic Workshop

How can Technology be a force for good in Africa?

IRA/ADPP

Thursday 22 March 2018 13:15 – 14:00
Room K1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/122#intro

1. Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

2. Main outcomes highlighting the following:

I. Debated Issues

Panelists from a diversity of fields – including someone from UNHCR working on connectivity for refugees, someone working on digital rights issues in Egypt, someone deploying community networks in Africa, someone working on trade and development for UNCTAD, and panelists collecting data on ICT access and use in Africa and Latin America – provided input on contextual challenges to enabling people from the global South to benefit from technology’s purpose to be a force for good in Africa and beyond.

II. Quotes

We have almost zero official statistics on microwork and its broader impact. Such missing stats form a vital basis for policies to promote fair micro work - Scarlett Fondeur Gill, UNCTAD, Geneva, Switzerland

As UNHCR works on promoting connectivity for refugees, we also realise that part of our efforts should be used to promote the digital rights of refugees and their host communities – John Warnes, UNHCR

Rigorous data collection is crucial to understanding contextual issues that underpin digital divides in Africa and beyond – Prof Alison Gillwald, Research ICT Africa
III. Overall outcomes of the session highlighting

There was agreement that despite the technological advancement and the reduction of the digital divide in many countries in the global South, the increased level of connectedness brings about new challenges for the vulnerable of society. Not only is a considerable portion of the populations in the global South still disconnected or connected to expensive and poor quality networks, but their rights online might be neglected; making them even more vulnerable in the digital space. Therefore, a new divide is emerging between those who are aware of their digital rights (including how they are regulated in their jurisdictions and how to protect themselves against digital rights violations) and those who are unaware of what their digital rights are and do not have resources – skills, means and capabilities - to enforce these. Panelists and audience members agreed that there’s a need for more data to fully understand how digital gaps are affecting citizens of the global South and to enable the realization of not only the WSIS goals but also the SDGs.

IV. Main linkages with the Sustainable Development Goals
SDG 1, SDG 2, SDG 5, SDG 8, SDG 10, SDG 16, SDG 17

V. Emerging Trends related to WSIS Action Lines identified during the meeting

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

How are the needs and rights of refugees protected and promoted in the Information Society? One suggestion/ comment is that the 45 minutes allowed for this session was really too little to allow sufficient audience participation.
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/200#intro

1. Key achievements, announcements, launches, agreements, and commitments (these will be reflected in the press release and Outcomes Document of the WSIS Forum 2018)

2. Main outcomes highlighting the following:

I. Debated Issues

The session was opened by Ms Marília Maciel, senior researcher for digital policy at DiploFoundation, who reminded the session that ‘the need for capacity development is voiced substantively and regularly in calls for action, meetings, and official speeches.’ Yet there seems to be a mismatch between supply and demand. This also goes for the sources of funding for capacity development. She asked who should take the financial burden of quality capacity development programmes? The aim of the session should therefore be to try to map what are or should be the responsibilities of the various actors, be they private foundations, governments, private sector, or the recipients themselves through self-financing.

Dr Susan Teltscher, head of the human capacity building division at the ITU, stressed the desire to increase the capacities of her organisation’s membership. She pointed out that the International Telecommunication Union (ITU) uses different sources of funding – regular budget and extra-budgetary funds provided by partners. She spoke about the Centre of Excellence programme which has run for several years and is self-funded as there are fees charged for the training. The ITU Academy platform provides the space for the training which runs on a cost-sharing model where 80% goes to the Centre and 20% stays with the ITU for core activities (such as content creation and running of the platform).

Mr. Michael Kleiner, economic development officer at the Directorate General for Economic Development, Research and Innovation in the Republic and State of Geneva, mentioned that everyone has criteria for how funds are used. He recalled the Geneva Initiative on Capacity Development in Digital Policy which clearly calls for a multilateral approach to cyber issues. The Geneva Internet Platform (GIP) receives many requests for capacity. One idea for resources for capacity development, later elaborated on in the session by Dr Psaila, is of bonds issued by governments, which involve a responsibility to pay back as there is a
Ms. Sarah Gaffney, senior partnerships manager at the GSMA, said that funding comes in various types of forms. There are many different models and approaches to funding capacity development by various partners. The Global System for Mobile Communications Association (GSMA), as an industry body, has unique resources to commit to capacity development. The courses are therefore delivered free of charge. As the GSMA works closely with policy makers and regulators, they get a lot of demand from them directly. In order to deliver free training, the organisation needs to be smart on how to deliver and leverage on the public-private partnership. The GSMA also relies on Training the Trainers courses. Gaffney stressed that as a lot of money goes in, it is important to choose the recipients really carefully.

Mr. James Howe, senior advisor at the International Trade Centre (ITC), told the session that the organisation’s primary focus is small firms and e-commerce. To focus on the problem, and linking to what Gaffney had said, he elaborated on the scale. We know we have the 2030 goals, time is moving quickly, we have discussed this at many forums, including the WSIS but the problem is in partnerships, in the case of e-commerce especially in large international private companies. There is a gap in expectations and that is where capacity development comes in. Large companies are expecting a return on investment while development organisations have a different viewpoint. The relationship needs to be properly managed to get the expectations right, because this partnership, for e-commerce, is essential.

Dr. Stephanie Borg Psaila, director for digital policy at DiploFoundation, briefed the session on some innovative ideas for approaching capacity-development. She spoke of the experience of Diplo and the way the organisation has used technology in training. In Diplo’s work, there is clear effort to distinguish the hype from what actually works. The use of technology continues to be explored with respect to the way capacity development programmes are delivered. A new concept of educoin, hinted at earlier by Kleiner, leverages the new technologies of blockchain and cryptocurrencies to encourage research in digital policy to offer capacity development and contribute to social development. This concept is in the initial stages. Exploring technologies does open new avenues. It will not solve the funding issue but will help in getting there.

Discussion with the audience continued on the impact on implemented policy, the changes it makes and how this corresponds to the needs in the countries. Mr Jorge Cancio from the Swiss Federal Office of Communication (OFCOM) reminded the session of how Switzerland co-operates closely with the GIP. He stressed the importance of striving to find the right balance between core funding and fundamental capacity development, and to give freedom and creativity to the implementers. Dr Jovan Kurbalija from Diplo appreciated this trust of Switzerland as a donor. He spoke about emotional bonds and human dynamics, building engagement, and codifying the element of engagement so that training is not passive.

II. Overall outcomes of the session highlighting

Main conclusion: Moderator asked speakers for “final tweets” which reflect, in their view, the most important element in overcoming the challenge:

- Listen to learners
- Collaborate
- Use technology
• Start the innovation with the corporate sector
• Responsibility on both sides (learner and donor).

The discussion on this topic will continue at the RightsCon in Toronto in May 2018.

III. Main linkages with the Sustainable Development Goals: Goal 4 and 9

V. Emerging Trends related to WSIS Action Lines identified during the meeting

There is clearly the need for solutions to overcome the funding problem, which can combine different approaches, and can be activated at different level.
Thematic Workshop

Cross-Border e-science and Research Partnerships for Shaping Better Information and Knowledge Societies

ICT-SIS
Thursday 22 March 2018 14:30 – 16:15
Room Popov 1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/162#intro

1. Key achievements, announcements, launches, agreements, and commitments

This workshop which was arranged by Iran University of Science and Technology, focused on different issues regarding e-science and the impact of partnership on them. The panelists from academia and international bodies who attended in the workshop were:

- Dr Hadi Shahriar Shahhoseini, Iran University of Science and Technology (IUST), Iran.
- Dr Eun-Ju Kim, International Telecommunication Union, ITU.
- Dr Gilles Falquet, University of Geneva, Switzerland.
- Dr Kaveh Bazargan, Shahid Beheshti University, Iran.
- Dr Alireza Yari, ICT Research Institute, Iran.
- Dr Younes Shokrkhah, University of Tehran, Iran.

In the opening of the workshop, Dr Shahhoseini, IUST Vice-Chancellor for International Affairs, gave general information about the workshop. He also introduced panelists. Then Dr Shahhoseini delivered his own speech regarding opportunities and challenges of e-Science and cross-border academic partnerships. He emphasized on benefits of e-Science and discussed about different aspects of cross-border academic partnership. Then Dr Kim, Chief of Innovation and Partnership Department BDT, in International Telecommunication Union (ITU) reviewed the ITU platforms such as ITU Study Groups, ITU Academy, Kaleidoscope, ITU Journal that have been used for facilitating Academic activities in the field of ICT. She also discussed about innovation and neutrality in technology. The third panelist was Dr Falquet, from University of Geneva. He talked about the effect of data sharing and computing power those results in appearing e-science. He believed most scientists in the world have interested to exchange knowledge and data. Dr Falquet gave an example of his work in which artificial intelligence was
used to analyze the scientific information and extract the best answer of complicated questions. After him Dr Bazargan, from Shahid Beheshti University, talked about a social innovation in an open ICT ecosystem. He described Human Computer Interaction (HCI) and listed the local and global solutions. Dr Shokrkhah from University of Tehran was the fifth presenter. He talked about the readiness for e-science while at the same time there are many challenges that are globally similar: lack of modern literacy and expertise, digitizing printed assets into digital, online and even cyber ones, accessing the large data resources, the ability to work with and manage the big data both in the storage and retrieval phases, getting familiar with new algorithms and workflows both for computation and large-scale data analysis. He raised this question: what will happen in future regarding the relationship between science and the media. As the sixth panelist, Dr Yari from ITRC focused on knowledge sharing and collaborative researches. He emphasized on collaborative researches and its impact on the evolution from the Information Age and Information Societies to Knowledge Societies.

2. Main outcomes highlighting the following:
   I. Debated Issues

Following issues are raised by audiences:
- history and the concept of Knowledge Societies;
- difference between academic and scientific minding;
- knowledge sharing platforms;
- Transformation the relation in schools as well as business, and society.

   II. Quotes

Please refer to item 4.

   III. Overall outcomes of the session highlighting

In this workshop panelists discussed about partnership issues that exist in the sphere of e-Science. Each one after a brief review on the main subject talked about different aspects of cross-border partnership from their own viewpoint and discussed about its impacts on shaping the future of the Information and Knowledge Societies.

   IV. Main linkages with the Sustainable Development Goals

G1 – G4 – G6 - G7 – G11 - G13 - G14 - G15 - G17

   V. Emerging Trends related to WSIS Action Lines identified during the meeting

How ICTs have changed the scientific environment paradigm;
Scientists interest to collaborate and exchange knowledge and data;
Open access scientific resources may be more efficient way of sharing knowledge comparing the current closed and centralized system.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- E-science in Information and Knowledge Societies
- Research Collaboration and the Information and Knowledge Societies
1. Main Outcomes Highlighting the Following:

I. Debated Issues

The objectives of the session was to introduce the Ljubljana OER Action Plan to discuss its implementation strategies. In particular, it focused on examining elements form the Ljubljana OER Action Plan adopted at the 2nd World OER Congress 2017 and their contribution to a UNESCO OER Recommendation to be developed in the 2018/2019 period further to a decision of the UNESCO General Conference at its 39th Session (November 2017).

The five areas for action highlighted in the Ljubljana OER Action Plan are:

1) the capacity of users to access, re-use and share OER;

2) issues relating to language and culture;

3) ensuring inclusive and equitable access to quality OER;

4) changing business models; and

5) The development of supportive policy environments. During the session, Zeynep Varoglu, Programme Specialist, ICT in Education, Knowledge Societies Division, Communication and Information Sector, outlined the Ljubljana OER Action Plan and its follow up, including the decision of the 40th UNESCO General Conference in CI Commission to develop a draft OER Recommendation.

Mr Gasper Hrastelj, Deputy Secretary-General, Slovenian National Commission to UNESCO presented the Ljubljana OER Action Plan from a Governmental Perspective and Dr Sophie Touzé, President of the Board of Open Education Consortium (OEC) presented on the Ljubljana OER Action Plan from an Institutional and NGO Perspective. This presentation was followed by an interactive session which focused on discussion on key issues, actions and actors for each of the 5 areas identified above in the Ljubljana OER Action Plan. In the report back session, participants presented the outputs of their working group sessions on the five areas of action.
II. key achievements and challenges shared by the audience and/or panellists

The issues highlighted in the debates were: the importance of regulatory bodies and governments in supporting the use and development of OER.

III. Quotes

The government has started to initiate a nationwide movement for OER in countries, and this movement needs to provide enough guidance for the people working on it.

- Ali Alyafei, Ministry of Education, United Arab Emirates

III. Overall outcomes of the session highlighting

The vision for implementation of WSIS Action lines beyond 2015: OER provides an innovative development in the area of e-learning

IV. Main linkages with the Sustainable Development Goals:

SDG4 ‘Inclusive Quality Lifelong Learning’

V. Emerging Trends related to WSIS Action Lines identified during the meeting:

Importance of OER for achieving SDG4
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/182#intro

1. **Main outcomes highlighting the following:**

I. **Debated Issues**

- **Ms. Sandra D'Urzo, Senior Officer, Shelter and Settlements, Disaster & Crisis Prevention, Response & Recovery, IFRC:** Ms Sandra shared that Red cross had presence in 191 countries with a huge network of around 16 million volunteers- notably half of them are youth. She shared about the platform of PASSA - Participatory Approach for Safe Shelter and Settlement Awareness was launched targeting under 18 teenager segment. The vision behind the initiative is that young people are agents of change. These young minds often residing in high at risk marginal communities are being empowered to use various online and offline tools for mapping critical life saving data by means of crowdsourcing, data visualization, digital mapping, timelines, GIS, serious gaming tools among others. She highlighted how youth to be an active part of transformation and they simply require technology that is socially inclusive to educate and empower them. She shared case studies from Costa Rica and Metro Manila where this initiative is being applied successfully.

