

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY New Delhi, 15-24 October 2024

Resolution 78 – Information and communication technology applications and standards for improved access to e-health services



FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, and information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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RESOLUTION 78 (Rev. New Delhi, 2024)

Information and communication technology applications and standards for improved access to e-health services

(Dubai, 2012; Hammamet, 2016; Geneva, 2022; New Delhi, 2024)

The World Telecommunication Standardization Assembly (New Delhi, 2024),

recalling

- *a)* Resolution 183 (Rev. Busan, 2014) of the Plenipotentiary Conference, on telecommunication/information and communication technology (ICT) applications for e-health;
- b) Resolution 54 (Rev. Dubai, 2014) of the World Telecommunication Development Conference, on ICT applications;
- *c*) United Nations General Assembly Resolution 70/1, on transforming our world: the 2030 Agenda for Sustainable Development,

recognizing

- a) Sustainable Development Goal 3 (SDG 3): Ensure healthy lives and promote well-being for all at all ages;
- b) the World Health Organization (WHO) Global Strategy on Digital Health 2020-2025, on leveraging digital technologies to achieve universal health coverage and improve health outcomes;
- c) that innovative approaches, using advances in ICTs, can also greatly facilitate the implementation of SDG 3, in particular for rural, remote and underserved areas, and in developing countries¹;
- d) that ICTs are transforming the delivery of health care through low-cost e-health applications that provide health-care access for the ageing population and the poor;
- e) the importance of safeguarding patients' rights and privacy;
- f) that there are national legislative and regulatory discussions relating to e-health and e-health applications and that this is an area of rapid evolution;
- g) that new and emerging telecommunications/ICTs for metaverse and artificial intelligence (AI) applications have the potential to be applied in various industries and service areas, including e-health,

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

considering

- a) that the World Summit on the Information Society, which was held in two phases (Geneva, 2003 and Tunis, 2005), included e-health in the Geneva Plan of Action as one of the important ICT applications, and stated the following: "Promote collaborative efforts of governments, planners, health professionals, and other agencies along with the participation of international organizations for creating a reliable, timely, high-quality and affordable health care and health information systems and for promoting continuous medical training, education, and research through the use of ICTs, while respecting and protecting citizens' right to privacy. ... Encourage the adoption of ICTs to improve and extend health care and health information systems to remote and underserved areas and vulnerable populations, recognizing women's roles as health providers in their families and communities":
- b) that WHO approved in May 2005 Resolution WHA58.28 on e-health, stressing: "... that e-health is the cost-effective and secure use of information and communication technologies in support of health and health-related fields, including health-care services, health surveillance, health literature, and health education, knowledge and research";
- c) that WHO and ITU have a key role in strengthening coordination between interested parties in all technical areas for the standardization of e-health applications and uses of e-health protocols;
- d) the pressing need for the provision of safe, prompt, efficient and effective health care through the use of telecommunications/ICTs in e-health;
- *e*) that e-health applications and the ICT applications supporting them are already extensive, but far from fully optimized and integrated, in particular for rural, remote and underserved areas;
- f) the importance of maintaining momentum so that the potential advantages of telecommunication/ICT technologies in the health-care sector are supported by appropriate and secure regulatory, legal and policy frameworks in both the telecommunication and the health sectors,

noting

- a) ongoing work and studies in Study Group 2 of the ITU Telecommunication Development Sector (ITU-D) under Question 2/2, on telecommunications/ICTs for e-health;
- b) ongoing work and studies in Study Group 21 of the ITU Telecommunication Standardization Sector (ITU-T) under its Question on multimedia framework for digital health applications;
- c) the work completed and deliverables developed by the Focus Group on AI for health (FG-AI4H), a partnership between ITU and WHO to establish a standardized assessment framework for the evaluation of AI-based methods for health, diagnosis, triage or treatment decisions;

