



Mobile World Congress Shanghai 2018, Opening Remarks
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Good morning. It's a pleasure to join you today in Shanghai to talk about 5G. I want to thank GSMA CEO John Hoffman for the invitation and the opportunity to share some thoughts on the spectrum and policy challenges and opportunities that await us on the road to 5G.

One of the most remarkable achievements of ICT developments in the modern society is the terrestrial mobile technologies and services. Since the mid 1980s, when we started the public service of mobile technologies, we have gone through from analogue to digital, moving from 2G, 3G to 4G, and now into 5G. The mobile subscribers registrations have passed the total number of the population of the planet.

Mobile communications are an important part of daily life for all those who have one or more mobile devices, as mobile services improve social and economic development of our societies.

The speed of mobile technology changes continues to increase: 2G analogue systems were deployed in the 1980s and 1990s. 3G standards were established by ITU in 2000, 4G in 2012, and 5G will be ready in 2020.

As innovative services like automated driving, remote medical surgery, and advanced virtual reality emerge, 5G will have to be ultra-reliable and deliver very low-latency, improved energy efficiency and enhanced privacy and security. Meanwhile, the deployment of Internet of Things is expected to connect an estimated 50 billion devices to the network by 2020. Needless to say, this will put tremendous pressure on a valuable natural resource that is already in short supply to support all these activities: spectrum. 4G cannot meet these requirements, but 5G will.

It's important to know that the development of mobile networks is dependent on two things: standards and spectrum. 5G is no different. Also both standards and spectrum for 5G networks require global cooperation.

ITU has been instrumental in developing international standards and harmonize spectrum for the ICT industry for over 150 years. In October 2016, the ITU has agreed on key 5G performance requirements for IMT-2020 including Enhanced Mobile Broadband (eMBB), Massive-Machine Type Communications (mMTC), and Ultra-reliable, Low Latency Communications (URLLC).

We are now in the process of selecting the technologies that will be included in the 5G standard specifications to be approved in 2020, and deliver 100 Mbps Downlink speed, 1.000.000 Connected Devices per base station, and Latency of less than 1ms. By "We" or "ITU" I mean the ITU membership, including governments, regulators, mobile operators, manufacturers, Regional and international organizations, industry fora, and academies from around the globe.

Let me now turn to our work on spectrum. Harmonization of spectrum is critical to ensure that the ecosystem is in place with affordable and interoperable devices and network equipment, and that cross border interference is minimized.

ITU-R Study Groups are gathering all spectrum stakeholders to address and resolve the technical, regulatory and operational issues that may impact the sustainable development of the radiocommunication ecosystem. These studies are the basis on which the ITU World Radiocommunication Conferences (WRC) take their decisions to modify the Radio Regulations, the international treaty that governs the use of spectrum.

The next World Radiocommunication Conference, WRC-19 will be held in Egypt, Sharm-El-Sheikh in November 2019. It will identify globally harmonized spectrum for the development of 5G in bands above 24 GHz,

To prepare the right decisions at WRC-19, all ITU Members, all ITU partners, industry fora, regional or international organizations concerned are actively working. Regional organizations such as APT, ATU, CEPT, CITEL, RCC and ASMG also contribute to the ITU process by building consensus at regional level.

The preparatory studies will be completed by the Conference Preparatory Meeting (CPM) in March 2019. I invite you to actively participate in these meetings and processes. WRC-19 decisions will affect the future life of everybody for the next decades. We need your support, and you need good results.

Let me say a few words on GSMA. GSMA is a Sector member of ITU. GSMA is an excellent partner of ITU. I highly appreciate the efforts made by GSMA to promote developments of 3G, 4G and 5G, to promote mobile broadband access, and to promote mobile applications to facilitate social and economic development. This congress is one of many good examples of GSMA commitment. ITU highly appreciates.

Since I am in Shanghai, I would like to take this opportunity to express, on behalf of ITU, our sincere appreciation to China and to the Chinese industry members of ITU, including China Mobile, China Telecom, China Unicom, China Tower, Huawei, ZTE and many others. China's contribution to ITU's mobile technology development is highly appreciated by the ITU family and by the mobile industry worldwide. We encourage China to continue to work with ITU to facilitate the world ICT development.

Ladies and gentlemen,

As we work to discover a better future, the theme of this year's Congress, let's remember that access to information and communication technologies has become a development indicator and aspiration in itself. Let's commit here today in Shanghai to building a 5G environment where we will all have access to highly reliable communications, and where ICTs will be key to innovation in every industry sector. Let us work together to bring the benefits of mobile broadband to everyone, everywhere.

Thank you.