

## Blockchain and Distributed Ledgers

“Blockchain is a distributed and shared digital ledger that records all transactions that take place in a business network. The business network is typically represented as public or private peer-to-peer network depending on the business context and the ledger is decentralized in the sense that the blockchain database structure is replicated across many participants/nodes in the network, each of whom collaborate in its maintenance.”

(Source: [White Paper Blockchain and Distributed Ledgers – June 2018](#))




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### Technical Committees working on Blockchain and Distributed Ledgers

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#### - International level -

##### **ISO/TC 307** – [Blockchain and Distributed Ledgers](#)

- Scope:  
Standardisation of blockchain technologies and distributed ledger technologies.
- 11 standards published
- 5 ongoing projects
- 6 working groups, 2 joint working groups
- 8 national delegates registered for Luxembourg

#### - European level -

##### **CEN-CLC JTC 19** – [Blockchain and Distribute Ledgers](#)

- Scope:  
To prepare, develop and/or adopt standards for Blockchain and Distributed Ledger technologies covering the following aspects:
  - Organizational frameworks and methodologies, including IT management systems;
  - Processes and products evaluation schemes;
  - Blockchain and distributed ledger guidelines.

The JTC will focus on European requirements, especially in the legislative and policy context, and will proceed with the identification and possible adoption of standards or other relevant documentation already available or under development in other SDOs or regulatory bodies, which could support the EU Digital Single Market and/or EC Directives/Regulations. Special attention will be paid to ISO/TC 307 standards. If required these standards will be augmented by CEN TRs and TSs.

- 1 standard published
- 1 ongoing project
- 1 working group
- 3 national delegates for Luxembourg

## Standards related to Blockchain and Distributed Ledgers

The following table lists under development projects related to Blockchain and Distributed Ledgers.

### ISO/CD TR 6277

Blockchain and distributed ledger technologies – Data flow model for blockchain and DLT use cases

**Abstract:**

The document discusses the data taxonomy and data flows related to blockchain and DLT systems and the key data elements of these systems. It clarifies as well the following key issues:

- What is the coverage of flows of blockchain and DLT data?
- What representative data flows are there in blockchain and DLT systems?
- What dimensions can blockchain and DLT data be categorized from, and what categories respectively?
- How could the data flow of blockchain and DLT be described? Are there any useful methodology?
- What are the key considerations for data flow and data categorization in blockchain and DLT?

### ISO/AWI 20435

Decentralized Identity standards for the identification of subjects and objects

**Abstract:**

This document establishes a DLT agnostic architecture for physical assets using NFTs which includes:

- An algorithmic data method for generating decentralized identifiers (DIDs) from physical assets with immutable unique identifiers, such as serial numbers.
- Processes for utilizing off-chain trust anchors, to establish proof of real-world human and machine generated events and information, that tie a real-world asset to its digital representation.
- A DID method scheme to enable DID Registry interoperability, so the Digital Representation can be stored, resolved, or transferred to any compliant DID Registry.

This document is applicable to...

- Serialize physical assets with unique immutable identifiers, such as serial numbers.
- The systems, machines, organizations, and natural persons that process them.

### ISO/DIS 22739

Blockchain and distributed ledger technologies — Vocabulary

**Abstract:**

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

### ISO/AWI TS 23516

Blockchain and Distributed Ledger Technology – Interoperability Framework

**Abstract:**

This document specifies a framework, recommendations and requirements for interoperability between DLT systems, between DLT and entities outside the DLT system, the relationship and interactions between these and cross-cutting aspects.

### ISO/WD TR 23642

Blockchain and Distributed Ledger Technologies – Overview of smart contract security good practice and issues

**Abstract:**

This document provides an overview of the current issues and best practice for smart contract security.

