Outcome report

Resources needs for connectivity

Session 5, Tuesday, 6 July 2021 (15:00 – 16:00 Geneva time)

Moderator:
- István Bozsóki, Head, Telecommunications Network and Spectrum Management Division (ITU/BDT)

Speakers:
- Philippe Aubineau Counsellor for ITU-R Study Groups, Radiocommunication Bureau, ITU
- Jinane Karam, Spectrum expert, Telecommunication Authority, Lebanon
- Arthur Carindal N'guessan, Head of Steakholder Development, AFRINIC
- Palesa Legoze, The Board Chairperson of the ZA Domain Name Authority (ZADNA)

1. **Session summary :** This session discussed the resources needed for extension of Internet and IoT including spectrum considerations, critical internet resources and Internet Domain name system

2. **Main outcomes highlighting the following:**
   a. Discussed topics
      Spectrum management, Internet resources and Internet Domain names
   b. Key achievements and challenges shared by the panellists and/or the audience

   - the importance of the ITU World Radiocommunication Conferences with some statistics and key elements on the WRC-19 outcomes and the topics on the next WRC-23 agenda
   - In today's increasingly digital society, access to spectrum is key to expanding the deployment, coverage and reach of telecommunication networks providing great opportunities for socioeconomic development. What are the key trends in spectrum for emerging technologies?
   - To accelerate the digital transformation in LDCs, specifically in Africa, AFRINIC has been engaged in a series of initiatives to assist governments and ICT regulators in making effective Internet development in Africa through the usage of IP numbers (IPv4, IPv6, ASNs).
   - Considering the expansion of critical infrastructures, government information networks and the increase of e-services as well as connected devices (e.g Internet of Things)

   - Critical Internet Resources: DNS Root Server instances are key to the overall functionality of the internet. There are over 1300 instances and about 220 of those are in 62 countries in the developing world. These instances make it possible for local internet to be accessible if the is a disruption of international connectivity. Thus every country needs to have at least one. Country code Top Level Domain names are critical to internet development in a country and therefore they should be managed and operated efficiently. This will enable

local businesses, organizations and people on the ground to register country-code domain names. Government should have an oversight role to ensure that ccTLD's are adequately resourced. ccTLD's should be operated locally and the root zone files should also be located in the relevant country.

    c. Main conclusions reached during the discussion

- the activities carried out within the ITU-R Study Groups on the Internet of Things.
- What are the regulatory, technical and economic considerations in relation to spectrum that governments and regulators are invited to consider to achieve universal and affordable Internet especially in the least developed countries?
- AFRINIC urges sustainable collaboration between private and public sectors to effectively deploy IPv6 to enable meaningful connectivity and foster competitive digital economies where emerging technologies might flourish
- The last round of gTLD's brought to the fore the gaps and maturity of the internet in developed and developing countries. The needs of the developing world have to be taken into consideration in the next rounds, including the protection of names that are culturally, nationally and geographically significant. So that what transpired with .amazon does not happen again.

3. Panellists contributions to the outcome reports
- **Takeaway**:
Philippe Aubineau:
harmonization standardization of radiocommunication systems, which is important for the economy of scale and benefit of the LDCs, LLDCs and the SIDs.
Jinane Karam:
A key word: accessibility. Technology is an enabler, tech the driver and people are the key. To focus specifically on these least developed country: 1 billion people should be the key.
Arthur Carindal N'Guessan
The keyword is IPv6, let us take the Internet and LDC for the next level for the use of IPv6 addresses Let's build up collaboration between the public and private sectors to accelerate the Digital Transformation.
Palesa Legoze
We need to look to collaborate as Africans to make sure that we expand Internet for the good of all of the people in Africa