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|  | World Telecommunication Standardization Assembly (WTSA-24) New Delhi, 15–24 October 2024 | |  |
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| PLENARY MEETING | | Addendum 10 to Document 40-E | |
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| ITU Member States, members of the Regional Commonwealth in the field of Communications (RCC) | | | |
| Draft New Resolution [RCC-MV] (NEW DELHI, 2024) | | | |
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| **Abstract:** | Thanks to the rapid growth of information and communication technology (ICT) and computing technologies, the development of fundamental technologies underpinning metaverses and their domains of application continues to make active progress and spread rapidly around the world.  Notably, the principal standards development organizations around the world have recognized the need for and importance of metaverse standardization and are actively engaged in and supporting standards development work. Against this backdrop, ITU‑T stands out, especially with the creation of the ITU Focus Group on metaverse (FG-MV) in December 2022 and the enormous interest shown by participants from different spheres and domains, not limited to telecommunications and ICTs.  In the time since it was created, FG-MV has achieved very good results and taken the lead internationally in the standardization work being done on the metaverse among SDOs concerned. To date, over 40 output documents have been prepared. It may be noted that the success of FG-MV has highlighted the global leading role of ITU‑T in metaverse standardization work, which should be continued and further strengthened in the next ITU‑T study period (2025-2028). RCC therefore proposes that WTSA‑24 adopt a new resolution on metaverse standardization in ITU‑T. | |
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ADD RCC/40A10/1

DRAFT NEW RESOLUTION [RCC-MV] (New Delhi, 2024)

Work in the ITU Telecommunication Standardization   
Sector on metaverse standardization

(New Delhi, 2024)

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

considering

*a)* that the metaverse, along with advances in various digital technologies, is changing people's way of life, having a profound impact on society as a whole and opening up new levels of experience beyond the boundaries of the virtual and real worlds;

*b)* that the metaverse is driving innovation in a wide range of fields, including manufacturing, education, health-care, real estate, entertainment, and many others, creating new business models and markets;

*c)* that the widespread use of the metaverse breaks down barriers between the virtual and the real world, offering immersive experiences where reality and virtuality merge, driving change in many spheres, from everyday life to the professional work environment;

*d)* that metaverses are expected to play a crucial role in creating and realizing the future Internet that will revolutionize lives, society and industries in their economic, social and cultural aspects,

noting

*a)* that the metaverse is emerging as a key driver of social and economic change beyond mere technological advancements;

*b)* that the metaverse itself is not a new technology but a combination of different technologies and could be realized through the convergence of various fundamental technologies and standards developed by many of the standards development organizations (SDOs) concerned;

*c)* that concerns related to inconsistent understanding and non-standardized applications are hampering the development of the metaverse, while metaverse standardization is necessary to promote the healthy development of the metaverse industry;

*d)* that in the early stages of the formation of practical solutions for a digital world we will see the creation of multiple separate and/or different virtual environments that do not necessarily interact with each other, i.e. an array of metaverses, also referred to as a multiverse. Both the metaverse and the multiverse represent new ways of interacting with the digital environment. The key difference between them is the level of interconnection between these environments;

*e)* that the quality of the metaverse experience will depend on the type of hardware and Internet connection the user has access to;

*f)* that, together with technologies such as the Internet of Things (IoT) and digital twins, the metaverse has the potential to revolutionize the way cities and communities operate, interact and manage their resources, making them more sustainable, carbon-neutral, efficient and inclusive;

*g)* that protecting metaverse users from fraud, ransomware and other cyberthreats will require the development of comprehensive security requirements, guidelines, and regulations;

*h)* that technical and protocol compatibility and standardization will be critical to ensure seamless cross-platform interoperability, foster innovation and competition, and drive global adoption;

*i)* that leading SDOs around the world have recognized the necessity and importance of metaverse standardization and are actively involved in advancing standards development;

*j)* that, among the metaverse-related standardization events promoted by numerous SDOs, the most significant results have been achieved by the ITU Telecommunication Standardization Sector (ITU‑T) in the pre-standardization work done by the Focus Group on metaverse (FG-MV);

*k)* that the ITU Forum, UN Virtual Worlds Day, and UN Think-a-thon should continue as promotion vehicles to strengthen the work done by ITU‑T on the metaverse;

*l)* that ITU‑T also needs to further promote and strengthen the standardization of future telecommunications and ICT applications and services related to the metaverse;

*m)* that the global role of ITU‑T as a leader in metaverse standardization work should be continued and further strengthened in the next ITU‑T study period following the completion of the work of FG-MV,

recognizing

*a)* that the ITU metaverse forum provided a dynamic space to explore and discuss the breakthrough work of FG-MV, and was held five times during the lifetime of FG-MV from March 2023 through June 2024;

