

Report of the World Telecommunication Development Conference 2022 (WTDC-22)

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Abstract

The eighth World Telecommunication Development Conference (WTDC-22) of the International Telecommunication Union (ITU) was held in Kigali, Rwanda, from 6 to 16 June 2022. This article gives an overview of the conference and its major deliberations.

Keywords: ITU, WTDC, development

1. Introduction

The International Telecommunication Union (ITU), through its Telecommunication Development Bureau (BDT), organizes a World Telecommunication Development Conference (WTDC) every four years in the period between two Plenipotentiary Conferences to consider topics, projects, and programmes relevant to telecommunication development. WTDC-22 was held in Kigali, Rwanda, from 6 to 16 June 2022. It was held in a hybrid format and attended by 2152 participants from 150 countries. Forty representatives from Japan attended including the Ministry of Internal Affairs and Communications, NTT, NTT DOCOMO, NTT-AT, NEC, Softbank, KDDI, and the ITU Association of Japan.

2. Overview of WTDC

WTDCs set the strategies and objectives for the development of telecommunication/information and communication technology (ICT), providing future direction and guidance to the ITU Telecommunication Development Sector (ITU-D). WTDC-22 established five committees (COMs) and a Working Group of the Plenary (WG-PL) under the Plenary. COM1 was a Steering Committee, COM2 dealt with budget control, COM3 with objectives (including regional initiatives, action plans, study group Questions, and

related resolutions), COM4 with working methods, COM5 with editing, and WG-PL with the ITU Strategic Plan and WTDC Declaration. Ms. Paula Ingabire, Minister of ICT and Innovation of Rwanda, was appointed the chair of the conference.

3. Major results and deliverables

WTDC-22 took place just over three months after the invasion of Ukraine by the Russian Federation, which gave the conference a very intense political atmosphere. During the opening session, Ukraine issued a statement condemning Russia's actions and objecting to the appointment of Russian representatives to the chair and vice-chair positions of WTDC-22 and ITU-D. While the statement was supported by many member countries, no compromise was reached, resulting in a secret vote in the Plenary in the second week (see below for details). In addition, WTDC-22 discussed 215 proposals, approved 14 study group Questions, 28 regional initiatives, and 4 new resolutions. The following is a summary of the main discussions and outcomes.

3.1 The Kigali Declaration

The Kigali Declaration outlines the main conclusions and priorities established by the conference and reinforces the political support for the ITU development mission and strategic goals. Recognizing that

Table 1. Questions to be addressed by SG1 and SG2 during the 2022–2025 study period.

SG1: Enabling environment for meaningful connectivity
<ul style="list-style-type: none"> • Q1/1: Strategies and policies for the deployment of broadband in developing countries • Q2/1: Strategies, policies, regulations and methods of migration to and adoption of digital technologies for broadcasting, including to provide new services for various environments • Q3/1: The use of telecommunications/ICTs for disaster risk reduction and management • Q4/1: Economic aspects of national telecommunications/ICTs • Q5/1: Telecommunications/ICTs for rural and remote areas • Q6/1: Consumer information, protection and rights • Q7/1: Telecommunication/ICT accessibility to enable inclusive communication, especially for persons with disabilities
SG2: Digital transformation
<ul style="list-style-type: none"> • Q1/2: Sustainable smart cities and communities • Q2/2: Enabling technologies for e-services and applications, including e-health and e-education • Q3/2: Securing information and communication networks: Best practices for developing a culture of cybersecurity • Q4/2: Telecommunication/ICT equipment: Conformance and interoperability, combating counterfeiting and theft of mobile devices • Q5/2: Adoption of telecommunications/ICTs and improving digital skills • Q6/2: ICTs for the environment • Q7/2: Strategies and policies concerning human exposure to electromagnetic fields

some 2.9 billion people remain unconnected in 2021, the WTDC representatives, delegates, and participants committed to accelerating the expansion and use of efficient and up-to-date digital infrastructures, services, and applications; mobilizing financial resources for providing universal, secure, and affordable broadband connectivity; promoting investments in broadband infrastructure deployment; creating alliances and partnerships among stakeholders; urgently mitigating the impact of disasters and the COVID-19 pandemic; and strengthening efforts to tackle environmental and climate-change issues.

