## RESOLUTION 77 (Rev. Buenos Aires, 2017)

# Broadband technology and applications for greater growth and development of telecommunication/information and communication services and broadband connectivity

The World Telecommunication Development Conference (Buenos Aires, 2017),

#### recalling

*a)* Resolution 71 (Rev. Busan, 2014) of the Plenipotentiary Conference, on the strategic plan for the Union;

*b)* Resolution 139 (Rev. Busan, 2014) of the Plenipotentiary Conference, on telecommunications/information and communication technologies (ICTs) to bridge the digital divide and build an inclusive information society;

*c)* the outcome documents of the 2005 phase of the World Summit on the Information Society (WSIS);

*d)* Resolution 135 (Rev. Busan, 2014) of the Plenipotentiary Conference, on ITU's role in the development of telecommunications/ICTs, and the importance of telecommunications/ICTs for economic and social progress;

*e)* Opinion 2 (Geneva, 2014) of the World Telecommunication/ICT Policy Forum, on fostering an enabling environment for the greater growth and development of broadband connectivity;

*f)* Resolution 20 (Rev. Buenos Aires, 2017) of this conference, on non-discriminatory access to modern telecommunication/ICT facilities, services and related applications;

g) Resolution 37 (Rev. Buenos Aires, 2017) of this conference, on bridging the digital divide;

*h)* Resolution 43 (Rev. Buenos Aires, 2017) of this conference, on assistance for implementing international mobile telecommunications (IMT);

*i)* Resolution 203 (Busan, 2014) of the Plenipotentiary Conference, on connectivity to broadband networks;

*j)* Resolution ITU-R 65 (Geneva, 2015) of the Radiocommunication Assembly, on principles for the process of future development of IMT for 2020 and beyond;

*k)* Resolution 92 (Hammamet, 2016) of the World Telecommunication Standardization Assembly (WTSA), on enhancing the standardization activities of the ITU Telecommunication Standardization Sector (ITU-T) related to non-radio aspects of IMT;

*I)* Resolution 93 (Hammamet, 2016) of WTSA, on interconnection of 4G, IMT-2020 networks and beyond;

*m*) Resolution 9 (Rev. Buenos Aires, 2017) of this conference,

## considering

*a)* the role of ITU, and the role of the ITU Telecommunication Development Sector (ITU-D) in particular, in the development of telecommunication/ICT facilities and services;

b) the potential benefits of the rapid introduction of new and diverse telecommunication services, including those highlighted in Resolution 66/184 of the United Nations General Assembly, and consistent with § 54 of the Tunis Agenda for Information Society, and the role of broadband connectivity are essential elements in attaining the UN Sustainable Development Goals (SDGs);

c) the importance of broadband capacity to facilitate the delivery of a broader range of services and applications, promote investment and provide Internet access at affordable prices to both existing and new users in underserved and unserved communities using a technology-neutral approach to bridging the existing digital divide;

d) that new innovative terrestrial, wireless access systems, as well as satellite system technologies, can help bridge the digital divide, not only between developing countries<sup>1</sup> and developed countries but also between urban, remote and rural regions where coverage by conventional fixed telecommunication services may not be adequate;

e) that broadband terrestrial and satellite systems are an effective, and in many cases – particularly for rural areas – the most effective, means of performing many practical tasks to open up new prospects to help bridge the digital divide and afford developing countries access to new technologies;

f) that ITU and the United Nations Educational, Scientific and Cultural Organization (UNESCO) set up the Broadband Commission for Sustainable Development, which agreed a set of four ambitious but achievable targets that countries around the world should strive to meet in order to ensure their populations participate fully in tomorrow's emerging knowledge societies;

*g)* that in accordance with Resolution 9 (Rev. Buenos Aires, 2017), the Director of the Telecommunication Development Bureau (BDT), in close consultation with the Director of the Radiocommunication Bureau (BR), is collecting pertinent information and preparing, over the period between world telecommunication development conferences (WTDCs), appropriate documents and other relevant outputs that are responsive to the specific needs of developing countries on national, economic, regulatory and financial approaches to, and challenges of, spectrum management and spectrum monitoring,

#### taking into account

*a)* the report of the fifth WTDC (Hyderabad, 2010), highlighting the importance of telecommunication infrastructure and technology development, particularly in developing countries, and adopting regional initiatives and the Hyderabad Action Plan to assist developing countries in achieving, to a greater degree, universal access to telecommunication services;

*b)* that many countries are interested in introducing a comprehensive technology-neutral approach for broadband services in activities such as e-health, e-government and e-education;

<sup>&</sup>lt;sup>1</sup> These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

*c)* that, despite considerable improvements in the availability and affordability of broadband, almost two-thirds of the world population lacks access to affordable broadband;

d) that unequal access to broadband telecommunication services does nothing to eradicate social inequality and has an adverse impact on the social and economic situation in different countries and regions;

*e)* the importance of competition in promoting investment, as presented in the report of the Broadband Commission for Digital Development<sup>2</sup>;

*f)* that, as part of the work of ITU-T Study Group 3, on tariff and accounting principles including related telecommunication economic and policy issues, a rapporteur group was set up for the purpose of drafting a supplement to Recommendation ITU-T D.50 to facilitate the adoption of specific measures to reduce international Internet connection costs, especially for developing countries;

