

## RESOLUTION 23 (Rev. Buenos Aires, 2017)

### **Internet access and availability for developing countries<sup>1</sup> and charging principles for international Internet connection**

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

*recalling*

- a)* United Nations General Assembly (UNGA) Resolution 70/1, on transforming our world: the 2030 Agenda for Sustainable Development;
- b)* UNGA Resolution 70/125, on the outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society (WSIS);
- c)* Resolution 64 (Rev. Busan, 2014) of the Plenipotentiary Conference, on non-discriminatory access to modern telecommunication/information and communication technology (ICT) facilities, services and applications, including applied research and transfer of technology, and e-meetings, on mutually agreed terms, which invites Member States to refrain from taking any unilateral and/or discriminatory actions that could impede technically another Member State from having full access to the Internet, within the spirit of Article 1 of the ITU Constitution and the WSIS principles;
- d)* Resolution 101 (Rev. Busan, 2014) of the Plenipotentiary Conference, on Internet Protocol (IP)-based networks;
- e)* Resolution 139 (Rev. Busan, 2014) of the Plenipotentiary Conference, on use of telecommunications/ICTs to bridge the digital divide and build an inclusive information society;
- f)* Resolution 20 (Rev. Buenos Aires, 2017) of this conference, on non-discriminatory access to modern telecommunication/ICT facilities, services and related applications;

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

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

*h)* the provisions of § 50 of the Tunis Agenda for the Information Society, recognizing the particular concerns among developing countries that charges for international Internet connectivity should be better balanced to enhance access, and calling for the development of strategies for increasing affordable global connectivity, thereby facilitating improved and equitable access for all, by the means described in the said paragraph, especially items a), b), c), d), e), f) and g) thereof;

*i)* the four targets set by the Broadband Commission for Digital Development for making broadband universal and boosting affordability and uptake thereof, namely: making broadband policy universal; making broadband affordable; connecting homes to broadband; and getting people online;

*j)* Opinion 1 (Geneva, 2013) of the World Telecommunication/ICT Policy Forum (WTPF), which expresses the view that enabling the interconnection of international, national and regional networks through Internet exchange points (IXPs) may be an effective way to improve international Internet connectivity and to reduce the costs of such connectivity, with regulation only when necessary to promote competition, and invites Member States and Sector Members to work in a collaborative manner to do a number of things, including to promote public policies aimed at permitting the local, regional and international Internet network operators to interconnect through IXPs,

*noting*

*a)* that Recommendation ITU-T D.50, on international Internet connection, recommends that administrations take appropriate measures nationally to ensure that parties (including operating agencies authorized by Member States) involved in the provision of international Internet connections negotiate and agree to bilateral commercial arrangements, or other arrangements as agreed between administrations, enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission, and the possible application of network externalities, among others;

- b)* that Recommendation ITU-T D.52, on establishing and connecting regional Internet exchange points to reduce costs of international Internet connectivity, proposes measures to empower administrations and consumers to benefit from efficient cooperation so that they have the required information to take appropriate regulatory actions, and to identify measures for improving the way the market works and proposals for regulatory actions, which may include measures to lower costs;
- c)* that the rapid growth of the Internet and IP-based international services, in addition to the rise in high-speed mobile telecommunication access in all parts of the world and general availability of connected devices, has allowed users access to a wider range of services;
- d)* that international Internet connections remain subject to commercial agreements between the parties concerned, and Internet service provider (ISP) operators from developing countries have expressed concerns that such agreements have not achieved the required balance in regard to charges between developed and developing countries, especially affecting landlocked countries;
- e)* that the composition of costs for operators, whether regional or local, is, in part, significantly dependent on the type of connection (transit or peering) and the availability and cost of backhaul and long-haul infrastructure;
- f)* that the cost of transit is an obstacle for the availability and development of the Internet in developing countries;
- g)* that Opinion 1 (Geneva, 2013) considered that the establishment of IXPs is a priority to address connectivity issues, improve quality of service and reduce interconnection costs; and that IXPs and telecommunication traffic exchange points may play a relevant role in the deployment of Internet infrastructure and reaching the overall goals of improving quality, increasing the connectivity and resilience of networks, fostering competition and reducing the costs of interconnection;
- h)* that access to information and sharing and creation of knowledge contribute significantly to strengthening economic, social and cultural development, thus helping countries to reach the internationally agreed development goals and objectives, a process which can be enhanced by removing barriers to universal, ubiquitous, equitable and affordable access to information;

*i)* that continuing technical and economic development require ongoing studies in this area by the relevant ITU Sectors, in particular best practices for reducing the cost of international Internet connectivity (transit and peering);

*j)* that efficient networks and costs enable increased traffic volumes, economies of scale and a shift from transit connections to peering arrangements where appropriate;

*k)* that a rise in the costs of international connectivity will result in delayed access to and benefit from the Internet;

*l)* that the disparities in ICT development between countries remain substantial, ICT Development Index (IDI) values being on average twice as high in developed compared to developing countries;

