**ATU-ITU Organizes Joint Webinar: Shaping Africa’s Digital Future: Governance in the Metaverse and Virtual Worlds**

The African Telecommunications Union (ATU), in collaboration with the International Telecommunication Union (ITU), successfully concluded a webinar themed, "Shaping Africa’s Digital Future: Governance in the Metaverse and Virtual Worlds.”

As part of ITU’s series of forums on metaverse and virtual worlds, launched in 2023, the open forum brought together policymakers, ICT and legal experts, technologists and industry leaders to explore strategies for addressing policy and regulatory challenges affecting the adoption of these emerging technologies like the metaverse and virtual worlds in Africa. As Africa's digital landscape evolves rapidly, enabling African countries to adopt advanced technologies is becoming increasingly critical. The Metaverse and virtual worlds offer users interactive three-dimensional spaces, presenting immense opportunities across key sectors. However, limited or underdeveloped policy and regulatory frameworks in many African countries remain a key barrier. The lack of clear governance structures poses risks around data security, privacy, economic inclusion, intellectual property rights, and digital sovereignty. As such, it is critical to develop regulatory pathways that ensure the metaverse fosters inclusive growth and aligns with Africa’s socio-economic priorities.

With the global metaverse and virtual worlds market projected to reach USD 5 trillion by 2030, these technologies have the potential to drive significant digital and economic transformation across Africa and the world. This underscores the need for collaborative policy and regulatory efforts.

In their remarks, Meriem Slimani, ATU Development Coordinator (representing ATU Secretary General John Omo), and Seizo Onoe, Director of the ITU Telecommunication Standardization Bureau, emphasized the importance of collaboration and partnerships in developing governance frameworks that foster data security, privacy, inclusivity and human rights.

During the first session, moderated by Isaac Boateng, ATU Standardization Coordinator, panelists provided valuable insights on the transformative potential of virtual worlds and the metaverse technologies.

The speakers included James Olorundare, Principal Manager, Spectrum Administration Department at the Nigerian Communications Commission & Vice-Chair of WG2 of ITU Focus Group on Metaverse; Pilar Orero, Professor at Universitat Autònoma de Barcelona, Spain; and Christina Yan Zhang, CEO of The Metaverse Institute. Their discussions delved into the opportunities for innovation, economic growth, and social impact, while addressing the challenges of governance, infrastructure, and inclusion in shaping a sustainable digital future.

The ATU is working closely with ITU to foster the development of frameworks for inclusive and secure adoption of metaverse and virtual worlds. ATU actively supports ITU initiatives such as the UN Citiverse Challenge, the UN Virtual Worlds Day and the Global Initiative on Virtual Worlds and AI.

These platforms provide opportunities for policy development, knowledge sharing, and raising awareness of virtual world technologies. Additionally, ATU facilitates African participation in the ITU Focus Group on Metaverse by coordinating expertise and data sharing. Notable frameworks that have been developed include:

The first UN report on Citizen-centred future smart cities: Technical Report ITU FGMV-35 “Building a people-centred CitiVerse” (approved)

UN Definition on Metaverse can be found here. Definition of metaverse (itu.int)

UN definition on CitiVerse can be found here Technical Report ITU FGMV-34 “Definitions of CitiVerse” (approved)

Metaverse for Future Tourism Technical Report ITU FGMV-36 “The future of travel in the metaverse: landscape and use cases” (approved)

Metaverse for all: Part 1 Guidance on how to build a metaverse for all - Part I: Legal Framework (itu.int)

Innovative efforts in metaverse and AI development are already yielding significant results globally. Examples include: *World Labs,* a USD 1 billion spatial intelligence AI startup founded by Dr. Fei-Fei Li; and *Cosmos World Foundation Model Platform*, developed by Nvidia, which predicts and generates physics-aware virtual environments and is poised to revolutionize the USD 50 trillion manufacturing and logistics sectors. Initiatives like the *Africa-EU Space Partnership Programme*, which has attracted USD 105 million in investment, also aim to enhance Africa’s space technology capabilities.

The *Africa Metaverse Project*, supported by End Games, is another ambitious initiative leveraging the metaverse to reshape Africa's historical, contemporary, and future narratives. This project enables users to engage with Africa’s heritage and culture beyond physical and temporal boundaries. ATU actively encourages member states and associate members to support such initiatives.

Despite its potential, experts caution that metaverse and real-world technologies could have significant environmental and socioeconomic impacts. For instance, AI-related global water consumption is projected to reach between 4.2 and 6.6 billion cubic meters by 2027. The good news is that, as the EU's ASCEND study has established, launching data centres in orbit could help reduce environmental footprints and enhance efficiency.

AI-driven job displacement could also lead to increased brain drain, as many skilled African youths seek opportunities overseas due to high unemployment and poverty rates. However, Africa's youthful population, expected to account for half the global population by 2100, represents a valuable workforce and asset.

The forum concluded by proposing pathways for the ATU and ITU to work together and develop a Framework for Metaverse and Virtual Worlds Governance and Adoption in Africa.

With the support of member states and associate members, such collaborative initiatives with ITU and other regional and global ICT organizations will create a digitally future-ready Africa where people can access digital connectivity and interact with metaverse and virtual worlds technologies securely and satisfactorily without any limitations.