



Web3 Festival

HONGKONG

WHY I AM HERE?

2006



2011

Distributed Ledger Technologies

2016

UNE

Normalización Española

New forms of competitiveness



2023



Innovation

Compliance WHAT IS THIS ABOUT??

Cybersecurity

Digitalisation

Conformity



Entrepreneurship

Perspective



2019



2016

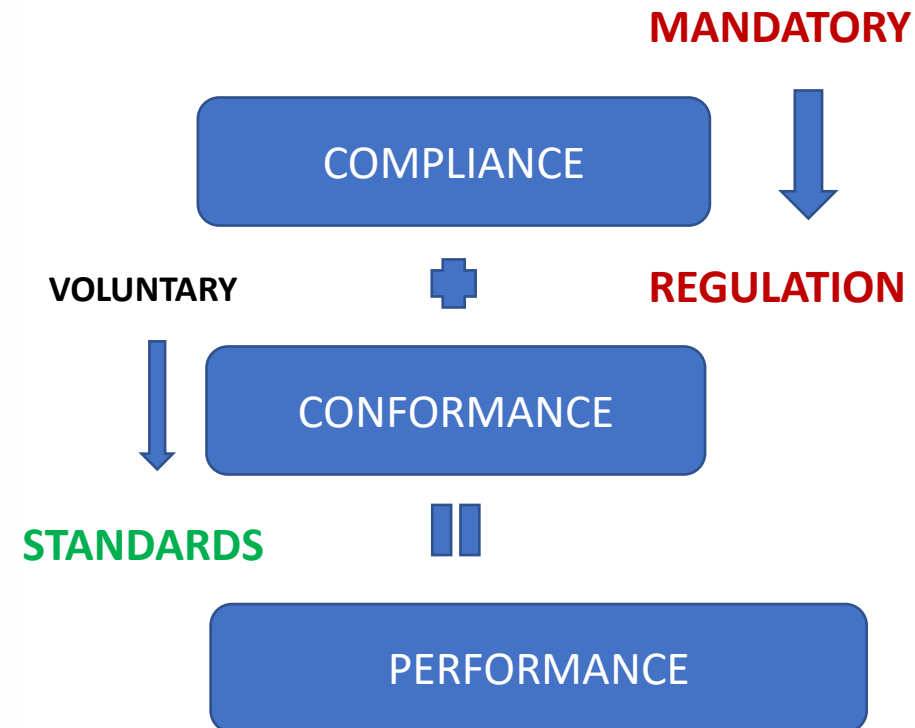
14.04.2023

TECHNOLOGY AND REGULATION MAY HAVE BARRIERS THAT STANDARDS CAN ENVISION

WHY STANDARDS

Functions of Standards

Function	Examples	Economic Impacts
Specify quality and reliability	<ul style="list-style-type: none"> Performance metrics, such as minimum quality levels Procedures, such as equipment calibrations 	<ul style="list-style-type: none"> Expand market share through performance assurance and reduction in transaction costs
Provide information	<ul style="list-style-type: none"> Measurement and test methods Science and engineering data bases, standard reference materials Terminology 	<ul style="list-style-type: none"> Increased research efficiency through more accurate research inputs and verifiable research results Higher productivity and quality through better process control Reduced transaction costs and hence lower prices for new products
Assure Interoperability	<ul style="list-style-type: none"> Interconnection among system components Portability of software across implementations of a computer system⁵ 	<ul style="list-style-type: none"> Achieve network externalities and thereby expand value/cost ratios Facilitate open systems and thereby enable more competition at component and subsystem levels
Enable variety reduction	<ul style="list-style-type: none"> Microprocessor architecture, size of silicon wafers 	<ul style="list-style-type: none"> Achieve economies of scale and compatibility across components



Source: Tasse, Gregory. The Economic Nature of Knowledge Embodied in Standards for Technology-Based Industries, ResearchGate, January 2015



2015: Proposed Blockchain ISO Standard

The proposed work is to:

- define this standard
- create the mechanism to be a gateway to multiple blockchains
- create the **governance** framework
- have **interoperability** and compatibility with existing financial standards
- provide legal and **regulatory compliance** to each transaction across blockchains
- work towards a **regulatory framework** that provides a mix of legal and technical rules

ISO ISO.ORG
International Organization for Standardization 11, Rue de Vanves, 92400 Courcouronnes, France

Form 1: Proposal for a new field of technical activity

Creation date: 2016-04-14	Reference number: (to be given to Central Secretariat)
Clearing date for voting: 2016-07-14	
Proposer: Standards Australia	ISO/TS 258

A proposal for a new field of technical activity shall be submitted to the Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives (part 1, subclause 1.5). The proposer may be a member body of ISO, a technical committee, subcommittee or project committee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for preparing and justifying a new field of technical activity are given in the ISO/IEC Directives (part 1, Annex G).

