



ATU SG's Speech during the 6th Sub-Sahara Spectrum Management Conference – 20 July 2021

Organizers of the Sub-Saharan Spectrum Management Conference, Forum Europe,

ITU BR Director, Mr. Mario MANIEWICZ,

Forum participants,

Ladies and Gentlemen.

As I begin my address, I would like to immediately acknowledge that the invitation to participate in this special conference is one which stood no chance of being turned down by the African Telecommunication Union. As an organization we are convinced that management and coordination of spectrum policy is one of those areas where no individual entity has the capacity to act alone and succeed. There will always be a great demand for synchronized action; and this has no better foundation than multi-stakeholder engagement. Therefore, the place of the Spectrum Management conferences remains assured today and in the future.

The format of this conference in itself appeals to the spirit of cooperation, collaboration and coordination, which we very much depend on in our journey to the future. The page that this conference is written on, is exciting to me and ATU especially because of choice of the topics over which our interactions will be predicated, interactive nature of the sessions, one-to-one and group networking opportunities and technology demonstrations and exhibitions. Some of the topical topics include:

- Making spectrum work for Africa
- Tackling global and regional digital divides - Delivering connectivity to unconnected communities and homes
- Tackling Africa's Backhaul Challenges
- The future of the UHF band – what potential for increased collaboration and coexistence between broadcast and mobile services?
- Balancing the needs of 5G and other key users in upper mid-band frequencies
- The emerging shape of the 3.3 – 4.2 GHz C-band – how important is a harmonized approach?
- Exploring the future of the 6GHz band in Africa
- Beyond IMT - A focus on other key themes for Africa at WRC-23
- Continuing the path towards a harmonized continental 5G strategy
- Opportunities in 57-71 GHz band in Africa
- What role for mmWave frequencies in Africa's digital future?
- The evolving shape of the spectrum landscape in Africa – bringing the required spectrum to market

The structuring of this Forum is such as to keep us engaged and committed to the optimal management of radio spectrum. Allow me at the onset therefore to thank Forum Europe for

the thought that has gone into organizing this Forum and for always yearly commitment to have sub-saharan Africa in mind when planning for these series.

A question that I have taken time to think about is just how eager do we are to make Spectrum work for Africa? The COVID-19 pandemic has kept people apart from each other but spectrum and mobile networks have built bridges and helped keep people together. Today, part of why we are here is to examine the possibilities that lie with tackling the global and regional digital divides and bringing the required spectrum to market. Whether we succeed or not in this quest is, in my opinion, hinged on our dedication to duty, to such an extent that it would be impossible to drag any one of us back, because in any case, there will be none amongst us who will be walking alone.

We have to walk together!

I recall when coming up with the draft Spectrum Management Recommendations by the ATU Task Group on Spectrum Recommendations, we noted that with a mobile broadband penetration of 34% at the end of 2019, Africa is way below the world average of 83%. This is a disparity that needs to urgently be resolved if we must compete favorably with the rest of the world. High quality mobile services for instance, and their reliance on increasing amounts of spectrum to support faster broadband speeds and rapidly growing data demand, cannot be wished away and hence we must continuously give thought as to how radio spectrum will meet this demand.

At the same time, with mobile penetration in Africa at about 49%, a significant connectivity gap persists. Nonetheless, demand for access to new technological innovations and state of the art technologies will be on the rise.

Very few Africans have fiber at their home or business compared to other regions; this makes mobile even more critical as a channel for online learning, e-health or e-commerce. It also increases the importance of Fixed Wireless Access within the region, especially if we do not want those in rural areas to be left behind in the digital economy.

This introduces the need for African countries to make additional spectrum available in a timely manner, thereby creating room to accelerate the deployment and increased mobile broadband penetration in Africa.

As we anticipate the rollout of 5G technology into the African markets, we expect that this will tremendously affect spectrum demand in the coming years. The important question in this regard is whether we are ready.

Today, mobile broadband is the main medium to access broadband services in Africa, and, therefore, timely access to sufficient and affordable spectrum is critical. The fact that most of the connection in African countries are will for a while be largely driven by wireless technologies which relies on spectrum alone, is enough to present the case for African Administrations to make enough spectrum available for mobile broadband.

We need to equally ask ourselves what our place is in this era where modern techniques of spectrum management continue to be considered. Admittedly, policies and practices that do not allow for dynamic spectrum usage and sharing will be out-of-date and need to be reviewed.

On the same boat, adequate preparation for the 2023 World Radiocommunications Conference is very critical. WRC-23 coincides with an interesting period when virtual digital technology has become vital for economies, societies, and individuals. Therefore, the outcomes of WRC-23, as we expect, will accelerate the digital transformation of economies and industries and digital inclusion of millions of people throughout the continent. I am pleased to indicate that our African preparations for WRC23 are going-on well. I invite all of you to actively participate in the process.

