

Digital Transformation Dialogues

Webinar

Shaping Africa's Digital Future: Governance in the Metaverse and Virtual Worlds

25 February 2025

11:00 – 13:00 CET

[www.itu.int/cities/
digitaltransformationdialogues](http://www.itu.int/cities/digitaltransformationdialogues)

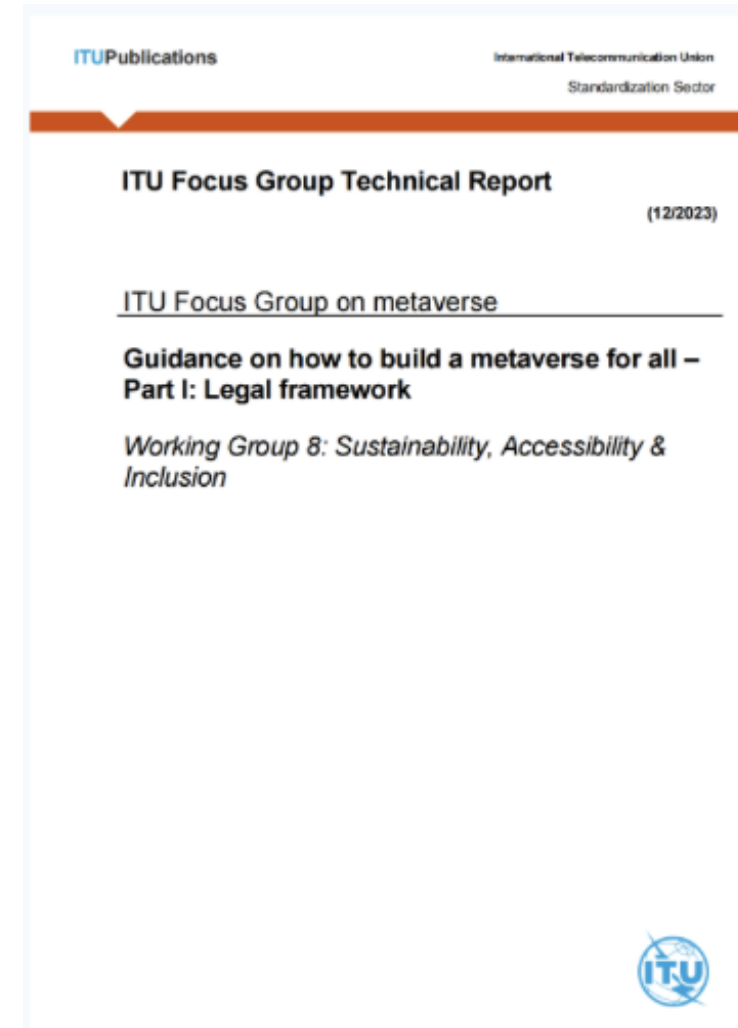


Native Inclusive and Diverse Policies for Virtual Worlds in Africa

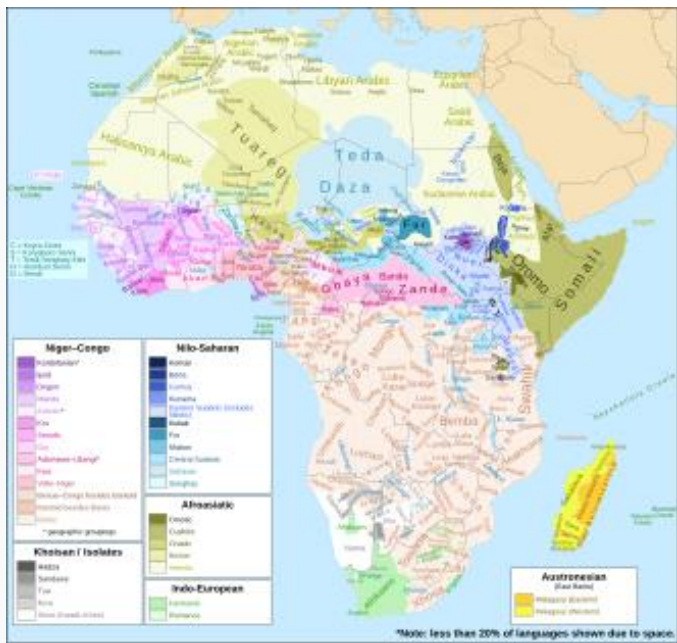
Pilar Orero

Universitat Autònoma de Barcelona, Spain

Profiling



Languages and language modalities



ITU Publications

International Telecommunication Union
Standardization Sector

ITU Focus Group Technical Specification

(03/2024)