- **Mr. Esteban Leon, Chief a.i. Risk Reduction Unit - RRR Branch / Head, City Resilience Profiling Programme (CRPP), UN-Habitat:** Mr Esteban shared about the City Resilience Profiling Program which is centred on the concept of treating city as a system and understanding the reaction and responses of the systems to shocks and stresses. “Cities are systems, you cannot respond in sectoral manner you have to be comprehensive and think how system works”. Currently there are 156 indicators on the basis of which data is collected from the municipality. The result is generation of evidence based recommendations of action for resilience. He stressed on the multi-hazard, multi-stakeholder approach of the program which has cross participation from the private sector, community, governments and society. He also mentioned how “each city is like a fingerprint” and one has to contextualize the actions based on the specific shocks and stresses it undergoes. He shared that the program promotes synergies and is also chairing the Medellin Collaboration for Urban Resilience which has a number of global partners like Rockefeller Foundation’s 100 Resilience Cities network, GFDRR, UNISDR, ICLEI, Cities Alliance among others. He also shared that it is aligned with the four large agreements- Sendai framework; SDG 11; Paris agreement and the New urban Agenda.
● **Mr Rob Cartridge, Head of Global Knowledge, Practical Action:** He shared examples of implementation of ICT4D in the form of a platform on Flood Resilience which acts as a Knowledge sharing portal. He stressed on the need for focus on (Appropriate) Technology and Technology Justice and also highlighted the importance of documenting and sharing key lessons. He shared examples of Practical Action’s work in Nepal where they are developing a portal which offers solutions to flood resilience as well as several Community assessment tools. He mentioned that “Knowledge should be localized, contextualized and relevant”.

● **Mr Josh Woodward, Former Regional ICT & Digital Finance Advisor, FHI 360:** Mr Josh shared about the work of his organisation in creating an inventory of digital technologies for resilience in Asia pacific. They received over 125 submissions which utilized varied types of digital technology like: data visualization; big data; IoT; SMS; GIS; IVR; Social media; Websites; UAV/Drones , Mesh networks, sensors, mobile apps etc. The project entries were mostly for community resilience and the top three sectors of focus were: livelihoods, climate and health. The nature of the response in these projects was on preparedness or recurring event response and were mostly from rural and peri-urban areas. The full inventory can be viewed here: [https://sites.google.com/view/digitaltech4resilience/inventory](https://sites.google.com/view/digitaltech4resilience/inventory). Mr Josh also shared about a due diligence tool that was created with an intent to choose the appropriate technology based on guiding questions related to: User appropriateness, appropriateness, Financial sustainability, impact potential among others. The tool can be accessed here: [https://sites.google.com/view/digitaltech4resilience/tools](https://sites.google.com/view/digitaltech4resilience/tools) In addition to these panelists, the session also witnessed three inspiring presentations from three inspiring entrepreneurs working in the field of digital literacy.

● **Ji won Park, Co-founder, CodePhil:** Codephil is a digital literacy not profit that aims to empower youth in rural Philippines through digital literacy skills and promote decent jobs for youth. The story began in Lavezares, Northern Samar, where they first piloted their computer programming workshops at BBCMAIS High School in 2016. In the words of the founder: “We realized that despite the investment in new computers at schools, there was still a lack of updated digital literacy curriculum to meet the needs of future jobs.” Ms Ji won shared that 80% of public schools in the Philippines did not have Internet access. This despite the fact that 90% of new jobs will require digital literacy skills. This inspired Code Phil to partner with the Department of Education to co create a curriculum with several local partners to teach computer programming and website development but also training the teachers to take a more active role in developing digital literacy material. The team is now working on a free online and offline tool called Typephil- which is a typing software for students, customizable to local language. Hackathon innovation summits are also being organized in these communities to power the tech ideas of students.

● **Marija Musja, Founder, Empowerment Lab:** Ms Marija is bringing coding and media training to girls in Odessa Ukraine, thereby defending their right to dream. The initiative started when she conducted surveys in Ukraine with 400 kids from 8 different schools asking them about their dreams and aspirations when they grow up. She shared that in EU, 80% of women wanted creative independent jobs, in Ukraine only 1% are interested in programming, majority of jobs desired are creativity related. So she combined the two and created an initiative on ‘Coding in creativity projects’. This involves a 2.5 month training on web development and workshops on story telling (how to tell their stories through technology), followed by an e-mentoring platform, where girls can contact female role models in the field of ICT to study further. The role of the mentors is to help navigate existing e-learning courses and encourage self-directed learning online.
• Iffat Gill, Founder Code to Change: Code to change is an innovative e-mentoring initiative which was launched in 2015 in Netherlands. The aim is to empower women in tech field who face challenges in their career progression but also the new women entering this field for better guidance and skills training. This is in context to the rapidly changing job market of technology. So this initiative brings women who want to teach and learn together through mentoring and digital skills bootcamp. Ms Iffat shared how “Coding as a tool can be used to build confidence of women to show them what they are capable of. Its not rocket science to build something, everybody can do it, provided you have: the right guidelines and right resources and the right support system”. Their Women in tech community now has more than 400 members and is supported by e-bay, Microsoft and Accenture. This initiative will shortly be launched in Pakistan and later there are plans to expand it to different countries with government support and interest. They will be hosting their Annual code to change conference, featuring various emerging technologies in Netherlands in October 2018.

II. Quotes

“Knowledge should be localized, contextualized and relevant” Mr Rob Cartridge, Head of Global Knowledge, Practical Action

Girls can be key agents of tomorrows changes but the problem of todays society that women are excluded from technological devt of the society Marija Musja founder of Empowerment Lab

“We believe in mission of Filipino govt on ICTs as well as codephil that market of digitization will be a truly connected and inclusive society that provides equal opportunities for everyone” Jiwon Park, Co-founder CodePhil, Science Policy Interface Focal point, UN MGCY

“Examples of Codephil, Codetochange, and Empowerment Lab shows us that a society where women are educated, empowered is a resilient one!” Rozita Singh (Session Chair), Science Policy Interface Focal Point, UN MGCY

“We shouldn’t be afraid of technologies, if we see history in 500 yrs, the evolution of our Humankind has been quite fast. Thanks to curiosity of people, to investigate and research more, the more we research and more technology we use in favour of goals, faster we will get there. We have to take advantage of young people who investigate and are curious and use this curiosity to advance our common agenda” Esteban

III. Overall outcomes of the session highlighting

• The vision for implementation of WSIS Action lines beyond 2015: Key Message to Member states at events like ECOSOC:

1) “It’s not a matter of resources or tools, what we lack is vision and political commitment to ensure that vision is carried forward. Resilience alone is one side of medal, should be combined with rights based approach (equity and justice).” For instance, municipality and governments need to be accountable for- right to housing and technology access. (Sandra)

2) “We have many goals and targets, we are dreaming a lot, from MDGs and SDGs a lot of global agreements but governments are overwhelmed with Targets and goals, we don’t have enough support to implement them. The ‘How they should be doing’ is missing?” (Esteban)
3) SDG 11 is difficult to implement, requires efforts, we can dream for ending poverty, but how do we do it? Stop promoting agreements that are sectoral, SDGs are the larger umbrella and under this we have the Sendai framework, Paris agreement, and the new urban agenda. We should not forget the main target, and instead find several ways of achieving it. (Esteban)

**IV. Main linkages with the Sustainable Development Goals**

The focus of this session was in line with this year’s ECOSOC Integration Segment theme of “Innovative communities: leveraging technology and innovation to build sustainable and resilient societies”, as well as that of the 21st Session of Commission on Science and Technology for Development, 3rd Multi-stakeholder Forum on STI for SDGs, and 2018 High-level political forum (HLPF) under the auspices of ECOSOC. This session was centred on SDG 11. In the Hyogo Framework, vulnerability is defined as the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. Therefore, awareness and action at the local community level is crucial for scaling successful DRR initiatives. The Sendai Framework for DRR specifically mentions the importance of strengthening public awareness, especially on disaster risk information and knowledge, through campaigns, social media, and other tools. This allows for a community to utilize available resources to continuously avoid, mitigate, respond to, and recover from adverse situations, despite uncertainty with future risks. The rich discussions from the panelists during this session reiterated these points and sentiments.

**V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019**

The WSIS Forum focuses on the role of ICTs as means of implementing, monitoring, and reviewing progress with the 2030 Agenda, as outlined in target 17.8. While ICTs can be applicable in various contexts and across sectors, special attention should be placed on their potential applications in fragile contexts like disaster settings, conflict areas, humanitarian response, and climate change response. Exacerbated and emerging risks are increasingly noticeable from trends such as migration, rapid urbanization, anthropogenic climate change, and even rapid technological change. Hence the thematic aspect of disaster risk reduction and resilience cannot be left out from the ICT discussion.
Thematic Workshop

How to set the standard for cyber security? Guidelines and good practices

GFCE

Thursday 22 March 2018

14:30 – 16:15

Room H2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/199#intro

1. Key achievements, announcements, launches, agreements, and commitments

- Call for action from the GFCE to cooperate on a global level on the implementation of cyber capacity building.
- Open call for GFCE Advisory Board Members! The GFCE is looking for representatives from academia, tech community or civil society. Deadline is April 1st
- Announcement to join the ‘Triple I’ (Internet Infrastructure Initiative) upcoming events to increase awareness on how to create robust, resilient and open internet infrastructure.

2. Main outcomes highlighting the following:

I. Debated Issues

- The main issues debated were how do we identify good practices? How do we make sure that these good practices get implemented?

- The session started with an introduction by Manon van Tienhoven of the Global Forum on Cyber Expertise and its work as international multistakeholder platform where best practices and expertise is exchanged on cyber capacity building. The GFCE is moving towards implementation of cyber capacity building, however more is needed than just good practices and guidelines. It is essential to identify the guidelines and good practices, the next step is to examine whether these guidelines and good practices are actually working or will continue to work under different circumstances, such as in a different environment or with different technologies. Only by cooperation lesson learned can be shared and explored with the GFCE community to facilitate the multistakeholder dialogue on cyber capacity building. Dejan Dincic from DiploFoundation explained on the process of identifying global good practices from the GFCE initiatives, a process that took place in 2017. He emphasized the comprehensive approach that is needed when implementing the
good practices. A regional, decentralized approach is essential to successfully implement good practices in different regions.

- Maarten Botterman represented the GFCE Internet Infrastructure Initiative and explained how a robust, open and resilient internet infrastructure is key to counter infringements and threats to the cyber domain. The initiative has developed global good practices, and the next step is to organize regional meetings to share these to bring together regional stakeholders and to raise awareness on Open Internet Tools.

- A regional example was provided by Abdullah Al-Balushi from the Information Technology Authority of Oman. In his presentation, he explained about Oman’s experience and achievements in the field of cyber security. He focused on the Oman eGovernment Architecture Framework, which is a set of standards/best practices and process management systems to enhance government services delivery. He underlined the importance of the multi-stakeholder approach, specifically the involvement of the private sector.

- The key question of the audience, which led to an interesting discussion, was: Standards are a means to increase cyber security. When you look at the actors involved today, is the government really the actor with the strongest cyber security? The main conclusion was that awareness on every level is key for strong cyber security. An interesting analogy was made by Dejan Dincic, with traffic. The government plays an important role, but you cannot (are not allowed) to drive a car as citizen, if you do not have a license. Awareness at the end-user level must be raised to strengthen cyber security. The GFCE is starting multiple Working Groups, also on Culture and Skills, where awareness raising in a priority topic.

II. Quotes

- “Help make the Internet more reliable in your region: take action” – Maarten Botterman, representative of the Internet Infrastructure Initiative

- “Only by cooperation lessons learned can be shared and explored with the GFCE and the broader community to facilitate the multistakeholder dialogue on the implementation of cyber capacity building.” – Manon van Tienhoven, GFCE Secretariat

III. Overall outcomes of the session highlighting

- Cooperation and a multi-stakeholder approach is necessary for successful global good practices and guidelines.

- Although cyber and the internet are global issues, cyber capacity building (WSIS Action Line C4) cannot be achieved with a one-size-fits-all approach.
IV. Main linkages with the SDGs

- SDG 8: Decent work and economic growth – Cyber capacity building increases economic welfare by enhancing e.g. e-commerce, as well as, by a safe digital environment.

- SDG 9: Industry, innovation and infrastructure – Cyber capacity building is key for safe industries and infrastructure, therefore also innovation, e.g. Critical Information Infrastructure Protection or CERTs.

- SDG 16: Peace, Justice, and strong institutions – Cyber capacity building can only be successful globally and contribute to developing international norms for cyber security and therefore keeps cyberspace stable.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

A focus on the younger generation and volunteers based on trust instead of formal institutionalized mechanisms.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Focus on Skills and Awareness thematic workshop – which is key for cyber capacity building and cyber security in general - GFCE is interested in hosting such a workshop next year.
Thematic Workshop

ICANN, Data Protection, and the GDPR

ICANN

Thursday 22 March 2018 16:30 – 18:15
Room Popov 1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/197#intro

1) Key achievements, announcements, launches, agreements, and commitments

While there were no agreements as such; there was, from the session, an enhanced understanding of the issues which ICANN was confronted with in terms of ensuring compliance of its contracted parties (Registries and registrars of generic domain names) with the European GDPR (which comes into force in May 2018) while also satisfying policy concerns of governments, and other stakeholders, that the current WHOIS database be kept as intact as possible given its use for law enforcement, security protection of registrants and IP protection.

ICANN committed to keeping broader community informed of deliberations and decisions concerning the above.

2) Main outcomes highlighting the following:
   I. Debated Issues

The Session allowed discussion and debate of a number of important issues, including:

- The genesis of the General Data Protection Regulation (GDPR) in the European Union and why it has effect for bodies (which deal in personal data of EU residents) both in the European Union and outside it;
- Why ICANN has an obligation to ensure that arrangements with contracted parties (Registrars and Registries) do not cause them to be in breach of their legal commitments under the GDPR while at the same time complying with their obligations to provide data on the WHOIS database;
- The progress ICANN has made in developing a “Model” (for compliance of contracted parties with GDPR) which has been subject to consultation and is awaiting input from the European Data Protection Authorities (DPAs) which administer the GDPR);
- One significant issue, on which DPA advice is being sought, is whether it would be legitimate for the WHOIS to display publicly the e-mail address of the registrant post implementation of the GDPR post May 25th, 2018.
- Why it is important for law enforcement authorities to have rapid access to information on registrants; whether through the current public information (preferable) or through some form of tiered access arrangements;
- How the WHIS database has increasingly been used for security purposes (including that of registrant) and IP enforcement;
- That originally the purpose of the WHIS was much narrower, essentially to allow contact to be made with registrars / registrants for operation and continuity purposes;
- How countries outside of the European Union, such as in Africa, are confronted with need to adapt their own legislation to enable their own business to continue to do business with EU citizens.