On our part as the ATU, we have, together with a number of partners, commissioned or completed a number of stakeholder-driven and radio spectrum-related projects in the quest for optimal management of spectrum in Africa. These include:

- (i) Development of Spectrum Management Recommendations in various areas including spectrum audit.
- (ii) Development the 1st Edition of the African Spectrum Plan (AfriSAP).
- (iii) Harmonization of Frequencies for Emergency Telecoms (PPDR) by establishing a set of ET harmonized frequencies for Africa.
- (iv) Study of the state of Satellite Resources for Africa.
- (v) Development of Strategy for Optimum Acquisition, Retention and Use of the Satellite Resources in Africa.
- (vi) Development of an ATU Handbook on Satellite Filing and Coordination.
- (vii) Development of a Harmonized (model) Framework for Licensing of Satellite Services in Africa.
- (viii) Optimization of the GE84 (the FM broadcasting frequency) Plan for Africa in order to have additional frequencies.
- (ix) Study of the state of Digital Sound Broadcasting in Africa.
- (x) Development of a Strategy for the introduction/promotion of Digital Sound Broadcasting in Africa.
- (xi) Coordination of the African preparations for WRC-23 in order to develop African common positions and proposals.
- (xii) Specialized, certificated capacity building of spectrum experts across the ATU member states.
- (xiii) The Development of recommendations on 5G implementation in Africa as well as other forms of emerging technologies deserves a special mention. Earlier last year, we commissioned a multidisciplinary Task Group on the basis of a special assignment given to ATU by the African Union Commission to develop draft recommendations on 5G implementation in Africa as well as other forms of emerging technologies.

1. The **highlights** of the recommendation are:

2. Category 1: 5G

- a. **Adopt** regionally harmonized frequency allocations, especially for core 5G/IMT-2020 frequency bands such as 3.3/3.4-3.6 GHz, as wider as possible, and 26 GHz, as a start in order to support economies of scale, reduce cross-border interference and support common technical standards.
- b. **Assign** spectrum for 5G/IMT 2020 in low, mid, and high bands in sufficient quantities to support 5G/IMT 2020 rollout and licensing terms that best meet policy goals, including technology neutrality and national assignments. In this regard, the targets of 80 to 100 MHz per operator in the 3.5 GHz band and 800 to 1000 MHz per operator in the 26 GHz band may be considered.
- c. **Allow** shared and license-exempt spectrum to increase access and efficient use of spectrum for 5G/IMT-2020, while prioritizing the use of licensed spectrum.

- d. **Consider** making available 5G spectrum, for local or shared licenses in order to address the spectrum needs for verticals. Accordingly, administrations are encouraged to develop a regulatory framework that facilitates access to local and shared spectrum.
- e. **Establish** standard, simple, one-stop shop, process for wayleave applications nationwide with application fees at a reasonable level to cover processing costs; and simplify and speed-up application and approval processes for other relevant approvals such as from aviation authorities or environmental authorities.
- f. **Communicate** clearly on the safety aspects of 5G/IMT-2020 with the evidence of various international bodies from a medical and scientific perspective as well as field tests from around the world.

3. Category 2: Emerging High-Altitude Platform Stations:

- a. **Consider** permitting mobile network operators to use their existing access spectrum licenses to provide services to end users via HAPS in support of technology neutrality principle for Spectrum Licences and subject to compliance with technical conditions;
- b. **Adopt** a special (temporary) license to enable timely access to mobile and fixed spectrum to be able to deliver service to end users in response to emergencies, and for trials of commercial networks;

4. Category 3: Emerging Satellite applications

- a. **Consider** permitting mobile network operators to use their existing access spectrum licenses to provide services to end users via HAPS in support of technology neutrality principle for Spectrum Licences and subject to compliance with technical conditions;
- b. **Adopt** a special (temporary) license to enable timely access to mobile and fixed spectrum to be able to deliver service to end users in response to emergencies, and for trials of commercial networks;

5. Category 4: Emerging Wireless Access Systems (WAS) and Radio Local Access Networks (RLANS):

- a. **Designate, on a licence-exempt basis**, the frequency band 5925 - 6425 MHz for use by WAS/RLAN equipment restricted to very low power (VLP) (both outdoor and indoor use) and low power indoor (LPI) use only on a non-exclusive, non-interference and non-protected basis;
- b. **Designate, on a licence-exempt basis**, the frequency band 57 - 66 GHz for use by WAS/RLAN such as WiGig and 5G NR-U on a non-exclusive, non-interference and non-protected basis.
- c. **Exempt** WAS/RLAN equipment that comply with the prescribed technical details from individual licensing.

I call upon ATU Member States as well as other African countries to exercise their utmost goodwill towards the outlined recommendations thereby adopting and adapting as much of the recommendation as far as possible.

As I conclude, I wish to state that there is no future without working together, building together and achieving together. Let us collaborate more and compete less. This is why, I wish this conference all the success.

Thank you.