

# Overview of ISO/TC 307/JWG 4

ITU Workshop on DLT security, identity management and privacy

*Session 1*

Geneva, Switzerland, 20 February 2023

# ISO/TC 307 - Blockchain and Distributed Ledger Technologies



<https://www.iso.org/committee/6266604.html>

*Technologies des chaînes de blocs et technologies de registre distribué*

*Aim of TC 307 is to meet the growing need for **standardization** in **blockchain and DLT** area by providing internationally agreed ways of working to improve **security, privacy, scalability** and **interoperability** and so encourage the technology's widespread **adoption** through greater innovation, enhanced **governance** and **sustainable** development*

## About

Secretariat: **SA**

Committee Manager: **Ms Amy Howie**

Chairperson (until end 2023): Mr Craig Dunn

ISO Technical Programme Manager [TPM]: **Ms Monja Korter**

ISO Editorial Manager [EM]: **Ms Christelle Gansonre**

Creation date: 2016



This committee contributes with 15 standards to the following Sustainable Development Goals:



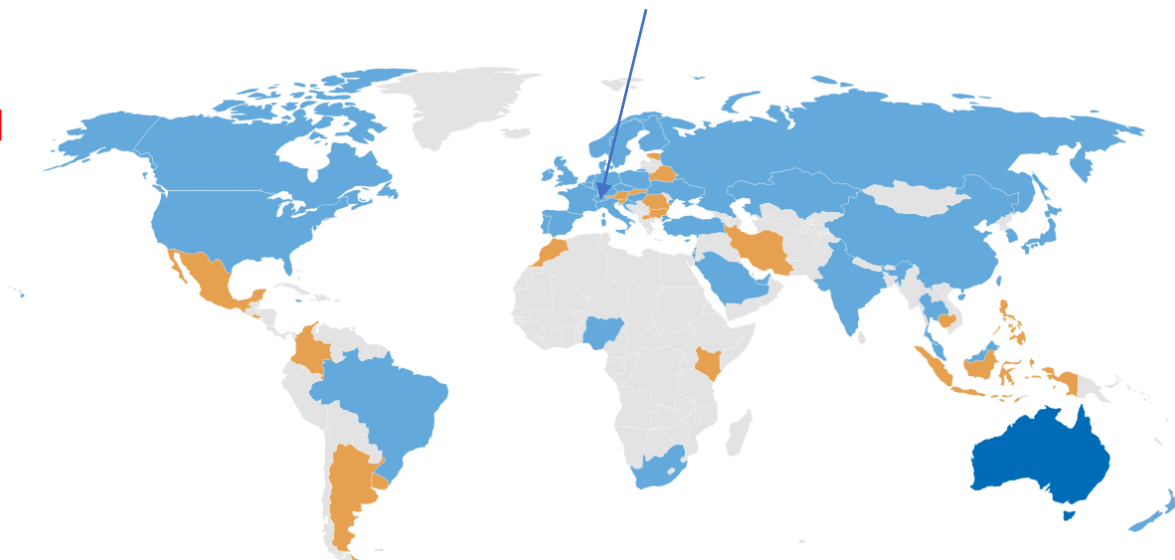
*First meeting in April 2017 (Sydney) with the creation of the first working items*

# ISO/TC 307



ISO/TC 307/AG 1 ⓘ	SBP Review Advisory Group
ISO/TC 307/AG 2 ⓘ	Liaison Advisory Group
ISO/TC 307/AG 3 ⓘ	Digital currencies
ISO/TC 307/AHG 2 ⓘ	Guidance for Auditing DLT Systems
ISO/TC 307/AHG 3 ⓘ	Representation of physical assets as non-fungible tokens (NFT)
ISO/TC 307/AHG 4 ⓘ	DLT and carbon markets
ISO/TC 307/CAG 1 ⓘ	Convenors coordination group
ISO/TC 307/JWG 4 ⓘ	Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG: Security, privacy and identity for Blockchain and DLT
ISO/TC 307/WG 1 ⓘ	Foundations
ISO/TC 307/WG 3 ⓘ	Smart contracts and their applications
ISO/TC 307/WG 5 ⓘ	Governance
ISO/TC 307/WG 6 ⓘ	Use cases
ISO/TC 307/WG 7 ⓘ	Interoperability

Switzerland!



