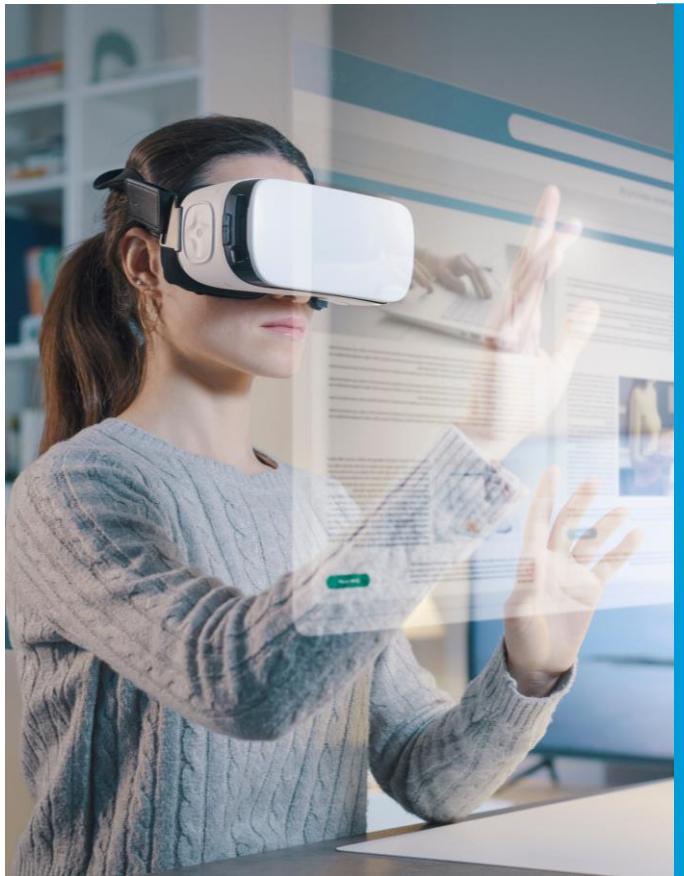
Harnessing the metaverse and virtual worlds for global impact

How the ITU is advancing the metaverse

Cristina Bueti
Focal point for metaverse and
smart sustainable cities

April 2024

Imagine a world where reality is redefined, where possibilities are infinite and connections boundless



The metaverse is…

“

An integrative ecosystem of virtual worlds offering immersive experiences to users, that modify pre-existing and create new value from economic, environmental, social and cultural perspectives.

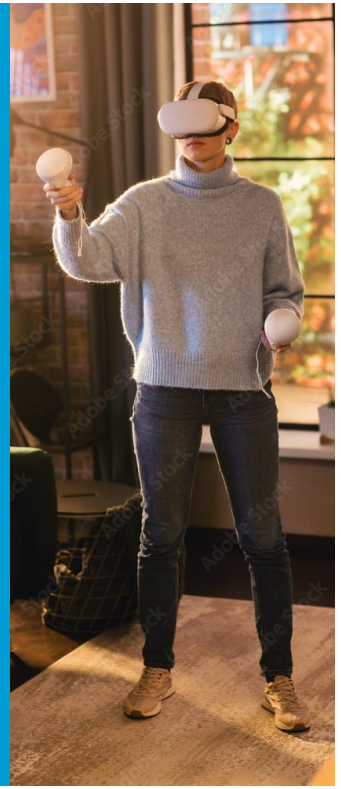
ITU Focus Group on metaverse

The metaverse - no longer a game but a game changer

$5T in value will be generated by the metaverse by 2030.

61% of people look forward to interacting with family and friends in the metaverse

The opportunities are endless for the metaverse



Source: McKinsey

Positively transforming the real world, one virtual step at a time

Sustainable Digital Transformation

The metaverse can make physical activities virtual, thereby minimizing travel and resource consumption.

Smarter Insights

Cities use metaverse technologies like AR, digital twins, and blockchain from tourism to resource management

Developing Skills

The metaverse facilitates skill acquisition through virtualization, training simulations, and interactive experiences.

Fostering Collaboration

The metaverse can enable real-world impact by connecting stakeholders across the world

Unleashing data insights beyond reality

As people are spending more and more time living virtually, municipal authorities around the world are harnessing the metaverse and virtual worlds for smarter data-driven insights.