II. Quotes
“Other purposes of the WHOIS, aside from allowing parties to be reached to ensure stability of infrastructure and continuation of service were not originally envisaged - William Drake

III. Overall outcomes of the session highlighting
That it was essential for all parties to work together, to come up with solutions that were legally compliant with GDPR but also allowed for information in WHOIS required to secure openness, security and stability of the DNS.

IV. Main linkages with the Sustainable Development Goals
That decisions on the information that was public, and or accessible, on the WHOIS database had implication for confidence and security in the use of ICTs, not least in providing protection for users against fraud, and spam, but also in protecting their privacy.

V. Emerging Trends related to WSIS Action Lines identified during the meeting
That adaption and changes to AL C5 is needed to reflect the new paradigm of Internet services.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
There should be a major theme on Data Protection and Privacy; as debate will be very topical.
1) **Key achievements, announcements, launches, agreements, and commitments**

Inclusion: It is only by creating an "inclusive" environment that the issue of balance can be resolved. We need to set the example of inclusion and cannot, in any of our actions, have a mindset of "excluding" (by, for example, creating specific ICT programs for girls that would exclude boys from participating).

Open discussion and action: sometimes the reality has to be said with clear words that is more often interpreted as an aggression when they are pronounced by a woman than a man. An open speech environment has to be created where the women who express opinions don't suffer from violent reactions.

Integration: women sometimes select carrier dominated by men and have to deal with an environment where they are unique. It's important for women to accept this situation, to be able to distinguish themselves mostly by demonstrating excellent skills and competences. The focus should then be made on the education to allow women to compete in men-dominated sectors.

2) **Main outcomes highlighting the following:**

   I. **Debated Issues**

   + How gender can be source of challenge in career evolution through the lens of social, cultural, economic, and biologic differences.

   + Real-life examples of women entrepreneurs regarding challenges they faced, and solutions they found, failures and successes along their journey.

   + How can ICT be part of the solution of gender-related challenges?

   + Why is diversity is a good thing?

   II. **Quotes**

   “The existence of gender bias is a reality. Nonetheless, the biologic gender-specific differences must not be ignored when assessing the gender gap.” – **Cintia Pino**

   “Sharing experiences between such a diverse panel of women active in ICT was an inspiring
experience and shows the importance of continuous exchange to address not only the gender issue but the broader issue of diversity and its positive impact on ICT” – Sonja Betschart

“It’s really important and interesting to bring together active women and to hear how they overcome the difficulties, as woman, as human and as entrepreneur. Sharing experience is inspiring.” - Patricia Sigam

“There are 4 keys to success: passion, objectives, timing and good mood.” – Marie Debombour

III. Overall outcomes of the session highlighting

The rich mix of experiences and discussion of the session pointed out that gender is only one part of the issue at hand and that the extent of gender inequality varies widely according to geography, cultural, religious, socio-economic, professional and academic backgrounds. Our speaker from India reported higher level of inequality issues in her country than those visible in occidental countries. But occidental countries also count on testimonials. One of the participant business owners denounced she suffered from sexist comments during board meetings of her own company associated to her condition as a woman, while another of the intervenient disclosed that when attending an important business meeting, stakeholders assumed her to be the assistant until they realized she was the actual COO they were waiting for. A black skin women entrepreneur added she faces double challenge inherent to both her gender and skin colour. On a more positive note, some speakers also shared experience on how a favourable environment, in the family or at work, supported them to become successful entrepreneurs. Your level of commitment should be the main constituent separating you from those at the top. Nonetheless, women seem to be required to show “proof of concept” more often than men. But by lack of confrontation with the men side reality or an in-depth analysis under a controlled scientific setting, this view cannot be considered as an indisputable truth.

Science has not yet distinguished whether several gender differences that often result in inequalities derive from societal bias or relate to biological gender-specific mechanisms. For example, in regards to women and man differences in decision-making process and brain wiring. But the existence of social bias is a reality (of all sort, such as for example, the majority of public places proposing the area to change babies’ dippers within women toilet instead of in a common area or in both men and women’s, putting women in the position of the housewife). The further we can tackle these bias, the closer we get to uncover the truth on the causes of the gender gap.

In the scope of the session outcomes, it was as well discussed how can ICT be part of the solution for gender-related challenges. Digital technology can be source of databased insights and help us acknowledge the gaps. The example of Uber demonstrating that women drivers earn on average 7% less than men per hour popped-out. Since Uber is a gender-blind economy, these differences are mainly related to the choices women and men undertake over their rides (such as the time periods and geographical areas they cover). Is this linked to physiologic decision-making differences? Is it because certain hours and areas represent a higher risk for women drivers than for men? Is it something else? This data is often a good starting point on the “What?” that requires an extended assessment to be conclusive enough on the “Why?”. ICT can also raise awareness to diversity issues since we live in an increasingly connected and globalized world. Leveraging social media to actively and openly promote diversity in as many formats as possible, is the best way to achieve gender balance.
Diversity is a creativity booster and can help us find new approaches. Studies indicate that the higher the gender diversity within a corporation, the best its performance will be. “If you’re going to make connections which are innovative ... you have to not have the same bag of experiences as everyone else does”, said Steve Jobs. Overall, it is important to extend the gender issue to a more global discrimination issue, including age, race, disabilities, appearance and so forward, and treat all discriminations as one problem.

IV. Main linkages with the Sustainable Development Goals

This session is directly linked to SGD 5 “Gender Equality”, since the best way to address gender balance and diversity is by promoting it openly and in as many formats and forums as possible. In addition, it was an important step to balance the gender participation at WSIS sessions, where otherwise men intervention would have been heavier.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

+ The % of women in ICT is actually declining. This trend shows how urgent it is to address the issue.

+ Digital technologies depend on ecosystems and how to best leverage them for success. We can get inspired by this very trend and apply the methods to address the issue of gender balance.

+ Women design themselves the path to improve gender inequities. Their successful strategies should be promoted and shared to support the other women who want to address the issue but sometimes don’t know how.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

+ How can ICT be part of the solution but also the problem of gender-related challenges?
+ Digital activism and group thinking consequences on the gender gap issue.
+ Case studies and experience reports

Process suggestions:

+ The gender inequities topic has been very present during WSIS Forum 2018. Unfortunately, all these initiatives didn’t come together. It would be worth to better coordinate the activities around gender inequities, for example, by producing a common outcome report englobing the insights uncovered along different sessions.
+ It would be nice to have this document during the session to facilitate the moderator’s role in taking notes of the relevant topics to be developed in the scope of this report.
Thematic Workshop

Connecting communities by building digital skills – a way towards the SDGs

ICC BASIS

Thursday 22 March 2018
Room C2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/137#intro

1. Main Outcomes Highlighting the Following:

I. Debated Issues

The workshop explored through robust and interactive dialogue with business and government experts from all parts of the world challenges and opportunities both developed and developing countries face when seeking to provide meaningful connectivity to their populations and empower local communities with the necessary skills to reap the benefits of ICT and the digital economy.

Participants shared best practices and lessons learned from implementing public-private projects and perspectives on issues such as the array and different facets of digital skills, their impact on the socio-cultural and economic development of a community and key elements of comprehensive policies to facilitate digital skills development. The workshop explored digital literacy as a holistic set of knowledge and skills that allows users and organisations to fully capture the potential of digital technology. Participants highlighted how this ranges from basic computing skills like typing and using applications, through full awareness of user issues such as cybersecurity and privacy, to mastering online tools for jobs in online journalism and marketing or knowledge in engineering and coding.

Discussions highlighted that not only education programs need to be adapted to factor future needs and digital skills prerequisites for employment, but digital literacy must also be ensured across the population so that all are equipped with the competencies for facing the challenges and fully take advantage of the opportunities of digital transformation in their everyday life such as communicating, navigating online systems for basic financial and healthcare services or interacting with their local public administration. Speakers emphasized how digital literacy is related to social factors, and interventions need to be developed with a community-oriented mind-set, tailored to the needs of the local context and local languages. They also raised the need to focus on growth-mindset and adaptability and soft skills such as critical thinking, creativity and reasoning, planning and organization. Participants agreed that governments are able to take the lead and set goals for skills development programmes, and best results can be achieved when the private sector, civil society and the technical community are involved in implementation. Working together with all stakeholders, the most
effective solutions can be created, tailored to particular need, and with the combined expertise from their respective angles.

II. **key achievements and challenges shared by the audience and/or panelists**

The discussion was organized around two broad themes:

1. Case studies and examples of implemented projects, best practices to service the growing demand for digital skills and bridging the existing gaps within and between countries;

2. Enabling policy approaches and private-public partnerships required for the implementation of projects.

In the first segment participants introduced and shared lessons learned from their projects aimed at developing digital skills which took many shapes and forms: raising awareness of the potential of the Internet and ICTs, guiding young and old through their first virtual steps, helping communities connect, getting businesses launched, training and re-training to develop new technologies and innovate.

Examples included:

- GSMA’s mobile internet skills training toolkit aimed to close the coverage gap and the skills gap and designed for mobile network operators, NGOs and governments that reached 250,000 users in India and Rwanda

- Initiatives in Japan by the National Center for Incident Readiness to fill the skills gap for ICT through cybersecurity awareness-raising for both everyday end users and skilled professionals of all ages, which has been shared in local languages throughout the ASEAN region.

- Initiatives by Microsoft using existing data to understand how technology changes the nature of work and the nature of jobs as well as how to bridge skills demand and supply at local levels.

- The ILO’s Digital Skills for Decent Jobs for Youth campaign aiming to connect stakeholders to work together to build the future of work they want and connect the demand of the labour market with the supply of skills and develop programmes for upskilling and reskilling to achieve higher productivity and employability.

- The work of CodePhil, a student-run nonprofit founded by Columbia, Dartmouth and MIT undergraduates, aiming to teach, empower, and connect the youth in rural Philippines through digital literacy skills.

- Initiatives by the government of Bangladesh to reform public services, education and address different socio-cultural challenges through digital skills training. In the second part of the workshop panelists were invited to offer recommendations of key policy actions to support the development of digital skills to further the SDGs. Participants highlighted the need for an enabling policy environment that builds on a comprehensive ecosystem composed of an accessible and affordable infrastructure that enables connectivity, coupled with appropriate applications and services that promote local content in local languages and
script, as well as initiatives to equip the users with the ability and skills necessary to actively and independently use and contribute to locally relevant content, applications and services.

Participants emphasized how from an ICT perspective creating an enabling environment for fulfilling the SDGs both demand and supply side questions need to be taken into account. This can be done through four main considerations:

- Economic consideration: how to promote sustainable investment and encourage innovation and entrepreneurship that can lead to overall national economic growth. How to enable MSMEs - the growth engine for sustainable economic development - with the necessary skills.
- Social and cultural considerations: how to foster ICT and digital literacy skills as well as the creation of relevant content and services, which is the end goal to strive for when thinking of meaningful connectivity.
- Technical considerations: how to make sure the necessary infrastructure is in place for the deployment of relevant services and projects.
- Governance approaches: how to encourage public-private partnerships that can leverage the unique contributions of each stakeholder group as well as answer their concerns so that such partnerships are sustainable.

**II. Quotes**

Lauren Dawes, GSMA: We view connectivity holistically. Access, relevant content, digital skills and affordability all play a significant role. You can't have one without the other. Having a good mobile connection is not enough without having a device. Having a device without knowing how to use it, practically means being unconnected.

Carolyn Nguyen, Microsoft: The question about the impact of technology and digital skills comes down to how to create a human-centric policy framework that is also sustainable as it goes forward. This needs to be a multistakeholder and multidisciplinary conversation between business and governments working together with academics and civil society.

Anir, Bangladesh: Digital skills should not be developed for the sake of digital skills. They are a road to getting somewhere. Governments can set the end goal towards which digital skills can provide the means.

**III. Overall outcomes of the session highlighting**

- Digital literacy must be considered as a comprehensive set of knowledge and skills that allows users and organisations to fully capture the potential of digital technology.
- Digital literacy is related to social factors, and interventions need to be developed with a community-oriented mind-set, tailored to the needs of the local context and local languages.
- Solutions are most effective when they tailored to particular need, and created with the combined expertise of governments, the private sector, civil society academia and the technical community.
- Successful and sustainable ICT investment, projects and partnerships can only be implemented if an enabling policy framework is in place. Different policy issues (economic, technical, social/cultural, governance) arise when conceptualizing and implementing such a policy environment. These policy issues can be overlapping and need the experience and expertise of relevant stakeholders to be addressed effectively.
The Geneva Plan of Action and the WSIS Action lines aim to create and sustain an open and inclusive Information Society where governments, civil society, businesses, the technical community and international organizations could work together to achieve the full potential of ICTs for development, to bridge digital divides and leave no one behind. The role of the WSIS Forum is to highlight the important activities and contributions the pursuit of the WSIS action lines can make. By highlighting the efforts made across the many UN agencies involved as well as the work of governments, business, civil society and others in making progress – WSIS Forum is an annual opportunity to benchmark progress, share success stories and learning experiences and incentivize further action.

IV. Main linkages with the Sustainable Development Goals

The workshop was directly related to the sustainable development process as it provided an important discussion on the increasing impact of technology and innovation on skills and how ICTs themselves can be a vehicle for training and retraining. The use of ICT can support development and highlight the ways in which stakeholders can work together to advance progress on action lines to expand connectivity, provide meaningful access and further adoption of digital technologies. The discussion outlined creative and collaborative solutions to education, training and bridging existing skills gaps within and between countries to foster inclusive growth, decent jobs and build inclusive societies.

