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|  | World Telecommunication Standardization Assembly (WTSA-24)New Delhi, 15–24 October 2024 |  |
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| PLENARY MEETING | Addendum 41 toDocument 37-E |
|  | 22 September 2024 |
|  | Original: English |
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| Asia-Pacific Telecommunity Member Administrations |
| draft NEW RESOLUTION [APT-MV] - PROMOTING AND STRENGTHENING STANDARDIZATION ACTIVITIES FOR METAVERSE |
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| **Abstract:** | This document contains the proposal for addition of new WTSA Resolution - “Promoting and strengthening standardization activities for metaverse”. |
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Introduction

Continuous investment and rapid research and development in metaverse are being made in most industries and service domains around the world, including not only big technology companies but also small and medium-sized enterprises. In particular, as it is combined with new technologies such as generative AI and immersive technologies, etc., metaverse is being applied and expanded globally to various industries and services in an environment where the virtual and real worlds coexist and are interconnected.

In particular, major standards development organizations (SDOs) around the world have recognized the need for and importance of metaverse standardization and are actively participating in and promoting standard development work. Among these SDO activities, the most notable standardization activities are being carried out by ITU-T.

For rapid progress in metaverse standardization work, the ITU Focus Group on metaverse (FG-MV) was established under TSAG unanimously in December 2022. Since the establishment of the Focus Group, FG-MV has achieved very successful results and has been leading the international standardization work on metaverse among related SDOs. FG-MV has developed total 52 deliverables through active standardization work during its lifetime of about one and a half years until the end of June 2024 and they will be used in relevant ITU-T study groups for subsequent standardization work on metaverse.

ITU-T's global leadership role in metaverse standardization work achieved through successful FG‑MV activities needs to be continued and further strengthened in the future. Also, it needs to further promote the collaboration on metaverse related activities among UN organizations and relevant SDOs.

In this perspective, WTSA is requested to adopt a new Resolution for promoting and strengthening metaverse standardization activities in ITU-T, and to foster further collaboration with other related SDOs and UN organizations.

Proposal

APT Member Administrations propose to add a new WTSA Resolution on “Promoting and strengthening standardization activities for metaverse”.

ADD APT/37A41/1

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

Promoting and strengthening standardization activities for metaverse

(New Delhi, 2024)

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

considering

*a)* that metaverse, coupled with advances in various technologies, is revolutionizing the way people live and this shift is having a profound impact on society as a whole, enabling new levels of experience beyond the boundaries of the virtual and real worlds;

*b)* that metaverse is spurring innovation in a wide range of areas, including industry, education, healthcare, real estate, entertainment, and more areas, creating new business models and markets;

*c)* that the spread of metaverse is breaking down barriers between the virtual and real worlds, offering immersive experiences which merge virtuality and reality, and this is causing changes across many areas from daily life to professional work environments;

*d)* that metaverse is expected to play the most essential role in constructing and realizing the future of telecommunications/ICTs that revolutionize peoples’ lives, society, and industries economically, socially, and culturally;

*e)* that the challenges of inconsistent understanding, non-standardized applications, and prominent ethical issues hinder the development of metaverse and metaverse standardization are essential to foster the healthy development of metaverse industry;

*f)* Resolution 209 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, Encouraging the participation of small and medium enterprises in the work of the Union,

noting

*a)* that metaverse is becoming a key driver of social and economic changes beyond just technological advancement;

*b)* that metaverse itself is not recognized by a new technology but rather a combination of various technologies, and it can be implemented by converging various elemental technologies and standards from many relevant standards development organizations (SDOs);

*c)* that major SDOs around the world have recognized the need and importance of metaverse standardization and are actively participating in and promoting standard development work;

*d)* that among metaverse-related standardization activities promoted by many SDOs, the ITU Telecommunication Standardization Sector (ITU-T) has produced the most remarkable achievements on the pre-standardization activities by ITU Focus Group on metaverse (FG-MV);

*e)* that ITU Forum on metaverse has played a significant role as a remarkable platform for advancing the shared vision of an open, interoperable, secure, inclusive, accessible and sustainable metaverse with many stakeholders around the world;

*f)* that lots of stakeholders in metaverse are small and medium enterprises (SMEs),

recognizing

*a)* the activities carried out by the ITU FG-MV and its remarkable 52 deliverables, outcomes of pre-standardization work;

*b)* studies carried out by ITU-T study groups (SGs) on metaverse-related topics;

*c)* that the ITU Forum on metaverse provides a dynamic space for exploring and discussing the groundbreaking work of the ITU FG-MV, which was held five times during the FG‑MV lifetime, from December 2022 to June 2024;

*d)* the first ‘UN Virtual Worlds Day’, a pioneering event held in June 2024, organized by the ITU based on conceptual ideas proposed by FG-MV in July 2023 with 17 UN entities, including World Bank, United Nations Economic Commission for Europe (UNECE), International Training Centre of the International Labor Organization (ITCILO), United Nations Futures Lab Network, World Meteorological Organization (WMO), United Nations International Computing Centre (UNICC), World Intellectual Property Organization (WIPO), United Nations Children’s Fund (UNICEF), UN Tourism, United Nations University (UNU), United Nations Department of Political and Peacebuilding Affairs (UNDPPA), United Nations Innovation Network (UNIN), United Nations Guatemala, Food and Agriculture Organization of the United Nations (FAO), United Nations Economic and Social Commission for Western Asia (UNESCWA), and United Nations Framework Convention on Climate Change (UNFCCC) and its interagency initiative Resilience Frontiers, and the United Nations Research Institute for Social Development (UNRISD);