3.2 The Kigali Action Plan

The Kigali Action Plan describes the ITU-D priorities and scope of activities and associated Outcomes and Outputs for the next period. It has identified the ITU-D priorities as the following five pillars: (1) Affordable Connectivity, (2) Digital Transformation, (3) Enabling Policy and Regulatory Environment, (4) Resource Mobilization and International Cooperation, and (5) Inclusive and Secure Telecommunications/ICTs for Sustainable Development.

3.3 Regional initiatives

The regional initiatives are intended to identify the principal telecommunication/ICT areas of concern to the six regions (Africa, the Americas, Arab States, Asia-Pacific, the Commonwealth of Independent States (CIS), and Europe), and were adopted by the preparatory meetings of each region. The regional initiative for Asia-Pacific consists of the following five priorities.

- (1) Addressing special needs of the least developed countries, small island developing states, including pacific island countries, and land-locked developing countries
- (2) Harnessing ICTs to support the digital economy and inclusive digital societies
- (3) Fostering development of infrastructure to enhance digital connectivity and connecting the unconnected
- (4) Enabling policy and regulatory environments to accelerate digital transformation
- (5) Contributing to a secure and resilient ICT environment

3.4 Questions, chairs and vice-chairs of Study Groups (SG)

The Questions to be addressed by SG1 and SG2 during the 2022–2025 study period are summarized in **Table 1**. The conference also elected the chairs and vice-chairs of Telecommunication Development Advisory Group (TDAG) and SGs for the new study period, with the chairs elected from Cote d'Ivoire for SG1, Egypt for SG2, and the US for TDAG. Two vice-chairs were elected from Japan, with the authors of this article, Ms. Memiko Otsuki as vice-chair of SG1 and Mr. Hideo Imanaka as vice-chair of SG2.

As mentioned above, the Russian delegation had candidates for the vice-chair positions in each of TDAG, SG1, and SG2, as well as COM5 of WTDC-22, and the Plenary discussed whether to approve the appointment of these four persons. At the suggestion of Ghana, a secret ballot was conducted, and the appointment of the Russian candidates was rejected.

3.5 Major resolutions discussed at WTDC-22

(1) Resolution 37: Bridging the digital divide

The Asia-Pacific region proposed to add a reference to a high altitude platform station (HAPS) as a means of reducing the digital divide. Although some countries pointed out that no specific technology should be mentioned, HAPS was included as an example of a stratospheric service, which clarified that HAPS is useful for bridging the digital divide.

(2) Resolution 45: Mechanisms for enhancing cooperation on cybersecurity, including countering and combating spam

Arab States and Africa proposed to encourage the ITU to provide information on the existing cooperative framework for data protection (GCA: Global Cybersecurity Agenda). In addition, Europe proposed to revise the resolution to encourage the sharing of information on cybersecurity threats and vulnerabilities. Japan, in cooperation with the United States and other like-minded countries, opposed the inclusion of information provision to the ITU in the resolution because security-related information is highly sensitive. After lengthy discussions in the ad hoc meeting, a compromise was agreed to limit the GCA to only the description of capacity building.

(3) Resolution 66: Information and communication technology, environment, climate change and circular economy

In Resolution 66, there was a proposal from Europe and Africa to include a specific technology, “scientific monitoring and reliable telecommunications (SMART) cables.” Japan opposed the description of the specific technology as the resolution should be a high-level document. After deliberations, the general description “undersea sensing technology, including SMART submarine telecommunication cables” was adopted.

(4) New resolution: Digital transformation for sustainable development

Africa and the Arab States had submitted a new draft resolution. It instructed the BDT Director to promote digital transformation in developing countries in line with the Kigali Action Plan. An informal group was formed, and after adjustments, such as excluding references to specific technologies, the resolution was agreed upon as a new resolution.

(5) New resolution (not adopted): Promotion of global development and adoption of Open Radio Access Networks (RAN)

It was proposed by Arab States to conduct research on the development and implementation of Open RAN. Canada, Sweden, and China opposed the new

resolution, citing concerns that Open RAN has not been standardized in the ITU Radiocommunication Sector (ITU-R) and the ITU Telecommunication Standardization Sector (ITU-T), that it is a premature technology, and that a resolution should not be created on a specific technology. India, Vietnam, and Arab States and Africa supported the creation of the new resolution because Open RAN would be useful in bridging the digital divide. After the drafting session led by the United States, it was agreed to insert the promotion of information sharing into Resolution 37 (Bridging the digital divide) instead of making it a stand-alone new resolution.