Discussions at the workshop mainly linked to the following SDGs:
Goal 4: Quality Education
Goal 8: Decent Work and Economic Growth
Goal 9: Industry, Innovation and Infrastructure
Goal 17: Partnerships for the Goals

V. Emerging Trends related to WSIS Action Lines identified during the meeting

The workshop highlighted that appropriate policies are at the center of the implementation of WSIS Action Lines for development and pointed to the growing need for partnership among all stakeholders to identify the timely, scalable, and innovation enabling policies that enable the implementation of the WSIS Action Lines. Stakeholders play key roles in ensuring well-informed and targeted policy approaches. For example, engaging relevant stakeholders in policymaking can help drive meaningful connectivity and empower local communities with the necessary skills to reap the benefits of ICT and the digital economy.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

WSIS Forum 2018 should seek in-depth discussions on connectivity and meaningful access to Internet and ICTs and how this contributes to bridging divides and closing gaps. The WSIS Forum mandate refers to taking stock of the progress made on the WSIS Action Lines. Thus discussions should also include presentations of collaborative initiatives and partnerships showcasing the lessons learned from local and regional projects aimed at advancing the Action Lines by enhancing connectivity, adopting digital technologies, and encouraging multistakeholder cooperation and public-private partnerships and investments.
Thematic Workshop

Discussion on the Technical Standards of Industrial Internet

CICSCERT

Thursday 22 March 2018
Room H1 - ITU

16:30 – 18:15

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/151#intro

1) Key achievements, announcements, launches, agreements, and commitments

The introduction of industrial Internet themes in the WSIS forum reflects a mainstream trend in the application of ICT technology and represents one of the specific ways that ICT promotes SDG. This year's workshop focuses on standardization topics, and key points such as Internet of things, safety and AI are mentioned, which provides new focuses for follow-up workshop.

2) Main outcomes highlighting the following:

   I. Debated Issues
      Technical Standards of Industrial Internet

   II. Quotes
      NON

   III. Overall outcomes of the session highlighting
      The workshop further highlights the standardization needs of industrial Internet, shares views on the industrial Internet technology architecture and standard system.

   IV. Main linkages with the Sustainable Development Goals
      Industrial Internet can improve the efficiency and intelligence level of industrial system, reduce unnecessary waste, reduce costs, and save resources and energy. The standardization of industrial Internet is the basic guarantee to promote the popularization and development of industrial Internet.

   V. Emerging Trends related to WSIS Action Lines identified during the meeting
      ICT application in industry

   VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019
      We suggest some alternative themes, such as Information Security of Industrial system, Industrial Internet, Application of Internet of Things in Indust
1. **Key achievements, announcements, launches, agreements, and commitments**

Presentation of the ITC “e-Trade for Impact” strategy, which aims to accelerate the Sustainable Development Goals with digital technologies scaling the impact of the organisation’s interventions. The strategy focuses on three areas:

- Sharing access to information, strategies, learning and platforms (“e Networks”),
- Empowering small businesses in online marketplaces (“e-Commerce”),
- Growing entrepreneurial ability to capture the potential of digital business models (“e-entrepreneurship”).

2. **Main Outcomes Highlighting the Following:**

I. **Debated Issues**

- E-Networks such as Shetrades are needed to enable shared access to information, strategies, learning, platforms and partners. Smart partnerships are essential to achieving success. The ITC and eBay join forces to connect women-entrepreneurs in developing countries to digital markets.

- Within the area of e-Entrepreneurship, the ITC works with tech startups and incubators in developing and least developed countries such as Concree Senegal to enable entrepreneurs to capture the potential of digital business. Digital platforms, like the ITC e-learning platform “SME Trade Academy” and third-party players help to leverage the reach and effectiveness in pursuing achievement of the 2030 Sustainable Development Goals.

- E-commerce is the entry door for micro, small and medium-sized enterprises to global markets, to retaining ownership and earning higher margins by serving consumer markets directly, without the need to pass through costly intermediaries. Small
businesses in developing and least developed countries are largely excluded from e-commerce as they have limited access to online payment solutions, reliable and cost-effective logistics services and technologies. The ITC helps these small businesses to overcome the barriers through training, advisory and partnerships.

II. Quotes

- “Digital innovation is accelerating. Online platforms and social media offer new routes to market. Emerging technologies such as blockchain, artificial intelligence, the internet of things, and additive manufacturing are challenging the organization of global value chains. Disruption brings new opportunities for developing countries, if followed by new capabilities and the implementation of appropriate strategies. Without these, disruption threatens to promote further disparities between countries who master the new digital-driven value chains and those who do not” Anders Aroe, Director, Division of Enterprises and Institutions, ITC

- “If you compare today’s world with the world 50 years ago, where you did not have internet, the customer was much further away (…). Today you can put your product out and get it seen by the world’s shoppers. This is the opportunity we have (…) and that is what we work on in the context of Shetrades to give women access to our platform, allow them to receive payments, allow them to have reasonable shipping rates and get them to sell.” Fabian Staechelin, Business Development Manager, eBay.

III. Overall outcomes of the session highlighting

- Digital technologies offer the potential to accelerate our reach and effectiveness in pursuing achievement of the 2030 Sustainable Development Goals. By making better use of digital platforms, tools and leveraging partnerships we can reach further, quicker and ensure that our initiatives are inclusive and increasingly cost effective.

IV. Main linkages with the Sustainable Development Goals

- Access to e-trade is expected to contribute significantly to SDG 17.11 “Increase significantly the exports of developing countries…” and in particular for poor communities (SDG 1.4 “By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources…””) and women (the means to implementing SDG 5 refers to “Enhance the use of enabling technologies, in particular ICT, to promote women’s empowerment…”).

V. Emerging Trends related to WSIS Action Lines identified during the meeting:

- Access to information and knowledge
- Capacity building
- Enabling environment
- International and regional cooperation
Thematic Workshop

International Decision-Making in ICT. Where are the Women?

ITU/UNESCO Chair in ICT4D

Thursday 22 March 2018 16:30 – 18:15
Room H1 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/113#intro

1. Key achievements, announcements, launches, agreements, and commitments

Mind-maps of the outcomes of the session has been shared with the participants and published under the ITU Network of Women for WRC-19 initiative web site here:


1. Main Outcomes Highlighting the following:

I. Debated Issues
- What are the biggest inhibitors of trust regarding ICTs in the algorithmic age?
- How does a “human-centric” narrative of purpose relate to the SDGs?
- How do we ensure equity of access to these technologies for all countries?
- Why do we need to ensure systems benefit humanity at the design phase?

II. Quotes

“Ethics is the new green.” John Havens, IEEE

“There is a keen interest in getting engaged and we all need to help people innovate responsibly” Anja Kaspersen, Director for the United Nations Office of Disarmament Affairs in Geneva

III. Overall outcomes of the session highlighting

- There is a need to build a new, human-centric narrative of purpose around and for technology and science.
- Society must encourage people, businesses and communities involved in technology development and deployment to collectively and individually assume their part of anticipative responsibility.
- Metrics should be developed that capture the well-being of people, not as an “externality” of global production chains and markets.
- Ensure that systems are designed in such a way that their outcomes are as much as possible truly beneficial for humanity, while mitigating predictable risks already at the inception and design phase, and not as an afterthought.
- It is important that individuals reclaim their digital identity in the algorithmic age.

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/193#intro
IV. Main linkages with the Sustainable Development Goals

As Artificial Intelligence and Autonomous Systems become more ubiquitous, these technologies will impact the achievement of all of the Sustainable Development Goals.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

Regarding WSIS Action Line C10: Ethical Dimensions of the Information Society, the panel noted that the ethics by design should be incorporated into Artificial Intelligence and Autonomous Systems in order to ensure equitable and fair use of these technologies.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

The panel noted that a dedicated track on the ethics of artificial intelligence and autonomous systems would be beneficial at the WSIS Forum 2019.
Thematic Workshop

ICANN, the Government Advisory Committee (GAC) and Capacity Building

ICANN
Friday 23 March 2018
Room Popov 2 - ITU

9:00 – 10:45

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/138#intro

1) Key achievements, announcements, launches, agreements, and commitments

Many IGOs and technical organizations organize Capacity Building activities for governments; sometimes duplicating scarce resources. Peter Major (the Moderator) underlined the need to improve the collaboration between these organizations in their capacity building efforts in order to improve the understanding of governments of the big picture.

2) Main outcomes highlighting the following:

   I. Debated Issues

   - The central role of government in Internet Governance discussions
   - Presentation of their main capacity building programs by ITU, ICANN and UNCTAD
   - Stocktaking of these capacity building programs
   - How to better answer to the need of governments in this capacity building field
   - Possible complementarity between these capacity building programs

   II. Quotes

   III. Overall outcomes of the session highlighting

   Governments are benefiting from different capacity building programs. The aim of these programs is to help them to better understand the functioning of the Internet and the main digital challenges (cybersecurity, Freedom of Expression, digital divide). ITU UNCTAD and ICANN have presented their respective activities and did a stocktaking of their programs.
IV. **Main linkages with the Sustainable Development Goals**

Goal 17: Revitalize the Global Partnership for sustainable development

V. **Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019**

An overview, and stocktake of what organisations were providing for governments in developing countries would be useful in perhaps avoiding duplication.
Thematic Workshop

Open Earth Observations for the benefit of Humankind

GEO/UNIGE

Friday 23 March 2018

Room H2 - ITU

9:00 – 10:45

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/156#intro

1) Key achievements, announcements, launches, agreements, and commitments

Presentation of several platforms and interfaces (GEOSS, MapX, Swiss Data Cube, and GEO Essential) committed to the open access and use of Earth Observation data for the benefit of humankind, contributing to achieving the SDGs.

Announcement for registration that is open from February to April 2018 for a Certificate of Advanced Studies (CAS) on Geomatics for a Sustainable Environment happening from June to September 2018. This education programme gives double competencies to professionals and students in geomatics and environmental fields. There are also GEO Knowledge Sessions.

2) Main outcomes highlighting the following:

I. Debated Issues

- Earth Observations for Impact; Group on Earth Observation Systems of systems (GEOSS) Platform and open Earth observation data and information
- MapX - Partnership Framework For Using Spatial Data To Inform National Biodiversity Planning And Reporting
- The Swiss Data Cube - Big Earth Observations Data for Sustainable Development
- GEO Essential European Project on Essential Variables to build workflows from raw data to indicators
- ‘Geomatics for a Sustainable Environment’ education programme

II. Overall outcomes of the session highlighting

Successful outcomes in terms of spreading the messages of the collaborative projects and potential partnering in terms of future integration between some of these activities.

Some examples of application and results of the activities were featured and presented to the audience in efforts to show the importance of open data sharing to contribute to the achievements of the SDGs.
III. Main linkages with the Sustainable Development Goals

The session explored how open Earth observations data and information, and the systems, applications, and capacity building efforts facilitating their use, contribute to the monitoring and achievement of the UN 2030 Agenda for Sustainable Development, particularly for SDG 2, 6, 11, 13, 14 and 15.

IV. Emerging Trends related to WSIS Action Lines identified during the meeting

This session had a big emphasis on the access to information and knowledge by presenting platforms such as the GEOSS Platform, the Swiss Data Cube and MapX. These platforms allow users to access and easily use spatial data freely and openly for projects aiming at better understand environmental challenges and most importantly for better decision making and policy making towards a sustainable development.

The second trend identified is the importance of the role of governments and all stakeholders in the promotion of broad open data sharing on Earth observations.
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/163#intro

1. Key achievements, announcements, launches, agreements, and commitments

Internet based applications and mobile technologies are increasingly becoming an integral part of children's lives. Protecting children in this environment, which is called Child Online Protection (COP), is a global challenge which requires platforms, tools and online services.

Tunis Agenda for the Information Society, which is adopted in the World Summit on the Information Society (WSIS) on 2005, specifically called for safeguards within the ICT environment “incorporating regulatory, self-regulatory, and other effective policies and frameworks to protect children and young people from abuse and exploitation through ICTs” and integrating them “into national plans of action and e-strategies”. To reach to these, public-private partnerships should be used to find Technological solutions to protect children online at national and regional and international levels.

In this workshop which was arranged by Iran National Committee for WSIS, panelists from academia, private sector and international bodies discussed about child online protection. The list of panelists was as follows:

- Dr Hadi Shahriar Shahhoseini, Iran University of Science and Technology (IUST), Iran.
- Dr. Ibrahim M. J. Aldabal, Council Working Group on Child Online Protection, ITU.
- Mr. Seyed Hadi Sadjadi, Information Technology Organization, Iran.
- Mr. Mazdak Mohtasham, Anarestan Company Iran.
- Mr. Abbas Mohammadkhanighi Asvand, Dorsa Company, Iran.
- Mr. Amirhossein PanahiNaeini, ICT Research Institute, Iran.
After opening the session by Dr Shahhoseini from Iran University of Science and Technology and raising the COP ecosystem’s pillars and key areas, Dr Aldabal, Chair of ITU council working group on Child Online Protection, talked about ITU activities in this regards. He emphasized COP as a global challenge that needs international collaboration and asked participants to consider the COP issues in their activities. Then Mr Panahi from ITRC talked about COP requirements and introduced the roadmap which has considered for COP in Iran. After him, Mr Sadjadi deputy chairman of Iran Information Technology Organization (ITO) described the KOVA project, which has been selected as champion project in WSIS Prize 2018. The project is reviewed in this workshop as a best practice in the COP area. KOVA is abbreviation of Persian words of "Kids and Internet". He explained different issues they faced during the implementation of the project and listed their achievements as well as challenges and applied solutions.

Then Mr Mohtasham from Anarestan Company delivered his speech regarding kids-friendly mobile application which was developed and offered by Anarestan. Their products and services include SIM cards, tablets, kid-friendly Internet and search engine, digital content for kids. He also gave some information about the number of their subscribers, applications, books, audios as well as the number of their partner companies, digital centers, publishers and schools. He also talked about the capacity of regional and international collaboration in the field of child online protection. As the last speaker Mr Mohammadkhani from Dorsa Company, presented the overview of Dorsa virtual ecosystem as a Persian safe digital ecosystem for kids.

2. Main outcomes highlighting the following:

I. Debated Issues

1. How should we deal with public area such as internet coffees, where kids like others use same facilities and what control mechanism should be considered?

2. What is the role of ITU and other international bodies regarding the inappropriate games and applications that may be developed for the kids?

