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Blockchain and distributed ledger technologies — Vocabulary

AS ISO 22739:2020

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Preface

This Standard was prepared by the Standards Australia Committee IT-041, Blockchain and Distributed Ledger Technologies.

The objective of this document is to define basic terms relating to blockchain and distributed ledger technologies to clarify the meaning of terms and concepts used in other document within the domain of ISO/TC 307 standards.

This document applies to all types of organizations (e.g. commercial enterprises, government agencies, not-for-profit organizations). The target audience includes but is not limited to academics, solution architects, customers, users, tool developers, regulators, auditors and standards development organizations.

This document is identical with, and has been reproduced from, ISO 22739:2020, *Blockchain and distributed ledger technologies — Vocabulary*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 307, *Blockchain and distributed ledger technologies*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document defines basic terms relating to blockchain and distributed ledger technologies to clarify the meaning of terms and concepts used in other document within the domain of ISO/TC 307 standards.

Clear, consistent and coherent standards require clear, consistent and coherent terminology. This document follows rules and guidelines set by ISO/TC 37, *Language and terminology,* for terminology standards.

This document applies to all types of organizations (e.g., commercial enterprises, government agencies, not-for-profit organizations). The target audience includes but is not limited to academics, solution architects, customers, users, tool developers, regulators, auditors and standards development organizations.

NOTES

Australian Standard®

Blockchain and distributed ledger technologies — Vocabulary

1 Scope

This document provides fundamental terminology for blockchain and distributed ledger technologies.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
asset
anything that has value to a stakeholder

[SOURCE: ISO/TS 19299:2015, 3.3, modified — Note 1 to entry has been removed.]

3.2
block
structured data comprising *block data* (3.3) and a *block header* (3.4)

3.3
block data
structured data comprising zero or more *transaction records* (3.79) or references to *transaction records* (3.79)

3.4
block header
structured data that includes a *cryptographic link* (3.16) to the previous *block* (3.2) unless there is no previous *block* (3.2)

Note 1 to entry: A block header can also contain a *timestamp* (3.75), a *nonce* (3.51), and other *DLT platform* (3.29) specific data, including a *hash value* (3.39) of corresponding *transaction records* (3.79).

3.5
block reward
reward given to *miners* (3.48) or *validators* (3.83) after a *block* (3.2) is *confirmed* (3.8) in a *blockchain system* (3.7)

Note 1 to entry: A reward can be in the form of a *token* (3.76) or *cryptocurrency* (3.14).

3.6
blockchain
distributed ledger (3.22) with *confirmed blocks* (3.9) organized in an append-only, sequential chain using *cryptographic links* (3.16)

Note 1 to entry: Blockchains are designed to be tamper resistant and to create final, definitive and *immutable* (3.40) *ledger records* (3.44).