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Part 1: Concepts, characteristics and technology

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Partie 1: Concepts, caractéristiques et technologie

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Introduction

The metaverse is a conceptual extension of the internet envisioned as a persistent, universal, immersive, interactive and socially engaging virtual environment that can be facilitated by virtual reality (VR) and augmented reality (AR)[1]. The term metaverse was first introduced in the 1992 science fiction novel Snow Crash[2] where people access a virtual urban environment from VR goggles or public terminals.

The metaverse comprises a set of digitally-constructed virtual worlds that can be accessed via various modalities. The metaverse is intended to be a decentralized 3D virtual environment, in contrast to the current predominantly 2D internet. Similar to the internet, it is always operational even though some parts can be non-operational for maintenance reasons.

VR provides immersion into the metaverse while AR enables metaverse elements to be layered onto the real world. In addition to these immersive technologies, access can also be achieved using conventional devices like keyboards, mice and screens to provide a less immersive and interactive experience.

Numerous organizations are actively engaged in shaping and establishing the metaverse. This document is intended to provide a general overview of the metaverse and define the foundational terms and concepts. It is intended to be the first of a series on aspects of the metaverse. Future parts are planned for framework and architecture, use cases, reference model, information model and governance.

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Information technology — Metaverse —

Part 1:
Concepts, characteristics and technology

1 Scope

This document provides an overview and defines fundamental terms and concepts for the metaverse.

This document specifies the following functionalities:

a) overview of the metaverse with description of its characteristics and technologies;

b) fundamental concepts;

c) terminology and definitions;

d) participation and oversight.

2 Normative references

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