3. What approach should be used in the field of COP, while there are many disagreements between countries?

4. Although we cannot find an agreed definition, but since there are many capacities and common goals in this area, regional cooperation may help in reaching to common solutions.

5. Some participants in the workshop interested to use the products and solutions that were introduced by panelists.
II. Quotes

Please refer to item 4.

III. Overall outcomes of the session highlighting

In this workshop, panelists from academia, private sector and international technical organization had a number of presentations about the main issues and requirements of the COP, in which:

- The ecosystem of COP was described from their viewpoints and its pillars and key areas were discussed.
- International needs and requirements in the field of COP were explained.
- Platforms, tools and services which have been provided by them in recent years were introduced and their achievements and challenges in this area were discussed.

IV. Main linkages with the Sustainable Development Goals

This is a general topic that should consider globally.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

There are many achievements while many challenges are remained. More regional and international collaborations are needed in the field of Child Online Protection.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Child Online Protection ecosystem.
Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/181#intro

1. Main outcomes highlighting the following:

I. Debated Issues

Ms. Sandra D'Urzo, Senior Officer, Shelter and Settlements, Disaster & Crisis

Prevention, Response & Recovery, IFRC: Ms Sandra shared that Red cross had presence in 191 countries with a huge network of around 16 million volunteers- notably half of them are youth. She shared about the platform of PASSA - Participatory Approach for Safe Shelter and Settlement Awareness was launched targeting under 18 teenager segment. The vision behind the initiative is that young people are agents of change. These young minds often residing in high at risk marginal communities are being empowered to use various online and offline tools for mapping critical life saving data by means of crowdsourcing, data visualization, digital mapping, timelines, GIS, serious gaming tools among others.

She highlighted how youth to be an active part of transformation and they simply require technology that is socially inclusive to educate and empower them. She shared case studies from Costa Rica and Metro Manila where this initiative is being applied successfully.

Mr. Esteban Leon, Chief a.i. Risk Reduction Unit - RRR Branch / Head, City Resilience Profiling Programme (CRPP), UN-Habitat: Mr Esteban shared about the City Resilience Profiling Program which is centred around the concept of treating city as a system and understanding the reaction and responses of the systems to shocks and stresses. "Cities are systems, you cannot respond in sectoral manner you have to be comprehensive and think how system works". Currently there are 156 indicators on the basis of which data is collected from the municipality. The result is generation of evidence based recommendations of action for resilience. He stressed on the multi-hazard, multi-stakeholder approach of the program which has cross participation from the private sector, community, governments and society. He also mentioned how “each city is like a fingerprint” and one has to contextualize the actions based on the specific shocks and stresses it undergoes. He shared that the program promotes synergies and is also chairing the Medellin Collaboration for Urban Resilience which has a number of global partners like- Rockefeller Foundation’s 100 Resilience Cities network, GFDRR, UNISDR, ICLEI, Cities Alliance among others. He also shared that it is
aligned with the four large agreements- Sendai framework; SDG 11; Paris agreement and the New urban Agenda.

**Mr Rob Cartridge**, Head of Global Knowledge, Practical Action

He shared examples of implementation of ICT4D in the form of a platform on Flood Resilience which acts as a Knowledge sharing portal. He stressed on the need for focus on (Appropriate) Technology and Technology Justice and also highlighted the importance of documenting and sharing key lessons. He shared examples of Practical Action’s work in Nepal where they are developing a portal which offers solutions to flood resilience as well as several Community assessment tools. He mentioned that “Knowledge should be localized, contextualized and relevant”.

**Mr Josh Woodward**, Former Regional ICT & Digital Finance Advisor, FHI 360

Mr Josh shared about the work of his organisation in creating an inventory of digital technologies for resilience in Asia pacific. They received over 125 submissions which utilized varied types of digital technology like: data visualization; big data; IoT; SMS; GIS; IVR; Social media; Websites; UAV/Drones, Mesh networks, sensors, mobile apps etc. The project entries were mostly for community resilience and the top three sectors of focus were: livelihoods, climate and health. The nature of the response in these projects was on preparedness or recurring event response and were mostly from rural and peri-urban areas. The full inventory can be viewed here: [https://sites.google.com/view/digitaltech4resilience/inventory](https://sites.google.com/view/digitaltech4resilience/inventory). Mr Josh also shared about a due diligence tool that was created with an intent to choose the appropriate technology based on guiding questions related to: User appropriateness, Financial sustainability, impact potential among others. The tool can be accessed here: [https://sites.google.com/view/digitaltech4resilience/tools](https://sites.google.com/view/digitaltech4resilience/tools) In addition to these panelists, the session also witnessed three inspiring presentations from three inspiring entrepreneurs working in the field of digital literacy.

**Jiwon Park**, Co-founder, CodePhil:
Codephil is a digital literacy not profit that aims to empower youth in rural Philippines through digital literacy skills and promote decent jobs for youth. The story began in Lavezares, Northern Samar, where they first piloted their computer programming workshops at BBCMAIS High School in 2016. In the words of the founder: “We realized that despite the investment in new computers at schools, there was still a lack of updated digital literacy curriculum to meet the needs of future jobs.” Ms Jiwon shared that 80% of public schools in the Philippines did not have Internet access. This despite the fact that 90% of new jobs will require digital literacy skills.

This inspired Code Phil to partner with the Department of Education to co create a curriculum with several local partners to teach computer programming and website development but also training the teachers to take a more active role in developing digital literacy material. The team is now working on a free online and offline tool called Typephil- which is a typing software for students, customizable to local language. Hackathon innovation summits are also being organized in these communities to power the tech ideas of students.

**Marija Musja**, Founder, Empowerment Lab

Ms Marija is bringing coding and media training to girls in Odessa Ukraine, thereby defending their right to dream. The initiative started when she conducted surveys in Ukraine with 400 kids from 8 different schools asking them about their dreams and aspirations when they grow
up. She shared that in EU, 80% of women wanted creative independent jobs, in Ukraine only 1% are interested in programming, majority of jobs desired are creativity related. So she combined the two and created an initiative on ‘Coding in creativity projects’. This involves a 2.5 month training on web development and workshops on story telling (how to tell their stories through technology), followed by an e-mentoring platform, where girls can contact female role models in the field of ICT to study further. The role of the mentors is to help navigate existing e-learning courses and encourage self-directed learning online.

Iffat Gill, Founder Code to Change Code to change is an innovative e-mentoring initiative which was launched in 2015 in Netherlands. The aim is to empower women in tech field who face challenges in their career progression but also the new women entering this field for better guidance and skills training. This is in context to the rapidly changing job market of technology. So this initiative brings women who want to teach and learn together through mentoring and digital skills bootcamp. Ms Iffat shared how “Coding as a tool can be used to build confidence of women to show them what they are capable of. Its not rocket science to build something, everybody can do it, provided you have: the right guidelines and right resources and the right support system”. Their Women in tech community now has more than 400 members and is supported by e-bay, Microsoft and Accenture. This initiative will shortly be launched in Pakistan and later there are plans to expand it to different countries with government support and interest. They will be hosting their Annual code to change conference, featuring various emerging technologies in Netherlands in October 2018.

II. Quotes

“Knowledge should be localized, contextualized and relevant”
Mr Rob Cartridge, Head of Global Knowledge, Practical Action

Girls can be key agents of tomorrows changes but the problem of todays society that women are excluded from technological devt of the society
Marija Musja founder of Empowerment Lab

“We believe in mission of Filipino govt on ICTs as well as codephil that market of digitization will be a truly connected and inclusive society that provides equal opportunities for everyone”
Jiwon Park, Co-founder CodePhil, Science Policy Interface Focal point, UN MGCY

Examples of Codephil, Codetochange, Empowerment Lab shows us that a society where women are educated, empowered is a resilient one!
Rozita Singh (Session Chair), Science Policy Interface Focal Point, UN MGCY

III. Overall outcomes of the session highlighting

“We shouldn’t be afraid of technologies, if we see history in 500 yrs, the evolution of our humankind has been quite fast. Thanks to curiosity of people, to investigate and research more, the more we research and more technology we use in favour of goals, faster we will get there. We have to take advantage of young people who investigate and are curious and use this curiosity to advance our common agenda” (Esteban).

The vision for implementation of WSIS Action lines beyond 2015:

Key Message to Member states at events like ECOSOC:

1) “Its not a matter of resources or tools, what we lack is vision and politicalcommitment to ensure that vision is carried forward. Resilience alone is oneside of medal, should be
combined with rights based approach (equity and justice).” For instance, municipality and
governments need to be accountable for - right to housing and technology access. (Sandra)

2) “We have many goals and targets, we are dreaming a lot, from MDGs and SDGs a lot of
global agreements but governments are overwhelmed with targets and goals, we don’t have
enough support to implement them. The ‘How they should be doing’ is missing?” (Esteban)

3) SDG 11 is difficult to implement, requires efforts, we can dream for ending poverty, but
how do we do it? Stop promoting agreements that are sectoral, SDGs are the larger umbrella
and under this we have the Sendai framework, Paris agreement, the new urban agenda. We
should not forget the main target, and instead find several ways of achieving it. (Esteban)

IV. Main linkages with the Sustainable Development Goals

The focus of this session was in line with this year’s ECOSOC Integration Segment theme of
“Innovative communities: leveraging technology and innovation to build sustainable and
resilient societies”, as well as that of the 21st Session of Commission on Science and
Technology for Development, 3rd Multi-stakeholder Forum on STI for SDGs, and 2018 High-
level political forum (HLPF) under the auspices of ECOSOC. This session was centred
around SDG 11.

In the Hyogo Framework, vulnerability is defined as the conditions determined by physical,
social, economic and environmental factors or processes, which increase the susceptibility
of a community to the impact of hazards. Therefore, awareness and action at the local
community level is crucial for scaling successful DRR initiatives. The Sendai Framework for
DRR specifically mentions the importance of strengthening public awareness, especially on
disaster risk information and knowledge, through campaigns, social media, and other tools.
This allows for a community to utilize available resources to continuously avoid, mitigate,
respond to, and recover from adverse situations, despite uncertainty with future risks. The
rich discussions from the panelists during this session reiterated these points and sentiments.

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

The WSIS Forum focuses on the role of ICTs as means of implementing, monitoring, and
reviewing progress with the 2030 Agenda, as outlined in target 17.8. While ICTs can be
applicable in various contexts and across sectors, special attention should be placed on their
potential applications in fragile contexts like disaster settings, conflict areas, humanitarian
response, and climate change response. Exacerbated and emerging risks are increasingly
noticeable from trends such as migration, rapid urbanization, anthropogenic climate change,
and even rapid technological change. Hence the thematic aspect of disaster risk reduction
and resilience cannot be left out from the ICT discussion.
1. Main Outcomes Highlighting the Following:

I. Debated Issues

This session considered the differences between cryptocurrencies and Central Bank issued digital currency (CBDC). The session provided a broad perspective of the main challenges facing central banks in issuing digital currency from an interoperability, policy and regulatory and cybersecurity perspective. It is anticipated that the technology for CBDC could be used across all economies.

Some of the key points from the presentations are summarized below:

Dr Daniel Reiss, Visiting Member of Secretariat, CPMI, Bank for International Settlements gave an introduction and overview on “Central Bank Digital Currencies: what is it about?”. CBDC are digital currencies which are issued by central bank authorities, and are a new instrument besides banknotes and coins, and bank reserves. CBDC have applications in (wholesale) payments among the financial industry, as well as in retail for individual payments. Central Bank Issued Digital Currency (CBDC) is potentially a new form of digital central bank money that can be distinguished from reserves or settlement balances held by commercial banks at central banks. CBDC is at the centre of the money flower (See figure 1). The taxonomy distinguishes between three forms of CBDCs (the dark grey shaded area). Two forms are token-based and the other is accountbased. The two token-based versions differ first and foremost by who has access, which, in turn, depends on the potential use of the CBDC. One is a widely available payment instrument that is primarily targeted at retail transactions but also available for much broader use. The other is a restricted-access digital settlement token for wholesale payment and settlement transactions. They are referred to as (central bank) general purpose token and (central bank) wholesale token. Private digital tokens (general purpose) in Figure 1 above include crypto-assets and currencies, such as bitcoin and ethereum. Central Bank issued Digital Currency can be implemented by different technologies such as distributed ledger technology for example. There are various design choices for a CBDC, including: access (widely vs restricted); degree of anonymity (ranging from complete to none); operational availability (ranging from current opening hours to 24
hours a day and seven days a week); and interest bearing characteristics. CBDC is different from cryptocurrencies as it is issued by the Central Bank and not by private entities like Bitcoin. A number of important questions are to be answered such as on resiliency and efficiency of CBDCs, but also on interoperability with other digital payment systems, privacy, counterfeiting and avoidance of double spending, and aspects addressing policy, credit and investment. Open questions are which potential CBDC provide for innovations, their seamless integration, and trust. In the majority of countries, CBDCs do not imply crowd-out cash or less cash.

Dr Klaus Loeber, European Central Bank, considered “Central Bank Digital Currencies – Risks and Implications”. He gave insightful explanations of CBDCs along with a taxonomy showing the relationship of digital currencies with physical currencies and digital deposits. He pointed out a number of roles and responsibilities of central banks when issuing CBDC where central banks act as payment operators. Some of the design considerations and implications for central banks are:

- **Availability.** Currently, access to digital central bank money is limited to central bank operating hours, traditionally less than 24 hours a day and usually five days a week. CBDCs could be available 24 hours a day and seven days a week or only during certain specified times (such as the operating hours of large-value payment systems). CBDC could be available permanently or for a limited duration.

- **Anonymity.** Token-based CBDC can, in principle, be designed to provide different degrees of anonymity in a way that is similar to private digital tokens. A key decision for society is the degree of anonymity vis-à-vis the central bank, balancing, among other things, concerns relating to money laundering, financing of terrorism and privacy.

- **Transfer mechanism.** The transfer of cash is conducted on a peer-to-peer basis, while central bank deposits are transferred through the central bank, which acts as an intermediary. CBDC may be transferred either on a peer-to-peer basis or through an intermediary, which could be the central bank, a commercial bank or a third-party agent.