The Republic of Korea aims to create its metaverse ecosystem. Metaverse Seoul: virtual municipal world

Japan is preparing for the spread of metaverse in cities and communities. Shibuya Ward Certified Virtual Shibuya

Dubai aims to be one of the world's top 10 metaverse economies as well as a global hub for the metaverse

How the ITU is supporting the metaverse

Research

ITU-T Focus Group on metaverse

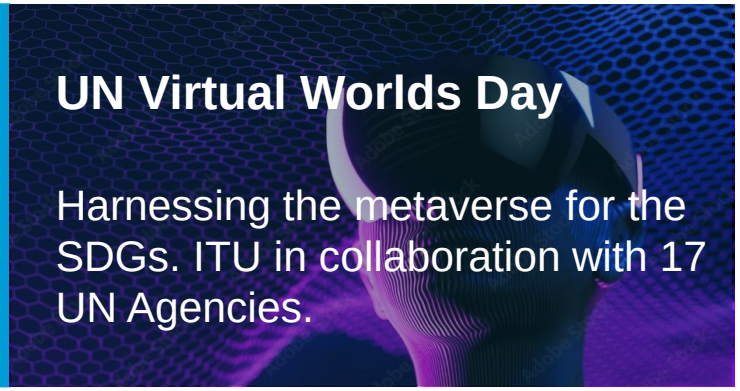
Global platform to accelerate standardization with 500+ experts, 30+ deliverables

Innovation

UN Metaverse Think-a-thon

Revolutionizing virtual worlds. ITU in collaboration with UNIC, FAO and IAEA

Collaboration



UN Virtual Worlds Day

Harnessing the metaverse for the SDGs. ITU in collaboration with 17 UN Agencies.

Awareness

Digital Transformation Dialogues

Disseminating knowledge and raising awareness on key topics.

ITU-T Focus Group on metaverse

The ITU Focus Group on metaverse was established under TSAG on 16 December 2022. It provides a platform for the necessary pre-standardization work.

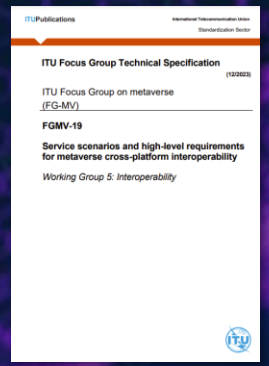
ITU-T FG-MV Meetings

500+ Experts involved

Riyadh (ARB Region)
Shanghai (AP Region)
Geneva (EUR Region)
Queretaro (AMS Region)

ITU-T FG-MV Deliverables

30+ Deliverables


ITUPublications

ITU Focus Group Technical Specification

(12/2023)

ITU Focus Group on metaverse (FG-MV)

FGMV-19

Service scenarios and high-level requirements for metaverse cross-platform interoperability

Working Group 5: Interoperability

ITUPublications

ITU Focus Group Technical Report

(10/2023)

ITU Focus Group on metaverse (FG-MV)

FGMV-07

Policy and regulation opportunities and challenges in the metaverse

Working Group 7: Economic, regulatory & competition aspects

UN Virtual Worlds Day

Harnessing the metaverse to advance the Sustainable Development Goals (SDGs)

14 June 2024 – Geneva, Switzerland

Exhibition

Metaverse exhibition

Think-a-Thon

Think-a-Thon to advance the SDGs

5th ITU Forum on Integrating virtual and physical worlds in the metaverse with digital twin

ITU Focus Group on metaverse

Global platform to accelerate standardization

ITU · THE WORLD BANK IBRD • IDA | WORLD BANK GROUP · UNECE · ITC International Training Centre · United Nations Futures Lab Network · WORLD METEOROLOGICAL ORGANIZATION · UNICC · WIPO WORLD INTELLECTUAL PROPERTY ORGANIZATION · unicef · UN Tourism · UNU · DPPA · UN INNOVATION NETWORK · NACIONES UNIDAS GUATEMALA · Food and Agriculture Organization of the United Nations · ESCWA · Shared Prosperity Dignified Life · United Nations Framework Convention on Climate Change · Resilience Frontiers · UNRISD UNITED NATIONS RESEARCH INSTITUTE FOR SOCIAL DEVELOPMENT

Think-a-Thon as part of the UN Virtual Worlds Day

Co-organized by

ITU · UNICC · FAO · IAEA International Atomic Energy Agency

Topic:
Virtual Worlds Revolutionizing Smart Sustainable Cities

Subtopics:

- Virtual Education Platforms
- Disaster Preparedness and Response
- Conflict Resolution Simulations

Timeline:

- Launched on 5 March 2024
- Award Ceremony on 14 June 2024

Supporting all aspects of smart sustainable cities and the metaverse

ITU-T Study Group 20

Sets International Standards for IoT and Smart Sustainable Cities

How can the metaverse support the SDGs?

In the metaverse, pixels become pathways to progress, avatars advocate for change, and virtual worlds unite us toward a smart sustainable future.

Thank you!

Email

digitaltransformation@itu.int

Website

www.itu.int/cities

Driving innovation for virtual worlds and cities

Global Initiative on Industrial metaverse

Together with: To be launched on 14 June 2024 during the first UN Virtual Worlds Day

Global Initiative on Citiverse and Virtual Worlds

Together with: Digital Dubai

To be launched on 14 June 2024 during the first UN Virtual Worlds Day