*m)* that the case could arise in which the surcharges that a Member State, especially a transit country, applies to parties operating at the national level (including recognized operating agencies) are transferred via tariffs to the parties (including recognized operating agencies) that are operating abroad under the rules of another Member State,

*recognizing*

*a)* that commercial initiatives by service providers have the potential to deliver cost savings for Internet access, for example through the development of more local content and the optimization of Internet traffic routing patterns in a manner that provides for a greater proportion of traffic to be routed locally;

*b)* that the development of an information society requires not only the deployment of appropriate technical infrastructure but also measures to promote availability of local content, applications and services, in a range of languages and at affordable prices, while providing access to remotely available content regardless of location;

*c)* that skills development, education and capacity building play a critical role in promoting Internet access in developing countries and the development of an information society;

*d)* the need to bridge the digital divide at various levels (including the digital divide between regions, countries, parts of countries, and between urban and rural areas),

*taking into account*

a) that, as part of the work of Study Group 3 of the ITU Telecommunication Standardization Sector (ITU-T), 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;

b) that ITU-T Study Group 3 adopted Recommendation ITU-T D. 52, on establishing and connecting regional 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,

*invites Study Group 1 of the ITU Telecommunication Development Sector*

1 to take into account the content of this resolution when conducting related studies to promote international connections to the Internet, and to maintain close cooperation with ITU-T Study Group 3;

2 to provide guidance based on contributions of Member States and Sector Members on the support and best practices which are available from ITU-T, including Recommendations ITU-T D.50 and ITU-T D.52, the Internet Society, the regional IXP associations and other relevant stakeholders in regard to the establishment of IXPs;

3 to continue to study the national aspects related to this resolution under ITU-D Study Group 1 Question 3/1,

*resolves to invite Member States*

1 to support the work of ITU-T in monitoring the application of Recommendations ITU-T D.50 and ITU-T D.52, bearing in mind the importance of the issue of international Internet connection costs in the developing countries;

2 to make progress in the coordination of regional policies in order to reduce international Internet connection costs, by agreeing on specific measures that will lead to an improvement in conditions for developing countries, including the deployment of regional IXPs, and supporting the Recommendation ITU-T D.52 supervisory work;

3 to promote, taking into account the policies of each country, the establishment of regional, subregional and national IXPs that represent an alternative to reduce the costs of broadband, ensuring that they in turn enable a direct flow without the need for recourse to international circuits;

4 to create policy conditions for effective competition in the international Internet backbone network access market as well as in the domestic Internet access service market, as an important factor for lowering the cost of Internet access for users and service providers;

5 to implement the Tunis Agenda in this respect, particularly § 50 thereof;

6 to take appropriate measures at national level to promote the provision of international connections that comply with international regulations in force;

7 to promote agreements for taking appropriate measures at national level that enable parties (including recognized operating agencies) that provide international connections to minimize the surcharges for parties (including recognized operating agencies) residing abroad that receive the aforementioned international connections;

8 to continue to support initiatives to promote skills development, education and capacity building in ICTs, particularly in developing countries;

9 to support the action being taken by ITU-T Study Group 3 to facilitate the adoption of specific measures to reduce the cost of global Internet connectivity, particularly for developing countries,

*reaffirms*

its resolution in the quest to continue to ensure that everyone can benefit from the opportunities that ICTs can offer, by recalling that governments, as well as the private sector, civil society and the United Nations and other international organizations, should work together to: improve access to information and communication infrastructure and technologies as well as to information and knowledge; build capacity; increase confidence and security in the use of ICTs; create an enabling environment at all levels; develop and widen ICT applications; foster and respect cultural diversity; recognize the role of the media; address the ethical dimensions of the information society; and encourage international and regional cooperation,

*urges regulators*

- 1 to promote such measures as may be considered appropriate to foster an improvement in conditions for service providers, including small and medium-sized ISPs and incumbent network access service providers, with a focus on reducing connectivity costs as referred to in *noting c), d), f) and i)* above;
- 2 to exchange experiences and best practices regarding the establishment of regional, subregional and national IXPs and encourage partnerships to improve international connections,

*urges service providers*

to negotiate and agree to bilateral commercial arrangements enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as, *inter alia*, traffic flow, number of routes, geographical coverage and the cost of international transmission,

*instructs the Director of the Telecommunication Development Bureau*

- 1 to continue to coordinate activities that promote information sharing among regulators on the relationship between charging arrangements for international Internet connection and the affordability of international Internet infrastructure development in developing and least developed countries, through cooperation with ITU-T in this matter, by giving the necessary priority to the relevant study Questions in the work under the programme concerned;
- 2 to continue to undertake studies on the structure of international Internet connection costs for developing countries, with emphasis on the influence and effects of the connection mode (transit and peering), secure cross-border connectivity and the availability and cost of backhaul and long-haul physical infrastructure;
- 3 to coordinate actions to provide training and technical assistance in order to encourage and promote the creation and development of regional interconnection infrastructure as a platform for exchanging Internet traffic between developing countries;
- 4 to organize workshops and seminars dealing with the advantages of establishing regional and national IXPs and international connectivity, covering technical, regulatory and quality-related matters as well as their impact on operators and users.