- **Interest-bearing.** As with other forms of digital central bank liabilities, it is technically feasible to pay interest (positive or negative) on both token- and account-based CBDCs. The interest rate on CBDC can be set equal to an existing policy rate or be set at a different level to either encourage or discourage demand for CBDC. Both non-interest bearing and interest bearing accounts could be used for retail or wholesale payment transactions. The payment of interest would likely enhance the attractiveness of an instrument that also serves as a store of value.

- **Limits or caps.** Different forms of quantitative limits or caps on the use or holdings of CBDC are often mentioned as a way of controlling potentially undesirable implications or to steer usage in a certain direction. There are technical issues such as standardization and cyber risks, as well as economic issues and acceptance issues, regulatory, policy, and legal questions, and issues of crossborder. The CPMI Working group has been investigating the implications of digital innovations and of cryptocurrencies. He outlined the key elements of CBDC, and some optional design features. He highlighted several implications of CBDCs, and provided key findings.
from an analysis which concluded that elementary questions deserve an answer when designing digital currencies.

- Dr David Wen, Chairman, ITU-T Focus Group Digital Currency, including Digital Fiat Currency (ITU-T FG DFC) presented the current situation of the new “ITU-T Focus Group on Digital Currency including Digital Fiat Currency (FG DFC)” which was established in May 2017, and which builds upon the experiences and results of the former ITU-T Focus Group on Digital Financial Services (FG-DFS). With the example of Swedish e-Krona, CBDCs are not intended to replace physical currencies, but are actually complementing them. The Focus Group DFC is exploring the digital fiat currencies, with perspectives contributed by People’s Bank of China, and Bank of Canada, and is looking into the ecosystem, along use cases, requirements and architectures, towards the opportunity for achieving interoperable, international DFC systems while considering issues of governance, interoperability, security, and counterfeiting. The second meeting of FG-DFC will be held in July 17-20 in New York City, United States.

- Dr Bruno Huttner, QKD Expert, ID Quantique introduced "Quantum threats and possible solutions for blockchains and digital currencies". The role of cryptography is to protect the digital currencies. He showed concerns that in a not too distant future, current cryptography might not be so secure anymore due to anticipated threats from quantum computers. He explained quantum computers as a novel approach which are fundamental different and potential much more powerful in their operations upon qubits than classical binary computers. Fears are that digital signatures schemes and other current public-key crypto primitives could be compromised by the power of quantum computers which are expected to become practical likely in some years from now while some uncertainties exist with regards to the future security of other crypto primitives. He offered quantum-safe methods such as quantum key generation, quantum-resistant algorithms, or quantum cryptography as new tools to mitigate the threats. He concluded by calling for crypto agility such as designers of digital currency systems are recommended to take into account already now any future disruptive changes in crypto technologies and be able to adapt to the raising threats.

- Mr Paul Neubecker, CFO, HX Foundation and Hybrid Network remotely presented "Interoperability, Security and Privacy on Distributed Systems". He compared CBDC with public block-chains, with respect to privacy, to interoperability, and to security, where he explained the similarities but also the limitations of each technology. He concluded that each technology has trade-offs, but also that the technologies can be used complementary.

II. Quotes

“Commercial banks could lose customer information whereas Central Bank Issued Digital Currency may allow central banks to obtain better real-time data on economic activity”: Klaus Loeber, European Central Bank

“New digital currency should implement crypto agility”: Bruno Huttner, ID Quantique
III. Overall outcomes of the session highlighting

- Various design choices and different forms of CBDC are possible with different implications for payment systems, monetary policy transmission as well as the structure and stability of the financial system
- CBDC raises old questions about the role of central bank money, direct access to central bank liabilities and the structure of financial intermediation
- CBDC could bring potential benefits to payment and settlement systems, but could also pose risks and challenges – need to compare with existing or enhanced payment and settlement solutions
- The risk on cyber-security caused by the quantum computer will become real in the next few years. The quantum computer will break all public key signature schemes and would be a threat to hash function as well.
- As such digital currency solutions based on distributed ledger technology, needs to be made quantum secure.
- Interoperability of distributed ledger technology implementations of central bank issued digital currency with existing web infrastructure and other DLT’s will be key for such deployments. Currently, in order to transfer from BTC to ETH, a trusted 3rd party is required resulting in fees and excessive value extraction. There is also need to develop a universal identity solution for eKYC.

IV. Main linkages with the Sustainable Development Goals

Mobile money and other digital financial services are becoming one of the main telecommunication/ICT success stories for socioeconomic development of many nations, especially in developing countries. The use of mobile phones for mobile financial services offers opportunities to enhance growth and development. In the meantime, mobile financial services can provide benefits to the telecommunication/ICT industry by making it the indispensable infrastructure for future financial services for everyone. Many Central Banks including the Federal Reserve Bank of United States, Bank of England, and People’s Bank of China have all stated that they are researching and working on a central bank issued digital currency. Implementations of DFC using different technology and are in different phases of deployment. Like fiat currency in paper form that played a key role for financial inclusion for the past centuries, and continuing doing so, a digital fiat currency must also be accessible by all citizens of a country and could be a catalyst to accelerating interoperability in digital financial services and further help in bridging the financial inclusion gap and provide more financial stability. This would ultimately help in enhancing socio economic growth and more transparency in managing government funds disbursement and control over counterfeiting money.
Thematic Workshop

Zero Waste Living: speaking the language of a new generation for sustainable habits

Rogue Gone Vogue

Friday 23 March 2018 11:00 – 12:45
Room A - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/155#intro

1) Key achievements, announcements, launches, agreements, and commitments

Open discussion between panelists and participants – no specific key achievements but rather we aimed to get an open line and discussion going about how we can use social media and non-traditional forms of education to change minds.

2) Main outcomes highlighting the following:

I. Debated Issues

How do we make sustainable habits more accessible to a wider spread of people? How can we make sure that the information that is presented online doesn’t put the onus on the consumer alone to change habits? What’s the best way to harness online communities for long-term change?

The zero waste movement online is largely driven by information-sharing for best practices, while the sustainable fashion movement has been driven by

Should we introduce non-traditional media like YouTube or blogs into national curricula? While this may open up the possibility of having more access to more materials and giving teachers the opportunity to expose their students to diverse ranges of materials, it can also create issues once it is formalized into a curriculum and allowing larger corporations to dictate how and where content can be put online.

We discussed how people can be given the correct information online to make sustainable choices – often it is difficult to balance all the various dimensions of sustainability e.g. making sure the product is sustainable but also ethically produced, that the product is empowering people etc. The internet can be a great platform for companies to push transparency so that consumers understand what they are paying for.
II. Quotes

N/A

III. Overall outcomes of the session highlighting

Open discussion and information sharing on SDG4 Quality Education, SDG 12 Responsible Consumption and Production

IV. Main linkages with the Sustainable Development Goals

Open discussion and information sharing on SDG4 Quality Education, SDG 12 Responsible Consumption and Production

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- Non-traditional forms of education online
- Reducing inequalities through sharing best practices for sustainable consumption
Thematic Workshop

Practical applications of ICTs supporting inclusion and accessibility to information and services, livelihoods for people with disabilities

eWWG

Friday 23 March 2018 11:00 – 12:45
Room H2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wwis/forum/2018/Pages/Agenda/Session/130#intro

I. Overall outcomes of the session highlighting

Main conclusions reached during the discussion

- USFP should be used to support more programs for accessibility and inclusion
- We need to implement and enforce global standards for interoperability
- ICTs need to be integrated early into the education system
- ITU needs to create a portal of best in breed policies for inclusive and accessibility for member countries to use as a reference
- Governments need to establish advisory committee with persons of disabilities to create cross cutting policies, integrated with key domains
- Policies have to be implemented

1. The vision for implementation of WSIS Action lines beyond 2015 Recommendations for Governments
2. Raise awareness among all national key stakeholders (Government, Broadcasters, Industry, Private Sector, NGOs etc)—about the need to promote ICT accessibility;
3. Build consensus and inclusive policy-making through encouraging national and regional debates to promote ICT accessibility.
4. Mainstream ICT accessibility through inclusive language, definitions, and provisions in national policies, laws & regulations;
5. Identify key steps on ICT accessibility for industry makers and local content providers such as making accessible content and devices (public and mobile phones, TV sets) available;
6. Promote ICT accessibility also as a business opportunity;
7. Establish clear targets, periodic monitoring and evaluation to ensure implementation of national ICT accessibility policies and services;
8. Encourage national trainings and educational programs on disability topics
9. Promote localization, for example of voice recognition and text-to-speech interfaces – to ensure local relevance and uptake;
10. Involve and consult with end users/PwD in all national related processes in ICT accessibility embracing the principle of ‘nothing about us without us’.
I. Debated Issues

- The participants highlighted that there is low awareness of the risks posed by e-waste to human health and the environment and that much more should be done to inform the public and young users on what is inside, in particular, mobile phones, computers, and tablets.

- Both the experience of Egypt in developing an e-waste management system nationally and the experience of the East African Communications Organization, whose member countries developed a common strategy for e-waste management, showed that it is very important to involve private sector associations and all stakeholders involved in e-waste management, at the country or regional levels, in the process of setting up a collection and management system.

- The audience agreed that green standard setting in the ICT sector is key provide competitive advantages to producers, recyclers and dismantlers who are complying with these standards and can receive financial incentives. Green ICT standards play a key role in achieving a circular economy.

II. Quotes

*Increasing the recyclability of ICT products by design is the mission of Huawei.* (Mr. Paolo Gemma, Senior Specialist on issues related to energy saving and environmental sustainability, Huawei).

*Green standards for ICT equipment and on e-waste management are essential to ensure the effectiveness of recycling processes and to creating a level playing field in a country or in a*
region. Without these standards, the efforts to build a circular economy would be deeply hampered. (Mr. Federico Magalini, Managing Director Sofies UK)

III. Overall outcomes of the session highlighting

- More awareness is needed on the risks associated to dumping ICT equipment at the end of life in a bin.
- The development of green standards for ICT equipment can inform consumer choices and change the behaviors of people when they need to dispose of ICT equipment at the end of life.

IV. Main linkages with the Sustainable Development Goals

- The sustainable management of e-waste will contribute to the attainment of sustainable development goals in particular, Goal 3 (Good health and Well-being), Goal 6 (Clean water and Sanitation), Goal 11 (Sustainable Cities and Communities), Goal 12 (Responsible Consumption and Production), Goal 14 (Life below Water), and Goal 8 (Decent Work and Economic Growth).

- Target 3.9 refers to the reduction of the number of deaths and illnesses caused by hazardous chemicals and air, water, and soil pollution and contamination. Target 6.1 seeks to achieve universal and equitable access to safe and affordable drinking water for all, and Target 6.3 aims to reduce pollution, eliminate dumping, and minimize release of hazardous chemicals and materials. Goal 14 refers to marine pollution and the protection of the marine ecosystem (Targets 14.1 and 14.2).

- Target 11.6 aims to reduce the adverse per capita environmental impact of cities, by paying special attention to air quality and to municipal and other waste management. Most e-waste will be generated in cities and it is particularly important to properly manage e-waste in urban areas, improve collection and recycling rates, and to reduce the amount of e-waste that ends up in dumpsites.

- Similarly, Target 12.4 aims to achieve the environmentally sound management of chemicals and all waste throughout the life cycle, in accordance with agreed international frameworks, and to significantly reduce their release into air, water, and soil in order to minimize their adverse impacts on human health and the environment.

- Target 12.5 aims to substantially reduce waste generation through prevention, reduction, repair, recycling, and reuse. An increasing number of people on the planet are consuming growing amounts of goods, and it is critical to make production and consumption more sustainable by raising awareness levels of producers and consumers, specifically in the area of electrical and electronic equipment.
V. Emerging Trends related to WSIS Action Lines identified during the meeting

- Developing countries will increase the rate of e-waste generated at a faster speed than developed countries.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

- Continue to raise awareness of e-waste and the role of green ICT standards to improve the design of products and e-waste management.
Thematic Workshop

Organizing Monitoring of SDG based on the three principles (transparency, inclusiveness, participation) and following Wikipedia methods using ground truth ICT techniques

CSEND
Friday 23 March 2018 12:45 – 14:00
Room H2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/161#intro

1. Key achievements, announcements, launches, agreements, and commitments

The session launched the first ever research analyzing the word “monitoring” in 6 major international documents since 1992 and how they related to the 3 SDG principles “participation, transparency, Inclusiveness - P.T.I.).

2. Main outcomes highlighting the following:

- Panelists agreed, and the audience supported, the observation that SDG monitoring could benefit from ICT supported application of Ground-Trothing and other participatory methods

- The participation of society will make the SDG monitoring process more participatory, inclusive, and transparent. It will highlight gaps in SDG implementation through the identification of needs among populations.

- Participatory methods need to bear in mind potential bias and data protection concerns, which could be mitigated by triangularising the data

I. Debated Issues

How can actors involved in SDG related activities in developing countries seek and obtain data that informs them of the needs and expectations of the populations they serve. A second highlight was the agreement that NGO actors involved in SDG activities have to obtain as much data as possible (e.g. from government, local authorities, farmers, urban citizen,
academics and think tanks) and be mindful that all available sources might be biased and hence need to be triangulated with other data.

II. Key achievements and challenges shared by the audience and/or panellists

Ability to use ICT in the field by Federation of Red Cross-Red Crescent Society but at the same with caveat that persons working in the field should not rely only on ICT provided data but always add personal interviews with the population they are in touch with.

III. Quotes

“ICT methods and tools should be included at the start of humanitarian projects” (Alexandra Sicotte-Lévesque, Manager, Community Engagement, International Federation of Red Cross and Red Crescent Societies)

“Both government and citizen data have their benefits and flaws. There is an opportunity in combining the two sources and look into the areas where the two don’t match, as these are likely the area where improvements can be made”. Barbara Rosen Jacobson, Programme Manager | DiploFoundation & Geneva Internet Platform

IV. Overall outcomes of the session highlighting

- Monitoring the SDGs requires a reliance on multiple data sources and a mix between natural science and social science methods
- The vision for implementation of WSIS Action lines beyond 2015: To approach SDGs from top-down (government to citizens) and from bottom-up (from citizens to government), to help governments improve inter-ministerial policy coordination (most SDGs are interdependent, hence require inter-ministerial cooperation and coordination) and to improve policy consultation and dialogue between government and non-state actors (private sector and CSOs). At the same time, to strengthen citizens’ abilities to use ICT and to be literate in regard to assessing data sent to them (identifying misinformation of all sorts).