ITU Focus Group on metaverse

(FG-MV)

FGMV-26

Requirements for communication between

human-avatar languages in the metaverse

Working Group 8: Sustainability, Accessibility &

Inclusion

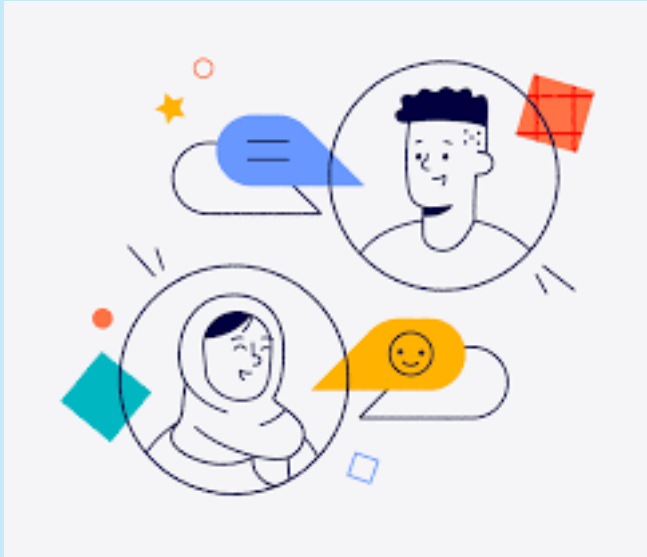


With Epic Games, we launched the African Metaverse Academy. In 2022 and trained more than 400 young people from 10 African countries. The result is the creation of the Africa Metaverse Museum: <https://www.youtube.com/watch?v=7OIWjFl1bjk> and <https://www.youtube.com/watch?v=5wGY2Q3qv64> which will be followed by the first African universe on Fortnite: <https://www.youtube.com/watch?v=FpovKpbs6Xo> The African heroes will be in the Africa Metaverse Museum, and will be able to converse in several languages with AI. Testing has begun successfully - <https://www.youtube.com/watch?v=0K7YjQLsLic>

*3DNetinfo the training center - <https://www.3dnetinfo.com>
DigiArt LivingLab (<https://www.facebook.com/DALL2015>)*



Profiling interaction



- Oral → written
- Written → Oral
- Tactile/haptic → Written/oral
- Sign → Written/oral