(6) New resolution (not adopted): Use of information and communication technologies to combat pandemics

In addition to the submission by Arab States and the CIS on the new resolution to combat pandemics, Japan proposed to include the promotion of e-health cooperation in the event of a pandemic. However, as the World Telecommunication Standardization Assembly (WTSA-20) agreed to discuss the new resolution on pandemics at the Plenipotentiary Conference (PP-22) in September 2022, it was agreed to withdraw the proposals and consider preparing an input document to PP-22 by the interested members.

4. Election campaign for PP-22

At PP-22, which was held in Bucharest, Romania, in September 2022, elections were scheduled for the council members, secretary general, deputy secretary general, directors of three bureaus, and the members of the Radio Regulations Board. Receptions and coffee breaks were held every day at the WTDC-22 to call for support for the elections. Japan also held an evening reception to request support for the election of the council member and of the director of the Telecommunication Standardization Bureau, for which Mr. Seizo Onoe, the chief standardization strategy officer of NTT, was running.

5. Conclusion

The ITU-D’s enthusiasm for pioneering initiatives was well demonstrated at WTDC-22, where sub-events, such as the Youth Summit, Partner2Connect (P2C) Digital Development Roundtable, and the Network of Women, were held in conjunction with the conference. The ITU-D is expected to be even more effective this year, as it has made clear its policy to focus on connectivity and digital transformation with

the goal of “Connecting the unconnected.” The NTT Group has secured two vice-chair positions and will continue to engage in activities related to the develop-

ment of telecommunications and ICTs and their deployment in developing countries.



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She received an MPP from the Australian National University (Canberra, Australia), and B.A. in business management from the International Christian University (Tokyo, Japan). She is currently working on her doctorate degree in economics at Kyushu University (Fukuoka, Japan). Ms. Memiko Otsuki currently serves as a manager of the Tariff and Regulatory Affairs Office and the Spectrum Planning Office at NTT DOCOMO, where she has been actively involved in policy and standardization work at ITU and Asia-Pacific Telecommunity (APT). Most recently, she was appointed the vice-chair of the ITU-D SG1 and the rapporteur of Question 12 of ITU-T SG3. Prior to her current position, she was the assistant director of the Global Strategy Division at the Ministry of Internal Affairs and Communications, Japan. In her role, she had been contributing to a number of ITU activities including the Council, the Council Working Group, the Expert Group on the International Telecommunication Regulations, the Informal Experts Group on World Telecommunication/ICT Policy Forum (WTPF-21), the World Summit on the Information Society (WSIS) Forum, the ITU Telecom, the Broadband Commission, and preparatory meetings for WTSA-20, WTDC-22 and PP-22. She has over 15 years of professional experience in the telecommunications/ICT field and has expertise in policy and regulatory issues. She received the ITU-AJ Encouragement Award from the ITU Association of Japan in 2017 for her contributions over the years. She is a member of the Japan Society of Information and Communication Research (JSICR).



Hideo Imanaka

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He received a B.E., M.E., and Ph.D. in electrical engineering from Mie University in 1985, 1987, and 2001. He joined NTT Telecommunication Network Laboratories in 1987. In 2004, he started international standardization activities in ITU-T and the APT standardization program (ASTAP) in NTT Service Integration Laboratories. He was in charge of standardization strategy planning of the entire NTT Group in NTT Research and Development Planning Department from 2010 to 2015. Since joining NTT Advanced Technology Corporation (NTT-AT) in 2015, he has been engaged in standardization consulting. He is currently with National Institute of Information and Communications Technology. He was the rapporteur of Question 1 of SG13 from 2006 to 2010 for the Next-Generation Network and Internet Protocol television standardization work in ITU-T, the chairman of the Internet of Things (IoT) working group in ASTAP from 2012 to 2016 for IoT and smart grid standardization work, and the vice-chairman of Focus Group on IMT-2020 in 2015 for pre-standardization of 5G (fifth-generation mobile communication) networks. He is currently the rapporteur of Question 8 of SG16 in ITU-T for standardization of Immersive Live Experience and the vice-rapporteur of Question 5 of SG2 in ITU-D for international deployment of emergency telecommunications and disaster relief solutions. He was recently appointed the vice-chairman of ITU-D SG2. He received the ITU-AJ Award from the ITU Association of Japan in 2009. He is a member of the Institute of Electronics, Information and Communication Engineers (IEICE) and the Society of Instrument and Control Engineers (SICE).