- d) the launch of the United Nations Global Initiative on AI for Health (GI-AI4H) by ITU, WHO and the World Intellectual Property Organization (WIPO) on 5 July 2023 during the AI for Good Global Summit, transitioning from the FG-AI4H;
- *e*) that ICT standards relating to health care have to be adapted as needed to suit the conditions in each Member State, and this will require strengthening of capacity building and increased support;
- f) ongoing work in ITU-D to reduce the digital divide in the area of e-health;
- g) ongoing work and studies in ITU-T Study Group 20, related to e-health;
- h) ongoing work in relevant standards-development organizations (SDOs), including the International Organization for Standardization Technical Committee on health informatics (ISO TC 215), in the area of e-health:
- *i*) that the development and pilot applications of health-care use cases and solutions are progressing in the metaverse environment,

recognizing further

- a) the importance of telecommunication/ICT standardization in e-health services to promote interoperability to make health care more inclusive and to realize the full potential of ICTs in strengthening health-care systems and applications;
- b) that new and emerging telecommunications/ICTs could strengthen e-health capabilities by providing more efficient and effective health-care delivery;
- c) that the integration of e-health applications and services with digital identity platforms may provide easier access to e-health services without compromising patients' rights and privacy;
- d) that, for health-care providers, system interoperability between information systems is critical and fundamental, in particular in developing countries, for delivering quality health care and reducing its costs;
- *e*) that telecommunications/ICTs play significant roles in providing quality e-health services to rural, remote and underserved areas, and in addressing challenges in public health emergencies,

resolves to instruct the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau and the Director of the Radiocommunication Bureau

- 1 to consider with priority the enhancement of telecommunication/ICT initiatives in e-health and to coordinate their related standardization activities;
- 2 to continue and further develop ITU activities on telecommunication/ICT applications for e-health in order to contribute to the wider global efforts concerning e-health;

- 3 to work collaboratively with WHO, WIPO, academia and other relevant organizations on activities related to e-health in general and to this resolution in particular;
- 4 to organize seminars and workshops on e-health for developing countries and gauge the needs of developing countries, which are the countries with the greatest need for e-health applications;
- 5 to encourage the standardization work based on the deliverables of FG-AI4H,

instructs Study Groups 20 and 21 of the ITU Telecommunication Standardization Sector, each according to its mandate, in collaboration with the relevant study groups, in particular Study Groups 11 and 17, of the ITU Telecommunication Standardization Sector

- 1 to identify and document examples of best practice for e-health in the field of telecommunications/ICTs, for dissemination among ITU Member States and Sector Members;
- to coordinate activities and studies relating to e-health among the relevant study groups, focus groups and other relevant groups in ITU-T, the ITU Radiocommunication Sector (ITU-R) and ITU-D, in order to foster awareness of telecommunication/ICT standards pertaining to e-health;
- for ensuring the broad deployment of e-health services in diverse operating conditions, to study communication protocols relating to e-health, in particular among heterogeneous networks;
- 4 to develop ITU-T Recommendations and non-normative documents that enable secure, trusted and resilient telecommunication/ICT applications and services for e-health;
- 5 to study standards-based solutions that provide secure, interoperable and immersive e-health services in environments based on AI and metaverse:
- 6 within the current mandate of the ITU-T study groups, to give priority to the study of security standards (e.g. for communications, services, network aspects and service scenarios for databases and record handling, identification, authentication, integrity, and for the protection of patients' rights and privacy) relating to e-health, taking into account *recognizing e*) of this resolution;
- 7 to cooperate with the relevant SDOs that are actively in support of this resolution, with a view to minimizing the duplication of effort and ensuring an efficient use of resources,

instructs the Director of the Telecommunication Standardization Bureau to collaboratively work with the Director of the Telecommunication Development Bureau

to support awareness-raising campaigns, developed by the Telecommunication Development Bureau upon request, that sensitize populations to the use of e-health applications, such as telemedicine in developing countries, within available resources,

invites Member States

to consider, as appropriate, the development and/or enhancement of frameworks, which may include legislation, regulations, standards, codes of practice and guidelines, to enhance the development of telecommunication/ICT services, products and terminals for e-health and e-health applications, in particular to address public health emergencies,

encourages Member States, Sector Members, Associates and Academia

- to participate actively in ITU-T studies on e-health, including effective solutions for addressing public health emergencies, and to support e-health services for ageing populations, persons with disabilities and persons with specific needs, through the submission of contributions and by other appropriate means;
- 2 to promote the development of sustainable, environmentally friendly and safe e-health technologies and solutions;
- 3 to promote the implementation of FG-AI4H and GI-AI4H e-health deliverables;
- 4 to actively engage with the GI-AI4H global community, which fosters knowledge-sharing and facilitates accessible and impactful solutions in the e-health field.