### RESOLUTION 85 (Rev. Kigali, 2022)

# Facilitating the Internet of Things and smart sustainable cities and communities for global development

The World Telecommunication Development Conference (Kigali, 2022),

recalling

- a) Resolution 197 (Rev. Dubai,2018) of the Plenipotentiary Conference, on facilitating the Internet of Things (IoT) and smart sustainable cities and communities (SSCCs);
- b) Resolution ITU-R 66-1 (Rev. Sharm el-Sheikh, 2019) of the Radiocommunication Assembly, on studies related to wireless systems and applications for the development of IoT;
- c) Resolution 98 (Rev. Geneva, 2022) of the World Telecommunication Standardization Assembly, on enhancing the standardization of IoT and smart cities and communities (SCCs) for global development;
- d) Resolution 50 (Rev. Kigali, 2022) of this conference, on optimal integration of information and communication technologies (ICTs);
- e) the goals of the ITU Telecommunication Development Sector (ITU-D), defined by Resolution 71 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the strategic plan of the Union for 2020-2023, particularly objective D.3, under which ITU-D is entrusted with the task of fostering an enabling policy and regulatory environment conducive to sustainable telecommunication/ICT development;
- f) Recommendation ITU-D 22 (Dubai, 2014) of the World Telecommunication Development Conference (WTDC), on bridging the standardization gap in association with regional groups of the study groups;
- g) Resolution 139 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on use of telecommunications/ICTs to bridge the digital divide and build an inclusive information society;
- h) Resolution 77 (Rev. Buenos Aires, 2017) of WTDC, on broadband technology and applications for greater growth and development of telecommunication/ICT services and broadband connectivity;

i) Resolution 200 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the Connect 2030 Agenda for global telecommunication/ICT, including broadband, for sustainable development,

noting

the work carried out by the United for Smart Sustainable Cities (U4SSC) initiative, launched by ITU together with the United Nations Economic Commission for Europe (UNECE) in May 2016,

#### considering

- a) that the development of IoT technologies will have a positive impact on both ICT and non-ICT sectors, including health, agriculture, transport and energy in view of the applications provided;
- b) that IoT deployment will contribute significantly to the successful implementation of the 2030 Agenda for Sustainable Development;
- c) that the development and deployment of IoT will benefit from cooperative efforts at the regional and global level;
- d) that the development and implementation of IoT and the creation of SSCCs will hinge upon the active participation of governments, industry and other relevant international and regional organizations and stakeholders;
- e) that special support should be given to developing countries<sup>1</sup>, as they may have limited resources to build an inclusive society,

#### recognizing

a) the important role of ITU and, in particular, that of ITU-D, in encouraging telecommunication/ICT development at the global level; and in particular the relevant work carried out by ITU-D study groups;

<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.

b) the role of the ITU Telecommunication Standardization Sector (ITU-T) and, in particular, that of ITU-T Study Group 20, in carrying out studies and standardization work associated with IoT and its applications, including SCCs, and coordinating with other organizations working in these two areas;
c) the role of the ITU Radiocommunication Sector (ITU-R) in conducting studies on the technical and operational aspects of radio networks and systems for IoT;
d) that U4SSC is a United Nations initiative coordinated by ITU, UNECE and the United Nations Human settlements Programme (UN-Habitat) to achieve Sustainable Development Goal (SDG) 11;
resolves
that ITU-D, in close collaboration with ITU-T and ITU-R, promote the adoption of IoT and the development of SSCCs, in order to maximize the benefits in advancing socio-economic development and contribute to achieving the SDGs and the Connect 2030 Agenda,
instructs the study groups of the ITU Telecommunication Development Sector, each according to its mandate
to collect national and regional experiences on the adoption of IoT and SSCCs and prepare guidelines for the implementation of IoT and SSCCs on the basis of ITU Recommendations and contributions from other organizations;
2 to carry out studies on the opportunities and challenges in the implementation of IoT and SSCCs;

to identify case studies on the application of IoT and SSCCs, focusing on factors affecting

3

the roll-out of IoT and SSCCs,

## instructs the Director of the Telecommunication Development Bureau

to support Member States, in particular the developing countries, in adopting IoT and SSCCs through providing relevant information, expertise, capacity building and accumulation of best practices aimed at facilitating the development of enabling environments and infrastructure, attracting investment and fostering digital innovation ecosystems;
to facilitate deployment and adoption of IoT and SSCCs, especially in developing countries, through projects under the United Nations development systems and in accordance with No. 118 (Article 21) of the ITU Constitution;
to work in collaboration with the ITU Sectors and in coordination with international and regional organizations and all the stakeholders in order to establish a favourable environment to enable the exchange of knowledge, expertise and best practices to support the deployment of IoT and SSCCs, including applications and services, by organizing workshops and forums at both regional and international levels,
instructs the Director of the Telecommunication Development Bureau, in collaboration with the Directors of the Telecommunication Standardization Bureau and the Radiocommunication Bureau
to prepare and/or update a report identifying the needs of developing countries related to IoT and SSCCs, based on the work conducted by ITU-T, ITU-R and ITU-D in connection with U4SCC;
to collate the work done within ITU relating to IoT and SSCCs, including studies conducted on technology and standards as well as recommendations on policy and regulation, so as to facilitate the development and adoption of IoT;
3 to facilitate discussions and exchange of best practices through the organization of workshops and training programmes on IoT and SSCCs;
to foster collaboration among ITU Sectors to discuss how the IoT ecosystem and SSCC technologies can further the achievement of the SDGs and the framework of the World Summit for the Information Society;

to provide developing countries with capacity-building opportunities in IoTs and SSCCs, invites Member States, Sector Members, Associates and Academia

- to participate actively in ITU studies relating to IoT and SSCCs, including applications and services, by providing all possible assistance;
- 2 to collaborate and exchange expertise and best practices in this area,

encourages Member States

- to adopt appropriate strategies, policies, plans and an enabling environment to facilitate and stimulate the development of IoT and SSCCs, including applications and services;
- 2 to cooperate and share knowledge, expertise and best practices on IoT and SSCCs.