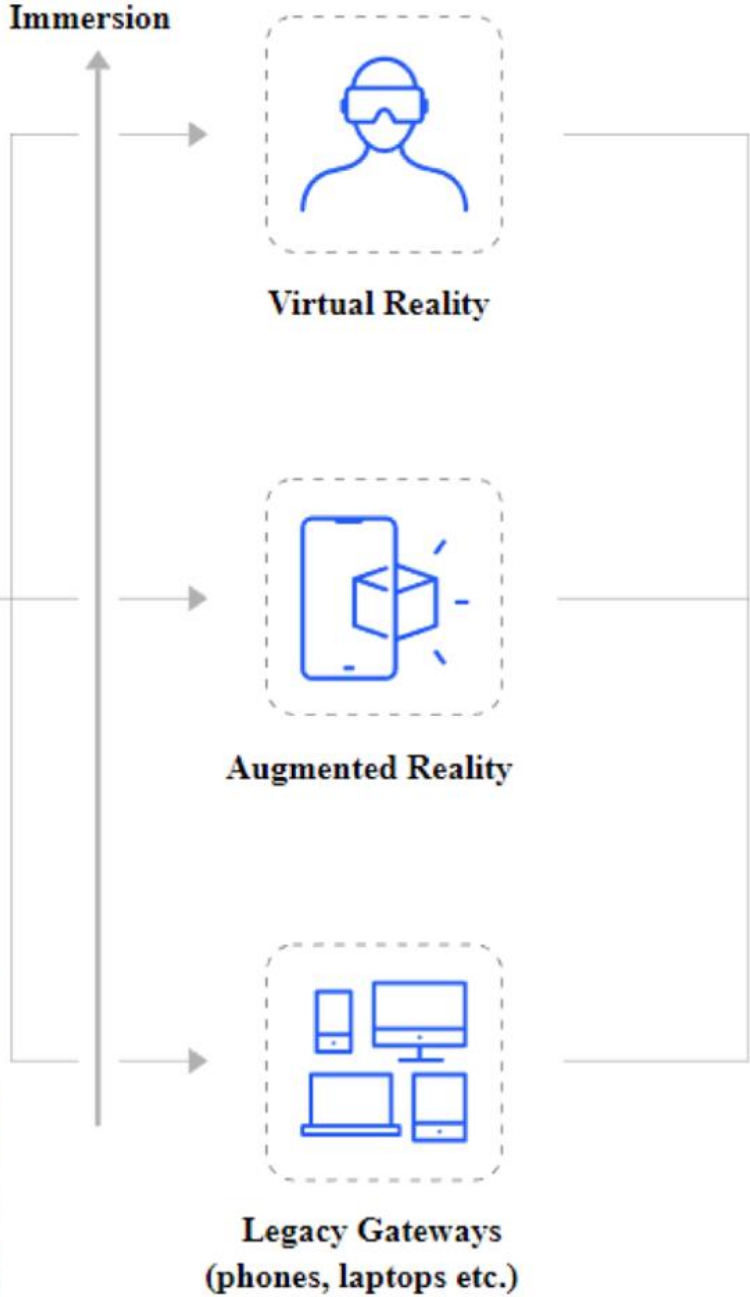
ITU-T Focus Group Technical Specification
(10/2023)

ITU-T Focus Group on metaverse

**Requirements of accessible products and
services in the metaverse: Part I – System
design perspective**

*Working Group 8: Sustainability, Accessibility &
Inclusion*





Item no.	Equation
1.	$dmax := \delta_l \cdot \max_{j=1,2,\dots,J} \{d_{j,p,r}\}$
2.	$avgd := \frac{\sum_{j=1}^J d_{j,p,r}}{J}$
3.	$sd_{p,r} := \frac{1}{\sqrt{J}} \cdot \sum_{j=1}^J \sqrt{(avgd - d_{j,p,r})^2}$
4.	$w_{i,p,r}^{\{s,a\}} := \left(1 - \frac{sd_{p,r} \cdot avgd}{\max_{\substack{p2:=1,2,\dots,P \\ r2:=1,2,\dots,R}} (sd_{p2,r2} \cdot avgd)} \right)$
5.	$\overline{\chi A}_{i,p,r,m}^{\{s,a\}} := \frac{(m-1) \cdot dmax}{nRules-1}$
6.	$\overline{\sigma A}_{i,p,r}^{\{s,a\}} := \frac{\overline{\chi A}_{i,p,r,m}^{\{s,a\}} - \overline{\chi A}_{i,p,r}^{\{s,a\}}}{\sqrt{(m-1) \cdot \frac{1}{J}}}$

FGMV WG 8

1. Guidelines to assess inclusion and accessibility in metaverse standard development
2. Requirements of accessible products and services in the metaverse: Part I – System design perspective
3. Requirements of accessible products and services in the metaverse: Part 2 – User perspective
4. Design criteria and technical requirements for sustainable metaverse ecosystems
5. Accessibility requirements for metaverse services supporting IoT
6. Accessibility in a sustainable metaverse
7. Guidelines and requirements on interpreting in the metaverse
8. Guidance on how to build a metaverse for all – Part I: Legal Framework
9. Guidance on how to build a metaverse for all – Part 2: Results from questionnaire
10. Requirements for communication between human-avatar languages in the metaverse



Native

Diverse

Inclusive

Impacts

Personal, Social, Political

Financial

Thank you

Pilar.Orero@uab.cat

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES
AND COMMUNITIES



16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



17 PARTNERSHIPS
FOR THE GOALS

