## Opening of the 110<sup>th</sup> anniversary of the Radio Regulations

Mr Malcolm Johnson, Deputy Secretary General of the ITU

Former Elected Officials of the ITU,

Current and former Members of the Radio Regulations Board and the former IFRB,

Current and former chairs and vice-chairs of WRCs, ITU-R and former CCIR Study Groups, Special Committee and CPM,

Ladies and Gentlemen, Dear Colleagues and Friends,

It is a pleasure to address you this morning in opening these celebrations of the 110 years of the ITU Radio regulations.

One hundred and ten years ago, only a few years after the decisive experiments on wireless telegraphy by Alexander Popov (1895) and Guglielmo Marconi (1901), the first International Radio Telegraph Convention (1906) was signed by 30 Maritime States in Berlin. It contained the first regulations governing wireless telegraphy. These regulations have since been expanded and revised by numerous World Radio Conferences (WRCs), and have evolved to the Radio Regulations, encompassing all the uses of radio waves.

Just a year ago, WRC-15 adopted the latest version of the Radio Regulations, which has recently been published, and its decisions were signed by 150 countries present. This was the 38<sup>th</sup> conference to modify this global treaty.

Your presence here illustrates the importance of this treaty, through which all countries in the World commit to use common spectrum and orbit resources in a harmonized, coordinated and equitable way, with the objective of avoiding harmful interference.

We are gathered here this morning to celebrate 110 years of success of the ITU community in adopting and improving this global treaty in a way that creates certainty for investments while constantly incorporating the progress of technologies and evolution of our societies.

Celebrating this success is also paying tribute to four generations of engineers who have dedicated their lives to make this happen, starting with Alexander Popov, who participated in the first Radio Telegraph Conference in 1903.

You may wonder how it is possible, in today's hectic world where everything is changing at the relentless rate of technology, to find 3,500 men and women from 163 countries who are ready, after four years of exhausting preparations, to gather in a conference hall like this one and discuss for four weeks, day and night, to decide on a legal framework that is intended to be valid for 20 or 30 years. The reason is very simple: without agreement at the end of a WRC, the future of radiocommunications would be problematic.

Since 1993, the WRC process through which the Radio Regulations are updated to meet evolving spectrum requirements and technologies has become a permanent process, which is fed by:

- The studies carried out by ITU-R Study Groups, summarized in the Report of the Conference Preparatory Meeting (CPM), and conducted by the ITU-R Membership. Let me thank the current and former chairs and vice chairs and all delegates to these study groups and former CCIR study groups for your contribution to this process and your presence today.
- The Radio Regulations Board (RRB), composed of twelve elected members from all regions, which adopts the Rules of Procedure, the complement of the RR in its application, and acts as a referee in conflicts arising from the application of the RR. Let me

thank the current and former members of the RRB and the former IFRB for their presence here.

- The Radiocommunication Bureau (BR), which administers the application of the RR and provides support to the whole process. Let me thank the two former directors of the BR, Mr Robert Jones and Mr Valery Timofeev, for their presence today and their leadership and the staff of the BR for their hard work.
- The ITU General Secretariat and the other ITU Bureaux, TSB and BDT, which provide support to the BR in carrying out its its duties. Let me thank Mr Malcolm Johnson, Deputy Secretary General, Mr Joshio Utsumi, former Secretary General and Mr Jipguep, former Deputy Secretary General for their presence here today.

## Ladies and Gentlemen,

Digital transformation has become the engine of world economic and social development, and radiocommunications are the vector by which most of this transformation is taking place. Radiocommunications contribute directly, or as enablers, to each and every one of the Sustainable Development goals adopted by the United Nations in 2015 as part of its 2030 Agenda for sustainable development.

Mobile and broadcasting networks, satellites, radio relays, radars, drones, short range devices such as Wi-Fi or Bluetooth are constantly providing us with the ability to access to, and exchange a wealth of information, as well as applications, that we are using seamlessly without realizing that they all rely on one common resource: spectrum.

The Radio Regulations are the basic instrument which permits the orderly use of this resource and therefore enables all this to happen, in particular when it comes to mass market wireless applications.

Since 1927, the Radio Regulations enabled the successful development of a number of such applications, like short wave

and FM sound radio, analogue and digital television broadcasting, Wi-Fi and Bluetooth, satellite positioning (e.g. GPS, Glonass, Galileo or Compass) and satellite television reception. Today, more than one billion people watch TV through digital terrestrial television broadcasting and a similar number through satellite dishes, in frequency bands which have been harmonized globally by the ITU Radio Regulations for many decades, since the corresponding technologies became available.

Since 1990, the number of mobile subscriptions increased from eleven million to more than seven billion today. We are now witnessing the full deployment of the third and fourth generation (3G and 4G) mobile broadband systems, based on ITU standards known as International Mobile Telecommunications (IMT)-2000 and IMT-Advanced. Nearly four billion users are currently enjoying the benefits of IMT services, and the number is expected to rise to 6 billion by 2020, when large-scale development of the fifth generation (5G) will commence and accelerate the digital transformation by integrating the Internet of Things (IoT), and vertical activities like health, transportation and retail.

Less visible, but equally important, the Radio Regulations are the enabler of satellite imagery and Earth resource monitoring, space science and missions, meteorology, maritime and aero- nautical transport and safety, civil protection and defence systems.

## Ladies and Gentlemen,

From the beginning, the WRC process has been one of constant improvement over the years to adjust the international regulatory framework to new technologies as they develop and enable new uses, as these new uses modify spectrum requirements.

Throughout this process, consensus is the constant practice, in order to ensure that decisions, whether binding or not, will be implemented worldwide, thus strengthening harmonization.

Consensus decision making also ensures that decisions will not lead to disruption to already deployed networks and services. The Radio Regulations are an international treaty, and the WRCs, which modify them, are treaty-making conferences. Decision by consensus is the guarantee that this treaty as it evolves, will continue to be reflected in national legislations, and enforced by national governments, as a consequence of their signing of the Final Acts of WRCs.

Building this consensus is a key requirement of the four-year preparation cycle of WRCs. This is achieved through the leadership of six regional groups which regularly convene preparatory meetings and develop common proposals to the conference, and by informal interregional coordination meetings, in addition to and in support of the preparatory process carried out in the ITU–R Study Groups and CPM. Let me thank the Heads of the regional groups present today for their leadership in support of this process.

On this foundation, careful technical, operational and regulatory studies ensure that the modifications to the Radio Regulations introduced by WRCs, respond to rapid technological and social evolution, keep harmful interference within manageable limits under all circumstances, and maintain the right balance between the protection of incumbents and the satisfaction of emerging needs.

Thanks to this process, which has been constantly improved over the years and has now become permanent, the Radio Regulations deliver a stable and predictable global framework which ensures long-term protection of the investments of a multi-trillion dollar industry, through the universal commitment of governments and all other stakeholders. The Radio Regulations are the basis for a sustainable ecosystem which has flourished over the last 110 years and have made radiocommunications a fundamental part of today's world.

To better assess the role and the importance of the Radio Regulations, we have gathered two panels of distinguished spectrum stakeholders

to address the historical and future role of the Radio Regulations in supporting the radiocommunication eco-system.

It is my pleasure to leave you now in the expert hands of Mr Mario Maniewicz and Mrs Julie Zoller who will moderate these two panels.