

TECHNICAL REPORT

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Blockchain and distributed ledger technologies – Overview of existing DLT systems for identity management





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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.

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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*, in collaboration with Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *Information security, cybersecurity and privacy protection*.

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

The target audience of this document includes but is not limited to academics, solution architects, customers, users, developers, regulators, auditors and standards development organizations.

Blockchain and distributed ledger technologies – Overview of existing DLT systems for identity management

1 Scope

This document provides an overview of existing DLT systems for identity management, i.e. the mechanisms by which one or more entities can create, receive, modify, use and revoke a set of identity attributes.

This document covers the following topics:

- Managing identity for individuals, organizations, things (IoT & objects), functions and processes and other entities including within and across DLT systems.
- Description of the actors and their interactions and common interfaces.
- Architectures.
- Existing relevant standards and frameworks.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22739, *Blockchain and distributed ledger technologies — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22739 apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Abbreviated terms

AML	Anti-Money Laundering
BCOS	Be Credible, Open & Secure
BSP	Biometric Service Providers
CCG	Credentials Community Group
CHAPI	Credential Handler API
CMS	Confidential Messaging Service
DID	Decentralized Identifier