Joint working groups under the responsibility of another committee

Reference ↑	Title
ISO/TC 46/SC 11/JWG 1	Joint ISO/TC 46/SC 11 - ISO/TC 307 WG: Blockchain

Liaisons – many internal ISO, with other SDOs (including ITU-T) and various organisations

# ISO/TC 307

- Published documents (IS = International Standard / TS = Technical Specifications /TR = Technical Report )
  - ISO/TR 3242:2022 Use cases
  - **ISO 22739:2020 Vocabulary**
  - ISO/TR 23244:2020 Privacy and personally identifiable information protection considerations
  - ISO/TR 23249:2022 Overview of existing DLT systems for identity management
  - **ISO 23257:2022 Reference architecture**
  - **ISO/TS 23258:2021 Taxonomy and Ontology**
  - ISO/TR 23455:2019 Overview of and interactions between smart contracts in blockchain and distributed ledger technology systems
  - ISO/TR 23576:2020 Security management of digital asset custodians
  - **ISO/TS 23635:2022 Guidelines for governance**

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## *Examples from ISO 22739 Vocabulary*

### **smart contract**

computer program stored in a DLT system (3.30) wherein the outcome of any execution of the program is recorded on the distributed ledger (3.22) [...]

### **hard fork**

change to a DLT platform (3.29) in which new ledger records (3.44) or blocks (3.2) created by the DLT nodes (3.27) using the new version of the DLT platform (3.29) are not accepted as valid by DLT nodes (3.27) using old versions of the DLT platform (3.29) [...]

# JWG 4

- Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG: **Security, privacy and identity for Blockchain and DLT**
  - Created mid-2018 jointly with ISO/IEC JTC 1/SC 27 “Information security, cybersecurity and privacy protection”
  - **Co-convenorship:** JB (from TC 307) **and** Sal Francomacaro (from SC 27)
  - **Who can participate?** experts from TC 307 members **or** experts from SC 27 members
  - **Administrative responsibility** under TC 307
  - **Program of work responsibility** under both TC 307 **and** SC 27

*TC 307 started some activities in WG2 "Security, privacy and identity" created late 2017 within TC 307, now disbanded*

# Way of working

- WG meetings for experts contributions on preliminary works, working drafts, WG-level decisions, recommendations to parent committees
- Consensus-driven
- Meetings usually at least 3-4/year, and additional meetings based on on-going activities
  - Next meetings – 21/02, 8/03, 22/03, 5/04 , TBC (expected June during TC307 plenary week)
- Committee-level decisions are taken in committee plenaries and/or by ballots among participating national members – executed in both parent committees (TC 307 **AND** SC 27)

# JWG 4 – work items

- Published

- ISO/TR 23244:2020 Privacy and personally identifiable information protection considerations
- ISO/TR 23249:2022 Overview of existing DLT systems for identity management
- ISO/TR 23576:2020 Security management of digital asset custodians [from WG2]

- On-going

- ISO/WD TR 23642 Overview of smart contract security good practice and issues
- ISO/DTR 23644 Overview of trust anchors for DLT-based identity management
- ISO/WD 7603 Decentralized Identity standard for the identification of subjects and objects
- PWI 12833 - Re-identification and privacy vulnerabilities and mitigation methods in blockchain and distributed ledger technologies



# Welcoming experts from various backgrounds

- Security, privacy, identity related to BC & DLT
- Integrators, end-users, developers, institutions, regulators, ...
- Participation are highly welcomed
  - can be through liaisons
  - or through your national standards organization.

# Thanks