*e)* the first “UN Think-a-thon” event that has been officially launched at the opening plenary of the fourth ITU Forum on metaverse held in March 2024 by the Director of the Telecommunication Standardization Bureau (TSB), and it involves the participation of youth and universities on the topic of “Virtual Worlds Revolutionizing Smart Sustainable Cities & Communities”, coordinated by the International Telecommunication Union (ITU), UNICC, FAO and International Atomic Energy Agency (IAEA),

bearing in mind

*a)* that metaverse is a key enabler for enhancing the value of future telecommunication/ICT applications and services not only in ITU-T but also outside ITU-T;

*b)* that the applications and services based on metaverse are expected to expand more rapidly across all industry and service domains;

*c)* that it is essential to provide standards at the system and service level to implement the interoperable metaverse;

*d)* that it is necessary to standardization work to ensure that the various technical components of metaverse can be effectively integrated and interoperated;

*e)* that many ITU-T SGs has already initiated relevant standardization work for supporting metaverse applications and services based on the deliverables developed by FG-MV, and it needs to be further promoted;

*f)* that the ITU-T also needs to further promote and strengthen the standardization of future telecommunication/ICT applications and services related to metaverse;

*g)* that ITU-T's global leadership in metaverse standardization work achieved through FG‑MV’s leading activities needs to be continued and further strengthened;

*h)* that ITU Forum on metaverse, UN Virtual Worlds Day, and UN Think-a-thon event need to be continued as promotional tools for strengthening metaverse activities of ITU-T,

resolves

1 to promote and strengthen the ITU-T SG’s standardization work related to metaverse, considering market requirements, to provide enhanced value of ITU-T deliverables such as Recommendations, technical reports, and guidelines;

2 to work collaboratively and cooperatively with other SDOs and relevant entities, in particular, for ensuring that ongoing work in the field of metaverse is taken into account in order to avoid duplicated work and ensure interoperability;

3 to establish a Joint Coordination Activity on metaverse (JCA-MV) under the appropriate ITU-T SG or Telecommunication Standardization Advisory Group (TSAG) to coordinate the relevant standardization work of each ITU-T SG and collaborate with related SDOs and relevant parties outside ITU-T;

4 to maintain a standardization roadmap in JCA-MV related to metaverse to lead and coordinate the global initiative and identify the standardization gap with relevant SDOs;

5 that ITU workshops be held to inform and share the progress in the work and the results achieved by the ITU-T SGs in charge of metaverse standardization before the next World Telecommunication Standardization Assembly (WTSA);

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

instructs the Director of the Telecommunication Standardization Bureau

1 to work collaboratively with the Directors of ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Development Sector (ITU-D) on metaverse-related activities to develop deliverables that could be applied to the relevant applications and services of other sectors;

2 to conduct a ITU Forum on metaverse for capacity building on metaverse-related standardization work of ITU-T, with other relevant SDOs, open-source communities working on metaverse-driven implementations for telecommunication/ICT areas, and metaverse related stakeholders including SMEs;

3 to continue close collaboration with relevant UN organizations to have collaborative activities such as the “UN Virtual Worlds Day” event to achieve UN sustainable development goals using the metaverse in cooperation with interested UN entities, and the “UN Think-a-thon” event to gather creative ideas on metaverse from young people and encourage their participation;

4 to encourage Member States, Sector Members, Associates and Academia to share and disseminate best practices on metaverse, including systems, applications and services from various fields of telecommunications/ICTs;

5 to support the ITU-UNICC Global initiative on “Virtual Worlds – Discovering the Citiverse” which is a global platform that aims at fostering open, interoperable and innovative virtual worlds that can be used safely and with confidence by people, businesses and public services;

6 to make appropriate ways, such as inviting SMEs to ITU-T events on metaverse including ITU forums and promoting a special membership fee to encourage participation of SMEs in metaverse standardization work;

7 to report to WTSA on the progress in implementing this Resolution,

instructs study groups of the ITU Telecommunication Standardization Sector

1 to promote rapid subsequent standardization work based on deliverables developed by the pre-standardization work of FG-MV;

2 to study and continue to expand and accelerate metaverse related standardization work to enhance the value of the deliverables developed by each SG according to its mandate;

3 to coordinate activities and studies on metaverse-related standardization work among the relevant SGs, FGs and other relevant groups in ITU-T, ITU-R, and ITU-D,

invites Member States, Sector Members, Associates, and Academia

1 to assist ITU‑T in implementing this Resolution;

2 to make voluntary contributions and active participations to metaverse-related standardization work and relevant activities of the ITU-T, ITU-R, and ITU-D;

3 to encourage non-ITU members, such as vertical industries and non-telecommunications/ICTs related organizations, to participate in metaverse standardization work and relevant activities of the ITU-T, ITU-R and ITU-D.