|  |  |  |
| --- | --- | --- |
|  | | Standardization Sector |
| **ITU Focus Group Technical Specification** | |
| **(12/2023)** | |
|  | ITU Focus Group on metaverse | |
|  | **Definition of metaverse**  *Working Group 1: General* | |

|  |  |
| --- | --- |
| **ITUPublications** | **International Telecommunication Union** |

Logo, icon

Description automatically generated

Technical Specification ITU FGMV-20

Definition of metaverse

Summary

This Technical Specification provides the definition of the term "metaverse".

It leverages a detailed analysis of 150 existing definitions of metaverse that was undertaken for the development of the ITU Technical Report on "Metaverse: an analysis of definitions", which was approved at the third meeting of the ITU Focus Group on metaverse (FG-MV), held on 3-5 October 2023 in Geneva, Switzerland.

Keywords

Definition, metaverse, term.

Note

This is an informative ITU-T publication. Mandatory provisions, such as those found in ITU-T Recommendations, are outside the scope of this publication. This publication should only be referenced bibliographically in ITU-T Recommendations.

Change Log

This document contains Version 1.0 of the ITU Technical Specification on "*Definition of metaverse*" approved at the 4th meeting of the ITU Focus Group on metaverse (ITU FG-MV), held on 4-7 December 2023 in Geneva, Switzerland.

Acknowledgments

This Technical Specification was researched and written by Leonidas Anthopoulos (University of Thessaly, Greece), Radia Funna (Build n Blaze), Xiaomi An (Remin University of China) and Christina Yan Zhang (The Metaverse Institute) as a contribution to the ITU Focus Group on metaverse (FG-MV). The development of this document was coordinated by Leonidas Anthopoulos (University of Thessaly, Greece), as FG-MV Working Group 1 Chair, and by Xiaomi An (Remin University of China) as Chair of Task Group on terminology & definitions.

Additional information and materials relating to this Specification can be found at: <https://www.itu.int/go/fgmv>. If you would like to provide any additional information, please contact Cristina Bueti at [tsbfgmv@itu.int](mailto:tsbfgmv@itu.int).

|  |  |  |
| --- | --- | --- |
| **Editor & WG1 Chair**: | Leonidas Anthopoulos University of Thessaly Greece | **Email**: [lanthopo@uth.gr](mailto:lanthopo@uth.gr) ​ |
| **Editor & TG Chair:** | Xiaomi An Renmin University of China | **Email**: [anxiaomi@ruc.edu.cn](mailto:anxiaomi@ruc.edu.cn) |
| **Editor:** | Radia Funna Build n Blaze | **Email:** [rfunna@buildnblaze.com](mailto:rfunna@buildnblaze.com) ​ |
| **Editor**: | Christina Yan Zhang  The Metaverse Institute | **Email**: [christina@metaverse-institute.org](mailto:christina@metaverse-institute.org) |

© ITU 2024

Some rights reserved.This publication is available under the Creative Commons Attribution-Non Commercial-Share Alike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; [https://creativecommons.org/licenses/by-nc-sa/3.0/igo](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcreativecommons.org%2Flicenses%2Fby-nc-sa%2F3.0%2Figo&data=05%7C02%7CChristelle.Gachet%40itu.int%7C0fe5406e5055456a0b5a08dc7bce06f3%7C23e464d704e64b87913c24bd89219fd3%7C0%7C0%7C638521372006151524%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=HtXL1m3ekhVn82amVYFS35Ip8LaaB74uwbUtbEu0fKM%3D&reserved=0)).

For any uses of this publication that are not included in this licence, please seek permission from ITU by contacting [TSBmail@itu.int](mailto:TSBmail@itu.int).

**Table of Contents**

Page

1 Scope 1

2 References 1

3 Definitions 1

3.1 Terms defined elsewhere 1

3.2 Terms defined in this Technical Specification 1

4 Abbreviations and acronyms 1

5 Conventions 1

Bibliography 2

Technical Specification ITU FGMV-20

Definition of metaverse

# 1 Scope

This Technical Specification provides the definition of the term "metaverse".

# 2 References

None.

# 3 Definitions

## 3.1 Terms defined elsewhere

This Technical Specification uses the following term defined elsewhere:

**3.1.1 virtual world, virtual environment [**b-ISO/IEC 18039]: Spatial organization of multiple virtual objects, potentially including global behaviour.

## 3.2 Terms defined in this Technical Specification

This Technical Specification defines the following term:

**3.2.1 metaverse**: 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.

NOTE – A metaverse can be virtual, augmented, representative of, or associated with the physical world.

# 4 Abbreviations and acronyms

None.

# 5 Conventions

None.

Bibliography

[ITU FGMV-02] ITU Focus Group on Metaverse. Technical Report FGMV-02 (2023), *Metaverse: an analysis of definitions*.  
<http://handle.itu.int/11.1002/pub/822e1df0-en>

[ITU FGMV-21] ITU Focus Group on Metaverse. Technical Report FGMV-21 (2023), *Principles for building concepts and definitions related to metaverse*. <http://handle.itu.int/11.1002/pub/822f50fe-en>

[b-ISO/IEC 18039] ISO/IEC 18039:2019, *Information technology — Computer graphics, image processing and environmental data representation — Mixed and augmented reality (MAR) reference model*.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_