

RESOLUTION 63 (Rev. Baku, 2025)

Promoting, facilitating and accelerating the transition to and deployment of Internet Protocol version 6 in developing countries

The World Telecommunication Development Conference (Baku, 2025),

recalling

- a)* Resolutions 101, 102 and 180 (Rev. Bucharest, 2022) of the Plenipotentiary Conference;
- b)* Resolution 63 (Rev. Kigali, 2022) of the World Telecommunication Development Conference (WTDC);
- c)* Resolution 64 (Rev. New Delhi, 2024) of the World Telecommunication Standardization Assembly;
- d)* Opinion 3 (Geneva, 2013) of the fifth World Telecommunication/Information and Communication Technology (ICT) Policy Forum (WTPF), on supporting capacity building for the deployment of Internet Protocol version 6 (IPv6);
- e)* Opinion 4 (Geneva, 2013) of WTPF, in support of IPv6 adoption and transition from Internet Protocol version 4 (IPv4);
- f)* the activities of the ITU Council Working Group on international Internet-related public policy issues (CWG-Internet);
- g)* the limited progress that has been made towards the adoption of IPv6 over the past few years;
- h)* that facilitating and accelerating IPv6 deployment has become an issue of the utmost importance today for Member States and Sector Members and stakeholders in the Internet community, because of IPv4 address exhaustion, especially in developing countries¹,

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

recognizing

- a) that Internet Protocol (IP) addresses are fundamental resources that are indispensable for the development of IP-based telecommunication/ICT networks, which are important for the digital economy;
- b) that the exhaustion of IPv4 addresses, calls for promoting, facilitating and accelerating the transition to and deployment of IPv6;
- c) that regional Internet registries (RIRs) are key players in the functioning of Internet networks;
- d) that IPv6 deployment is essential to satisfy the exponential demand for world connectivity, as it facilitates the large-scale deployment of emerging telecommunications/ICTs, driving rapid advancements in technology and business innovation;
- e) that IPv6 deployment is an important enabler of digital transformation;
- f) the importance of facilitating the deployment of IPv6, particularly in developing countries, through the provision of technical assistance from qualified experts, as well as the need to specify the process of requesting such assistance;
- g) that governments play a critical role in facilitating the transition to, and adoption and deployment of, IPv6; and that their efforts are essential in fostering an enabling environment through the formulation of appropriate policies, regulations and national strategies;
- h) that some countries have IPv4-to-IPv6 transition plans in place;
- i) that IPv6 deployment mitigates shortages in the numerical space of IPv4 addresses, enabling the allocation of publicly routable addresses on the Internet to each device;
- j) that delays in the transition to IPv6 may exacerbate the digital divide between developed and developing countries;
- k) that the promotion, facilitation and acceleration of IPv6 deployment is an important issue for Member States and Sector Members,

taking into account

- a) that many developing countries are currently experiencing challenges in the IPv6 deployment process, due to limited technical skills and human capacity in this area;
- b) that it is necessary to encourage the collaboration and cooperation of all relevant stakeholders in order to be able to carry out the deployment;
- c) the collaboration efforts between the Telecommunication Development Bureau and RIRs that aim to promote and accelerate IPv6 deployment,

resolves

to promote the exchange of experiences and information with all stakeholders on all aspects of IPv6 deployment, with the aim of unifying joint efforts and ensuring the contributions that enhance the Union's efforts to encourage the transition to and deployment of IPv6,

instructs the Director of the Telecommunication Development Bureau

- 1 to strengthen the close cooperation and coordination in the spirit of "One ITU" with the Director of the Telecommunication Standardization Bureau (TSB) in this regard, continue ongoing activities to facilitate transition to IPv6 among all members, considering the different specific needs of each Member State, towards the goal of a comprehensive deployment of IPv6, and provide the necessary information on training and education activities being undertaken by ITU and relevant organizations;
- 2 to continue cooperating with relevant international and regional organizations, including RIRs, on capacity building and the enhancement of technical skills for IPv6 deployment, and the possible use of IPv6 deployment statistics as appropriate means to measure progress, identify challenges and guide targeted interventions, in order to respond effectively to the needs of developing countries;

3 to submit an annual report to the Council on the progress made in this regard, and report to the next WTDC;

4 to assist Member States in developing and enhancing guidelines to enable, if necessary, adjustment of the organizational frameworks and national policies necessary for the deployment of IPv6, in collaboration with relevant international and regional organizations, including RIRs;

5 to maintain and update, in collaboration with the Director of TSB, the website which provides information to the entire ITU membership and interested parties on global activities related to IPv6,

invites Member States

1 to disseminate their practices, experience, knowledge and expertise to facilitate the transition to and deployment of IPv6;

2 to continue to stimulate and facilitate the transition to IPv6, towards the goal of a comprehensive deployment of IPv6 and particularly to encourage national initiatives and strengthen interaction with government and private-sector entities, RIRs, academia and civil-society organizations in order to exchange experiences, expertise and knowledge;

3 to encourage the training of technicians and administrators from governmental agencies and private-sector organizations in IPv6 deployment, with theory and labs that show how to deploy IPv6 on their networks;

4 to encourage manufacturers to supply fully-featured customer premises equipment that supports IPv6 in addition to IPv4;

5 to foster cooperation among Internet service providers, other service providers and relevant stakeholders to accelerate IPv6 deployment;

6 to encourage service providers to activate IPv6 in the telecommunication/ICT equipment and networks and offer IPv6 service to users;

7 to encourage governmental agencies and private-sector organizations to make their websites and services such as email available over IPv6,

invites Member States and Sector Members

- 1 to make use of the ITU website and other resources, which provide information about global activities related to IPv6;
- 2 to consider how public procurement frameworks and market mechanisms can promote IPv6 deployment;
- 3 to encourage all stakeholders including ITU membership to make their websites and services, such as e-mail, available over IPv6,

encourages Sector Members and stakeholders

- 1 to invest in IPv6-enabled infrastructure and make services broadly available over IPv6;
- 2 to support local IPv6 capacity-building and development programmes, including by partnering with ITU Academy training centres.