V. Main linkages with the Sustainable Development Goals

ICT supported Ground Truth methods needed to ensure implementation of the 3 SDG Principles- Participation, Transparency and Inclusiveness

VI. Emerging Trends related to WSIS Action Lines identified during the meeting

Increasing complementarity between monitoring as controlling, checking, surveillance versus monitoring as participatory science supported by ICT

VII. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

How to design, implement, revise Ground Truth/ICT based SDG implementation (participatory data collection and data sharing
Thematic Workshop

Intellectual Property Rights awareness to Information Technology Sector and Cyber Space

JITD
Friday 23 March 2018 12:45 – 14:00
Room K2 - ITU

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/128#intro

1) Key achievements, announcements, launches, agreements, and commitments

Patent Searching for Indian & Foreign Patents

Use of online tools of Espacenet WIPO and USPTO. Also includes searching for other types of patent literature and more practice with the new Cooperative Patent Classification (CPC).

Importance of Patent Searching Classes

Holistic view of online patent resources for Market Entry Strategy and Product Launch in India and overseas.

Commitments:
Goal 9: Build resilient infrastructure, Promote sustainable industrialization and foster Innovation is highly achieved.

2) Main outcomes highlighting the following:

I. Debated Issues
Case Studies and Projects in India:
Start-up Ecosystem in India: Identifying GENIUS Budding Entrepreneurs, Mentors, Angel Investors, VCs for Start-up in India.
II. Quotes

“If your Patent Strategy and or Intellectual Property strategy is not in a place. You will fail in your start up business. Idea, Inspire and Innovate is essential”.

III. Overall outcomes of the session highlighting

Executing Intelligent Business Idea is the need of the hour. Funding ecosystem is prevalent in India. However identifying important patent, brands, copyrights, trade secrets and technical know how’s of the founders is the need of the hour. We identify GENIUS entrepreneurs, and we strive to encourage budding entrepreneurs through mentoring sessions.

IV. Main linkages with the Sustainable Development Goals

Good products gives opportunity for Business, in turn business Creates Employment and also improves overall growth (Goal 8: Promote Inclusive and sustainable economic growth, employment and descent work for all).

A patented and renowned product or a concept pays the way for Industrial growth and creates opportunity for Innovation (Goal 9: Build resilient infrastructure, Promote sustainable industrialization and foster Innovation).

A good product will have market locally and globally which builds partnerships (Goal 17: Revitalize the global partnership for sustainable development). Reflecting the views of SDGS.

V. Emerging Trends related to WSIS Action Lines identified during the meeting

SWOT analysis for successful IP based business models, Patent drafting, patent Searches (patent analytics), PCT National phase patent prosecution in India (drafting office action responses for USPTO, EPO, UKIPO) & International trademark registration in India under Madrid Protocol. This is reflecting the views of WSIS action lines Access to Information, Building confidence in using ICT and also close links in Ethical dimensions of the Information Society.

V. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

All the thematic Aspects were well organized. Organizers of the workshop and Audience have a fantastic time. Every Sessions very thoughtful and Enlightening.

Overlapping topics may be avoided.
Thematic Workshop

Paradigm shift to develop genuine global civilization and the role of ICT

EMLSRI

Friday 23 March 2018
Room M - ITU

12:45 – 14:00

Please find in the link below, more informations regarding the workshop:

https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda/Session/112#intro

1) Key achievements, announcements, launches, agreements, and commitments

Key announcements
1. Aligned “HDS E” (humanity, Democracy, Symbiosis for Evolution) is needed as evolvability of genuine future global civilization. ICT could be help of the evolution but not driver of evolution.
2. “Calling Right” is needed to add a part of HR of UN
3. I proposed these new concepts during my speech

I. Debated Issues

At the core of the discussion was the concept of humane democratic symbiotic society that is needed to achieve not just sustainability, but evolvability. This is all of us decide together for all of us for long-term future, unprecedented. But the technology has potential to bring the voice of all. And make the voices effective. So it depends on us how to use the technology with wisdom, intelligence, strategy, culture, collaboration, co-innovation and co-evolution.

Individual’s quality of life is the most important for future building. Individual should decide what one wants for the future civilization on the globe. Each one of us is the decision maker, agency. Decision makers are not the direction of technology innovation, not corporates, not neoliberalism, not power holders, but all of us with equal respected considerate constructive voices for all by all for long-term future civilization development / evolution.

• Please highlight key achievements and challenges shared by the audience and/or panelists

Q: Roles of international trade agreement, international organizations have not achieved to help equalize relationships. -> A: not only political powers, negotiating powers, but all functionalities from individuals to organizations, international organizations can help communication, understanding, change for the inequality current world has.

Q: Humanity, Democracy, Symbiosis for Evaluability (HDS E) is an empowering proposal for future societies. Do you have examples of past human society based on HDS E, or this a completely new path for humans? -> A: From top down government systems it may seem
radical, but from human, each individual, it is a natural paradigm for co-existence. To achieve HDS E we may need to think in terms of smaller, more human sized social units.

II. Quotes

Dr. Yohko Hatada (EMLSRI Evolution of Mind Life Society Research Institute): Evolvability of evolution must be guided by human in civilization evolution. Information evolution is natural with or without human, not depending on human which occurred already in past 4 billion years.

Dr. Ansgar Koene (University of Nottingham): How to achieve evolvability? Balancing between extremities of capitalism with democracy is only possible through paradigm shift. Therefore paradigm shift is needed even just to achieve a stable ‘third way’, sometimes referred to as the ‘golden rule’ of avoiding extremes. The current approach of capitalism driven innovation inherently tends towards monopolist power concentration as embedded in the way that success is measured.

III. Overall outcomes of the session highlighting

Paradigm shift is required and the core of this shift movement is individual quality of life standing on own calling, as culture shift.

• The vision for implementation of WSIS Action lines beyond 2015

C5: Building confidence and security in the use of ICTs

Individual strong identity is needed to grow and live true calling in Life-Work creatively, innovatively, so that each one become a true creator of next global civilization as an active enhancer of co-innovation cultural movement in a unique way.

C1: Ethical dimensions of the information society

Particularly current power holders (culturally, economically, politically, academically, societally, technologically) need to listen and respect and innovate how possibly the paradigm shift can be brought through technological advancement by themselves for themselves, not driven by power holders and/or for power holders, about realistically practically for long-term genuine global civilization development in a responsible manner.

IV. Main linkages with the Sustainable Development Goals

G16: Promote just, peaceful and inclusive societies

V. Emerging Trends related to WSIS Action Lines identified during the meeting

C11 Intergovernmental organization collaboration with us. Global influence on trade, how to make negotiation process to empower for the weaker parties.

VI. Suggestions for Thematic Aspects that might be included in the WSIS Forum 2019

Paradigm shift from power competition to co-innovation.
The Fifteenth meeting of the United Nations Group on the Information Society (UNGIS) was held as part of the WSIS Forum 2018. This meeting comprised the High-Level Segment of the meeting that took place on Tuesday 20 March 2018 and the Working Level meeting that took place on the Friday 23 March 2018. The Fifteenth UNGIS meeting provided an opportunity to advance the Group’s objectives of coordination of substantive and policy issues facing the United Nation system in the implementation of the outcome of the World Summit on the Information Society (WSIS). Particular focus was directed towards the development of a Work Plan.

Relevant documentation for the meeting will be made available at ungis.org.

Closed Session – UNGIS Members Only

Session’s link to WSIS Action Lines
AL C1. The role of public governance authorities and all stakeholders in the promotion of ICTs for development
AL C2. Information and communication infrastructure
AL C3. Access to information and knowledge
AL C4. Capacity building
AL C5. Building confidence and security in the use of ICTs
AL C6. Enabling environment
AL C7 e-Gov. ICT Applications: E-government
AL C7 e-Bus. ICT Applications: E-business
AL C7 e-Lea. ICT Applications: E-learning
AL C7 e-Hea. ICT Applications: E-health
AL C7 e-Emp. ICT Applications: E-employment
AL C7 e-Env. ICT Applications: E-environment
AL C7 e-Agr. ICT Applications: E-agriculture
AL C7 e-Sci. ICT Applications: E-science
AL C8. Cultural diversity and identity, linguistic diversity and local content
AL C9. Media
AL C10. Ethical dimensions of the Information Society
AL C11. International and regional cooperation

Session’s link to Sustainable Development Process

Goal 1: No poverty: End poverty in all its forms everywhere
Goal 2: Zero hunger: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3: Good health and well-being: Ensure healthy lives and promote well-being for all
Goal 4: Quality education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5: Gender equality: Achieve gender equality and empower all women and girls
Goal 6: Clean water and sanitation: Ensure access to water and sanitation for all
Goal 7: Affordable and clean energy: Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Decent work and economic growth: Promote inclusive and sustainable economic growth, employment and decent work for all
Goal 9: Industry, innovation and infrastructure: Build resilient infrastructure, promote sustainable industrialization and foster innovation
Goal 10: Reduced inequalities: Reduce inequality within and among countries
Goal 11: Sustainable cities and communities: Make cities inclusive, safe, resilient and sustainable
Goal 12: Responsible consumption and production: Ensure sustainable consumption and production patterns
Goal 13: Climate action: Take urgent action to combat climate change and its impacts
Goal 14: Life below water: Conserve and sustainably use the oceans, seas and marine resources
Goal 15: Life on land: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss
Goal 16: Peace, justice and strong institutions: Promote just, peaceful and inclusive societies
Goal 17: Partnerships for the goals
## Social Networking Events

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<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td><strong>WSIS Forum 2018 Donors Dinner sponsored by Poland (On invitation only)</strong></td>
<td>Monday 19 March 2018</td>
<td>19:00</td>
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<tr>
<td><strong>High-Level Lunch (On invitation Only)</strong></td>
<td>Tuesday 20 March 2018</td>
<td>13:00 – 14:30</td>
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<tr>
<td><strong>WSIS Forum 2018 Reception sponsored by Switzerland</strong></td>
<td>Tuesday 20 March 2018</td>
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<tr>
<td><strong>High-Level Lunch (On invitation Only)</strong></td>
<td>Wednesday 21 March 2018</td>
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<tr>
<td><strong>High-Level Gala Dinner (On invitation only)</strong></td>
<td>Wednesday 21 March 2018</td>
<td>19:00 – 22:00</td>
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Exhibition

Exhibition Inauguration
Monday 19 March 2018 10:45 – 11:00
Exhibition Area, ITU Tower

WSIS Forum 2018 gathered more than 30 exhibitors from Civil Society, Academia, International Organizations, Private Sector, and Governments. The exhibition set the stage that encouraged all stakeholders to share their initiatives for a more effective Information Society. Exhibitors prepared a number of ground-breaking and innovative projects, including Virtual Reality, Augmented Reality and autonomous robots, as potential solutions to specific issues that will advance the achievement of the SDGs. Moreover, the photo gallery displaying images from the WSIS Photo Contest finalists and winners optimized the exhibition experience for more than 2800 WSIS attendees from more than 150 countries.

At 10:45 AM, March 23rd, 2018, the exhibition inauguration was honored by Mr. Houlin Zhao, the Secretary General of ITU, and H.E Majed Sultan Al Mesmar, Deputy Director General of the Telecommunications Regulatory Authority (TRA) of the United Arab Emirates. To everyone’s amazement, the scissors to cut the ribbon were delivered by an autonomous vehicles, courtesy of TeleRetail, a scene that was showered by flashes from cameras shot by several press photographers and exhibition attendees. The ITU’s SG and the UAE’s TRA's DDG proceeded to the chocolate printing machine, courtesy of the University of Geneva, from which they sampled an alternative and futuristic way of producing ready-to-eat food. It was then time to honor our Platinum Partner, the United Arab Emirates, along our Gold Partner, Saudi Arabia, all together whose contributions made possible WSIS Forum 2018. Furthermore, it would not have been the same without our special activities, contributing, and supporting partners. WSIS remains grateful to your continued support.

<table>
<thead>
<tr>
<th>Partners Strategic Partners</th>
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<tbody>
<tr>
<td>United Arab Emirates – Platinum</td>
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<tr>
<td>Kingdom of Saudi Arabia – Gold</td>
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<tr>
<th>Partners for specific activities</th>
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<tr>
<td>Republic of Rwanda</td>
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<tr>
<td>IEEE Association</td>
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<th>Contributing Partners</th>
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<td>ICANN</td>
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<th>Supporting Partners</th>
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<td>INWES</td>
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The exhibition of WSIS Forum 2018 was also privileged to host such an interestingly diverse range of other exhibitors, as mentioned before, from Civil Society, Academia, International Organizations, Private Sector, and Governments, all with a common goal to use ICTs for development. The thematic topics were as multidisciplinary as they were groundbreaking and focused on the following categories:

- WSIS Action Lines and SDGs
- VR and education
The following organizations and their contributions were pivotal to the success of WSIS Exhibition 2018 and will be perpetually appreciated.