*g)* that ITU-T Study Group 3 adopted Recommendation ITU-T D.52, on establishing and connecting regional Internet exchange points (IXPs) to reduce costs of international Internet connectivity, which guides regional collaboration to establish central hubs or IXPs that enable local Internet traffic to be routed locally, saving international bandwidth and reducing the costs of international Internet connectivity,

## recognizing

*a)* the important role of ITU-D in coordinating the rational use of resources in the context of various projects aimed at securing more widespread deployment of technology-neutral telecommunication services in different countries of the world;

b) that broadband-enabled terrestrial, wireless access and satellite communications are a factor in eliminating the isolation of certain categories of population who live in parts of a country where coverage by conventional telecommunication networks remains inadequate and who lack resources;

http://www.broadbandcommission.org/Documents/publications/Report\_2.pdf)

<sup>&</sup>lt;sup>2</sup> "Broadband: A Platform for Progress". A report by the Broadband Commission for Digital Development, September 2010. (Available at

c) that studies suggest that broadband penetration is higher in countries with national broadband plans, policies or strategies than in countries without them;

d) that, pursuant to § 22 of the Geneva Declaration of Principles adopted by WSIS, a welldeveloped information and communication network infrastructure that is easily accessible and affordable and makes greater use of broadband can accelerate the social and economic progress of countries and the well-being of all individuals, communities and peoples;

*e)* the policy recommendations in the report of the Broadband Commission for Digital Development<sup>3</sup>, advocating broadband infrastructure development and the creation of a favourable environment for investment in telecommunication infrastructure by encouraging all Member States to:

- i) enable government services that will stimulate demand for and investment in telecommunications, especially in developing countries;
- ii) establish a universal service programme to support technology-neutral telecommunication infrastructure investment;
- iii) encourage efficient and innovative broadband practices for new market entrants and consumers;
- iv) ensure the availability and affordability of broadband-enabled services;

*f)* that development and implementation of a national broadband plan, policy or strategy is essential to broadband development and economic growth;

*g)* the work of the Internet Society (ISOC), the Internet Exchange Federation (IEF) and the regional IXP associations and other stakeholders to support the establishment of IXPs in developing countries in order to promote better connectivity,

<sup>&</sup>lt;sup>3</sup> "The State of Broadband 2012: Achieving Digital Inclusion for All". A report by the Broadband Commission for Digital Development, September 2012. (Available at <a href="http://www.broadbandcommission.org/Documents/publications/bb-annualreport2012.pdf">http://www.broadbandcommission.org/Documents/publications/bb-annualreport2012.pdf</a>).

#### resolves

1 to encourage greater coordination by BDT, and encourage the private sector to continue playing a significant role in supporting initiatives that foster access to and uptake of broadband connectivity by utilizing the most appropriate technology mix approach, with the aim of providing citizens greater access to ICT applications in support of national broadband strategies;

2 to promote availability, accessibility, reliability and affordability of broadband in developing countries by enabling Member States to develop national broadband policies and implementation strategies based on careful evaluation of supply and demand for broadband;

3 that BDT should support the implementation of regional and national projects for the use of terrestrial and satellite broadband communication systems to provide the population with services, including mobile services and applications such as e-government, e-health and e-education, as well as mobile money transfer and transactions, mobile payment, mobile banking and mobile marketing, on the basis of cooperation with interested Member States, relevant international organizations and the private sector;

4 that BDT, taking into account available experience and the strategy for bridging the digital divide and building the global information society, should formulate and implement a programme to develop proposals and recommendations on the most effective and efficient use of technology, including telecommunication services for broadband connectivity at regional and national level, acting in association with ITU connectivity initiatives as appropriate,

## *instructs the Director of the Telecommunication Development Bureau*

1 to seek partnerships and cooperation with parties directly involved in the provision of services to the population using the most practical telecommunication technology, facilities and networks, to ensure effective implementation of the relevant ITU programmes and activities in the development of broadband connectivity, providing reliable broadband access at affordable prices to both existing and new users in underserved and unserved communities;

2 to establish clear links between the broadband study Question(s), programmes and regional initiatives in order to maximize the use of human and financial resources and, most importantly, better meet the needs of developing countries;

3 to assist Member States in increasing connectivity and reducing costs by establishing national and regional IXPs to help connect landlocked developing countries (LLDCs);

4 to work in collaboration with ITU-T, ISOC, IEF and the regional IXP associations and other stakeholders to support developing countries, particularly LLDCs, in accessing effective advice and support on the establishment of IXPs;

5 to explore options to facilitate broadband connectivity, in close collaboration with the ITU Radiocommunication Sector (ITU-R) and ITU-T,

invites Member States

1 to create and promote widespread affordable access to broadband communication infrastructure through enabling legal and regulatory environments, including the availability of spectrum for new broadband wireless access technologies and licensing policies that are fair, transparent, stable, predictable and non-discriminatory;

2 to undertake all efforts to foster an enabling environment for the greater growth and development of technology-neutral broadband connectivity, in particular in developing countries;

3 to actively contribute to the broadband study Question(s);

4 to implement the results of the work performed on the study Question(s), including legal, regulatory and market reforms that create an enabling environment for broadband by promoting competition, private investment and public-private partnerships;

5 to implement policies and plans to encourage the availability of services, applications and content that stimulate demand for broadband;

6 to adopt measures that promote human capacity building, including digital literacy programmes and technical education, taking account of the need to promote broadband access for women and girls, persons with disabilities, people living in rural and remote areas and indigenous peoples.