*b)* that the first UN Virtual World Day was a groundbreaking event in June 2024, organized by ITU on the basis of visionary ideas proposed by FG-MV, with the participation of 16 UN entities, including the World Bank, the United Nations Economic Commission for Europe (UNECE), the International Training Centre (ITCILO), the UN Futures Lab, the World Meteorological Organization (WMO), the United Nations International Computing Centre (UNICC), the World Intellectual Property Organization (WIPO), the United Nations Children's Fund (UNICEF), United Nations University (UNU), the United Nations Department of Political and Peacebuilding Affairs (DPPA), the UN Innovation Network (UNIN), UN Guatemala, the Food and Agriculture Organization of the United Nations (FAO), the United Nations Economic and Social Commission for Western Asia (UNESCWA) and the United Nations Framework Convention on Climate Change (UNFCCC) and its interagency initiative Resilience Frontiers;

*c)* the activities carried out by FG-MV, and the over 40 outstanding outputs developed by relevant FG-MV working groups for metaverse-related pre-standardization;

*d)* that ITU‑T study groups have already started receiving contributions for the study of metaverse-related topics,

resolves

1 to promote and strengthen standardization work in ITU‑T study groups related to technologies, systems, applications and services for the metaverse, taking into account current market demands so as increase the value of ITU‑T outputs such as recommendations, technical reports and guidelines, etc.;

2 to work jointly and cooperatively with other standardization organizations and entities, in particular, to increase the familiarity of the ITU‑T membership with current trends in metaverse standardization;

3 to establish a joint coordination activity on the metaverse (JCA-MV) within the appropriate ITU‑T study group or the Telecommunication Standardization Advisory Group to coordinate the relevant standardization work of each ITU‑T study group, and to collaborate with relevant SDOs and relevant entities outside ITU‑T;

4 to develop a standardization roadmap within JCA-MV related to metaverse standardization work, in order to lead the global initiative and identify standardization gaps with relevant SDOs;

5 to hold ITU seminars on the progress and results achieved by the ITU‑T study groups responsible for metaverse standardization ahead of the next world telecommunication standardization assembly;

6 to encourage cooperation with other relevant organizations, including industry associations, consortia and forums, on metaverse systems, applications and services,

instructs the Director of the Telecommunication Standardization Bureau

1 to collaborate with the Directors of the Radiocommunication Bureau and the Telecommunication Development Bureau in activities related to the metaverse with a view to providing standardization solutions that could be applied to the relevant applications and services of other Sectors;

2 in collaboration with other relevant SDOs to conduct capacity-building workshops for the metaverse standardization done by ITU‑T, including open-source communities working on metaverse-based implementations in various fields of telecommunications and ICTs;

3 to continue to organize the ITU metaverse forum as a platform to explore and discuss the breakthrough metaverse standardization work being undertaken by ITU‑T study groups;

4 to continue organizing UN Virtual World Day to achieve the UN Sustainable Development Goals using the metaverse in collaboration with UN organizations;

5 to continue organizing UN Think-a-thon events to gather creative ideas from young people and foster their participation;

6 to encourage Member States, Sector Members, Associates and Academia to share and disseminate best practices in the use of metaverse-based systems, applications and services in various fields of telecommunications and ICTs,

instructs the study groups of the ITU Telecommunication Development Sector

1 to facilitate rapid follow-up of standardization work on the basis of the results developed and provided during the FG-MV pre-standardization work and the contributions received from the ITU-T membership reflecting their areas of interest in the development of metaverses;

2 to coordinate activities and studies relating to standardization work related to the metaverse among the relevant study groups, focus groups and other relevant groups in ITU‑T, the ITU Radiocommunication Sector (ITU‑R) and the ITU Telecommunication Development Sector (ITU‑D);

3 to study and to continue to expand and advance metaverse-related standardization work to add value to the deliverables of each study group in accordance with its mandate,

invites Member States, Sector Members, Associates and Academia

1 to collaborate and share metaverse-related experiences with other ITU members;

2 to share their experiences with regard to the implementation of this resolution through relevant ITU events/tools, including workshops;

3 to make voluntary contributions to and actively participate in metaverse-related standardization work in ITU‑T and to support relevant ITU‑R and ITU‑D activities.

**Reasons:** The development of fundamental technologies underpinning metaverses and their domains of application continues to make active progress and spread rapidly around the world. Considering the successful work done within ITU by FG-MV, it is proposed to consolidate the leading role of ITU‑T in metaverse standardization and adopt a new WTSA resolution that will extend and strengthen the study of metaverse-related issues in the next ITU‑T study period (2025-2028).