<table>
<thead>
<tr>
<th>Organization name</th>
<th>Thematic stall title</th>
<th>Organization type</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST-Africa Institute &amp; IIMC</td>
<td>IST-Africa Institute &amp; mHealth4Afrika Initiative</td>
<td>Academia / Technical community</td>
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<tr>
<td>Nexleaf Analytics</td>
<td>IoT &amp; Data Analytics for Human Health and Our Planet</td>
<td>Academia / Technical community</td>
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<tr>
<td>Telematics Industry Application Alliance (TIAA)</td>
<td>The Usage of Electronic Information in Vehicles and Traffic</td>
<td>Academia / Technical community</td>
</tr>
<tr>
<td>Institute on Disability and Public Policy (IDPP)</td>
<td>&quot;A11y&quot; the Double Robot for Inclusive Remote Participation</td>
<td>Academia / Technical community</td>
</tr>
<tr>
<td>Iran Information Technology Organization (ITO)</td>
<td>IRAN’s Achievements in WSIS Action Lines</td>
<td>Academia / Technical community</td>
</tr>
<tr>
<td>WeCan.Fund</td>
<td>Crowdfunding your idea brings your project to reality</td>
<td>Private sector</td>
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<tr>
<td>Posts and Telecom Press</td>
<td>Informatization Process boosts Smart Future in China</td>
<td>Private sector</td>
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<tr>
<td>Horyou SA</td>
<td>Social Network for Social Good</td>
<td>Private sector</td>
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<tr>
<td>Xatena AG</td>
<td>The Healthcare Marketplace Market access for hospitals, medical practices and suppliers</td>
<td>Private sector</td>
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<tr>
<td>digitalMedLab</td>
<td>Telemedicine made simple &amp; affordable</td>
<td>Private sector</td>
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<tr>
<td>EZ Group sarl</td>
<td>Mobile VR e-learning</td>
<td>Private sector</td>
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<td>SUDACAD</td>
<td>Empowering ICT Capacity Building</td>
<td>Private Sector</td>
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<tr>
<td>Job in Rwanda ( J.I.R Ltd)</td>
<td>Empowering Job Candidates and Career</td>
<td>Private sector</td>
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<td>Organization</td>
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<td>WeRobotics</td>
<td>Robotics for the Benefit of All</td>
<td>International organization</td>
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<tr>
<td>Empowerment Lab</td>
<td>Creativity in Code: empowering girls through technology</td>
<td>International organization</td>
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<tr>
<td>International Commission on Cyber Security Law</td>
<td>International Conference on Cyber Security Law &amp; ICCC, 2018</td>
<td>International organization</td>
</tr>
<tr>
<td>UNESCO</td>
<td>Promoting Internet Universality and Knowledge Societies to Achieve 2030 SDGs</td>
<td>International Organization</td>
</tr>
<tr>
<td>Health and Environment Program</td>
<td>Women and the Future of ICT in Africa</td>
<td>Civil society</td>
</tr>
<tr>
<td>Internet Society of China</td>
<td>ICT for Development of Information Accessibility in China</td>
<td>Civil society</td>
</tr>
<tr>
<td>Gedaref Digital City Organization Sudan &amp; UN Global Compact Sudan Network</td>
<td>GDCO and UNGC Sudan Networks 4 SDGs</td>
<td>Civil society</td>
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<tr>
<td>DiploFoundation / Geneva Internet Platform</td>
<td>Capacity development and knowledge-sharing in digital policy</td>
<td>Civil society</td>
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<tr>
<td>Amplio</td>
<td>Sharing Knowledge with the most Vulnerable to Achieve the SDGs</td>
<td>Civil society</td>
</tr>
<tr>
<td>Ministry of Communication and Information Technology of the Republic of Indonesia</td>
<td>Indonesia Internet Multistakeholder Initiatives</td>
<td>Government</td>
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</tbody>
</table>

In addition to the wide range of thematic topics from many organizations across assorted sectors, the participation and involvement of women, due to a proactive inclusion, and youth, special thanks to Ecole La Découverte, was very noticeable, which is merely one step forward in the effort to achieve the SDGs. WSIS Forum continually endeavors to be as inclusive as possible, though not without challenges, in hopes to yearly increase the participation of underrepresented stakeholders.
Ms. Sah thanked and welcomed all the facilitators, participants, partners, stakeholders.
Mr. Zhao announces that all reports will be available on the WSIS website as WSIS is paperless this year.
Mr. Zhao announced that WSIS had a record breaking number of participants this year-2800, from 150 countries and that remote participant increased significantly.
Mr. Zhao then thanked the WSIS co-organizers, facilitators and co-facilitators, partners, the chairman, stakeholders, participants, volunteers, and interns.
Informed the public that ITU will organize the next WSIS Forum, 2019 in Geneva in first half of April.
WSIS Chairman, HE Engg. Majed Sultan Al Mesmar, pointed out that how WSIS has made people recognize the significance of accelerating the progress to achieve the targets of Action Lines and the UN's SDG's.
Mr. Chairman quote that "World is shifting rapidly towards a new era in which artificial intelligence plays a critical role"
Mr. Chairman said main focus of panelists in discussions was on employing big data analytics as mechanism for achieving SDGs for betterment of society.
Mr. Chairman thanked Mr. Zhao, WSIS Team, High Level Facilitators, Sponsors, participants, volunteers and interpreters and translator and wished them success for working towards the betterment of society.
UNESCO said that in cooperation with WSIS they work to create inclusive knowledge societies and empower local communities by increasing access, preservation and sharing of information and knowledge
UNESCO quoted “knowledge societies must be built on 4 pillars and these pillars must be encouraged between public, private and UN agencies, ‘Freedom of expression’, ‘Universal access to information and knowledge’, ‘Respect for cultural and linguistic diversities’ and ‘quality education for all’.
UNESCO advocated for an internet guided by human rights, openness, accessibility and multi stakeholder participation. These elements are part of internet universality framework, are essential for internet in ICTs.
UNESCO service facilitators for 6 WSIS action lines.
Knowledge societies provide an overarching vision and guiding principles for UNESCOs interventions. People in knowledge societies can acquire information and transform it into knowledge.
Building of bridges, conceptually through policies and concretely through programmes between WSIS action lines and 2030 sustainable development agenda is crucial to realisation of knowledge societies across all regions.
UNCTAD was pleased to take part in WSIS Forum. UNCTAD thanked co-organisers, WSIS Partners and high level track facilitators for providing support.
UNDP UN system had been engaged in discussions on frontier issues under role of new technologies in achieving 2030 agenda.
UNDP said that they come out better informed during the WSIS week.
UNDP is looking into ICT and its uses in delivering every goal on 2030 agenda and the SDG.
SG thanked Mr. Johnson (Deputy Secretary-General, ITU), Mr. Lee (Director, Telecommunication Standards Bureau, ITU) and WSIS Team.

1. From the Audience

1. Rosita Singh, UN MGCY: "We are eager to continue in engaging to enhance more youth participation as well as promoting intergenerational capacity building and mechanism for stakeholders to have meaningful engagement, we look forward and hope that in future summits and processes there is stronger linkages between wsis and other science policy and science technology structure within the UN system such as CSTD, STI Forum and are able to monitor progress on all action lines, we need to use ICT to shift systems, to put people and planet in center. We support you on policy coherence, access to knowledge, opportunities for decent jobs and livelihood and ensure no one is left behind"

2. Chairman of joint coordination activity on accessibility and human factors: In the workshop they had support for sign language which was done remotely by a team of American Sign Language interpreters from Florida using the internet. People with disabilities can now participate in WSIS. ICT can help blind people to navigate indoors in metro stations and Tube stations and deaf people can contact to other people in real time using relay services.

22. Mr. Zhao concluded the closing ceremony of WSIS.
Press Conference
(Media only)

Tuesday 13 March 2018
13:00
Room 15, CICG

Please follow the link below to access the 360 Campaign Media Report for WSIS 2018:


Additional WSIS Forum 2018 Media Coverage Highlights*
*Titles have been translated into English for informational purposes.

ONLINE MEDIA

Azerbaijan projects nominated for WSIS-2018 contest
01/02/2018, Azerbaijan State News Agency, Azerbaijan

The province was selected "champion" in the WSIS Prizes 2018
2/2018, Télam, Argentina

"Electronic Education of the Republic of Tatarstan" became a participant of the international competition WSIS Prizes
9/2/2018, New Kama, Tatarstan (Russia)

Tres proyectos cubanos resultaron nominados a la 7ma Edición de la WSIS 2018
10/2/2018, Cuba Debate, Cuba

Plotnikov: The victory of the Ecological Card in the WSIS 2018 competition is hyperactive!
14/2/2018, Tula Pressa, Russia

Three San Luis digital policies that will compete in Switzerland chosen
28/2/2018, El Diario de la República, Argentina

Algeria Telecom's Trans-Saharan fiber optic project awarded by the ITU
6/3/2018, HuffPost, Algeria

NIPOST Digital Platforms Selected as Finalist in WSIS Prizes 2018
16/3/2018, This Day, Nigeria

Sultanate to Take Part in WSIS in Switzerland
The World Forum on the Information Society started
19/03/2018, RTV, Serbia

What are the WSIS Prizes?
19/3/2018, Agencia de Noticias de San Luis, Argentina

UN forum to spotlight ways ICT can help beat poverty and boost development
19/3/2018, UN News, Geneva

Information Society Forum focuses on using technology to solve development problems
19/3/2018, UNCTAD, Geneva

Three UGM Initiatives Win a Chance in WSIS Prizes 2018
19/3/2018, Tribun Jogja, Indonesia

African trio leverages ICTs to attain UN goals
19/3/2018, CajNews Africa, Africa

Two St. Petersburg IT projects won prizes WSIS-2018
20/3/2018, Topspb.tv, Russia

Nationwide Educational Network wins a prestigious award
20/3/2018, Portal Samorzadowy, Poland

Why connecting communities through digital skills matters for the SDGs
20/3/2018, ICC, Geneva

Colombia awarded at the World Summit on the Information Society
20/3/2018, Presidencia de la República, Colombia

Serbian Prestigious World Award: Office of IT and eUprava Winner of the WSIS Award
20/3/2018, Kurir, Serbia

WSIS Project Prizes 2018 from Geneva: Naïma Mahrez receives first prize in its category
20/3/2018, DIA, Algeria

Plataforma Fuerza México receives recognition at WSIS 2018
20/3/2018, 24 Horas, Mexico

The WSIS Prizes awarded to San Luis in photos
20/3/2018, Agencia de Noticias de San Luis, Argentina

The IT and eGovernment Office has won a prestigious worldwide award for contributing to IT development
20/3/2018, Blic, Serbia

WSIS Prizes 2018: NIPOST Digital Platforms Selected As Finalist
20/3/2018, Leadership, Nigeria

Oman Wins Top Award at World Summit on the Information Society in Geneva
21/3/2018, Muscat Daily, Oman
Indonesia wins 12 awards at WSIS 2018 forum in Geneva
21/3/2018, Antara News, Indonesia

The Virtual Archeology Museum wins World Summit Award
22/3/2018, Dostor, Egypt

India to put in place data protection framework: Aruna Sundararajan, Telecom Secretary
22/3/2018, CIO, India

Kuwait participates in Switzerland-hosted international info. summit
22/3/2018, Kuwait News Agency, Kuwait

Telkomsel's CSR activities are recognized by WSIS Prizes 2018
24/3/2018, IndoTelko, Indonesia

The World Summit on the Information Society concludes in Geneva
24/3/2018, Thomson Reuters, UAE

Mexican Digital Programs Recognized at WSIS Awards
27/3/2018, La Jornada, Mexico

Mexico obtains 14 awards in digital strategy
27/3/2018, AM Queretaro, Mexico

UNESCO promotes Internet Universality indicators to advance SDGs at WSIS Forum 2018
28/3/2018, Modern Diplomacy, Europe

WSIS Forum Highlights Critical Role of Information Technologies in Advancing SDGs
29/3/2018, IISD SDG Knowledge Hub, USA

Ayni Bolivia was awarded the WSIS 2018 International Award in Geneva
7/4/2018, La Patria, Bolivia

VIDEOS

WSIS Prizes 2018 Voting
8/2/2018, MCMCTV, Malaysia

Chapterthon Digital Schools is WSIS Prize Winner 2018
20/3/2018, Internet Society, USA

WSIS Prizes 2018 (1)  
WSIS Prizes 2018 (2) *Over 3,200,000 views
20/3/2018, San Luis Government, Argentina

The Office for IT and eGovernment won WSIS prize
20/3/2018, Portal eUprava, Serbia
Each year, on the occasion of the WSIS Forum, 18 WSIS stakeholders are awarded **WSIS Prizes**, as a unique mark of global recognition for excellence in the implementation of WSIS outcomes.

This year’s innovation in the **WSIS Prizes** contest is the new recognition category: **WSIS Prize Champions** who appeared after the Online Voting Phase with 1.65M votes received from the WSIS Community. Their projects are among the most voted ones and have gained one of the best reviews by the members of the Expert Group. Among the five selected projects per each of 18 categories, one is the Winner, while other runner-ups are WSIS Prize Champions.

During this ceremony, all the Champions were awarded with high recognition certificates.
Quick Links

- Open Consultation Process: https://www.itu.int/net4/wsis/forum/2018/Pages/OpenConsultations#intro
- Agenda: https://www.itu.int/net4/wsis/forum/2018/Pages/Agenda#intro
- Facebook WSIS Process: https://www.facebook.com/WSISprocess
- WSIS Flash: http://groups.itu.int/stocktaking/WSISFlash.aspx
- Twitter WSIS Process #WSIS: https://twitter.com/WSISprocess
- WSIS on You Tube: http://www.youtube.com/WSISprocess
- WSIS Stocktaking: www.itu.int/net4/wsis/stocktaking/en
- Partnership for Measuring ICT for Development: http://www.itu.int/ITU-D/ict/partnership/

For further information please write to the WSIS Secretariat at wsis-info@itu.int
Remote participation recordings:

Video Highlights and Interviews:
https://www.youtube.com/user/WSISProcess

Photographs:
https://www.flickr.com/photos/itupictures/collections/72157685044094155/
The World Summit on the Information Society Forum 2019 represents the world's largest annual gathering of the ‘ICT for development’ community. The WSIS Forum, co-organized by ITU, UNESCO, UNDP and UNCTAD, in close collaboration with all WSIS Action Line Facilitators/Co-Facilitators, has proven to be an efficient mechanism for coordination of multi-stakeholder implementation activities, information exchange, creation of knowledge, sharing of best practices and continues to provide assistance in developing multi-stakeholder and public/private partnerships to advance development goals. This forum will provide structured opportunities to network, learn and participate in multi-stakeholder discussions and consultations on WSIS implementation. The Agenda and Programme of the Forum will be built on the basis of the submissions received during the Open Consultation Process.

Additional information about the WSIS Forum 2019 will be made available soon.