The proposal (to be completed by the proposer)

Title of the proposed new committee: (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover.)
Blockchain and electronic distributed ledger technologies

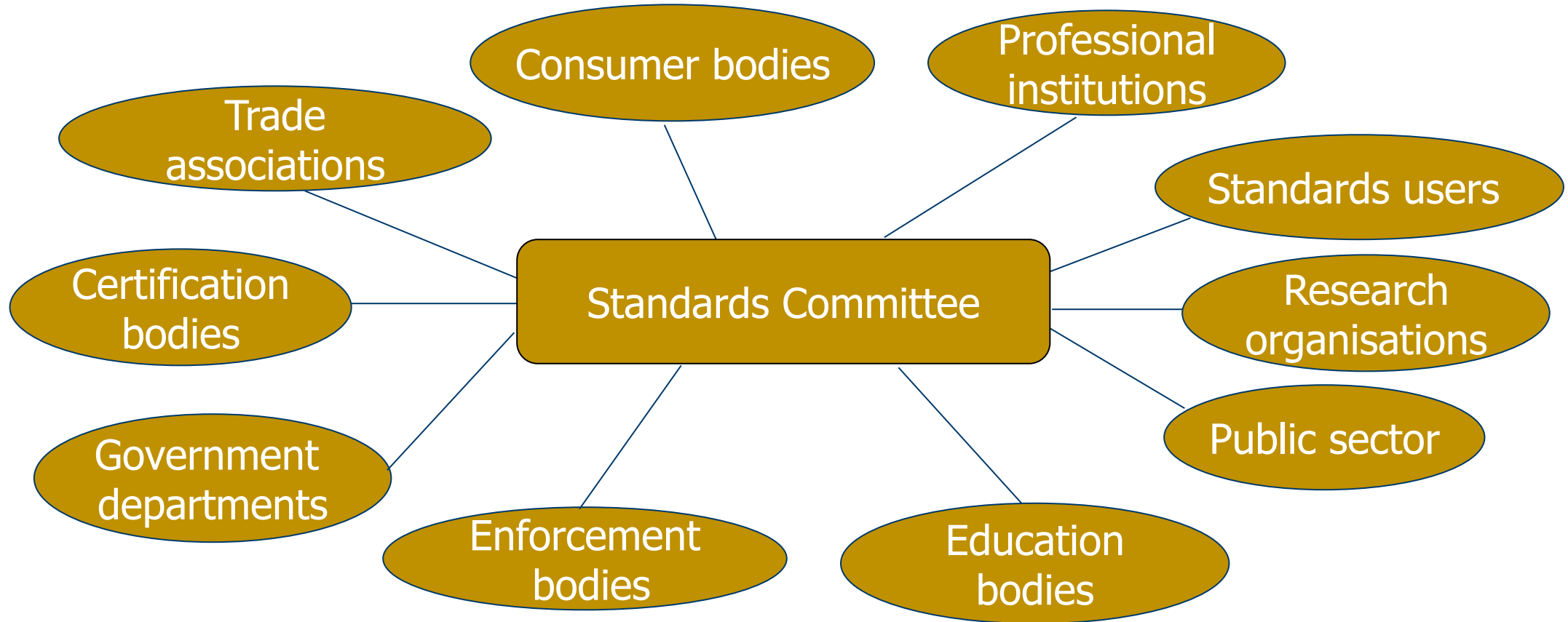
Scope statement of the proposed new committee: (The scope shall precisely define the limits of the field of activity. Scope shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)
Standardisation of blockchains and distributed ledger technologies to support interoperability and data interchange among users, applications and systems.

FORM 1 - Proposal for a new field of technical activity
Issue 3 (2015)

14.04.2023



National Standards Bodies do not write standards, the stakeholder committees do



ISO TC307 Standards Published



Standard and/or project under the direct responsibility of ISO/TC 307 Secretariat(0)

[ISO/TR 3242:2022](#)

Blockchain and distributed ledger technologies – Use cases

[ISO 22739:2020](#)

Blockchain and distributed ledger technologies — Vocabulary

[ISO/TR 23244:2020](#)

Blockchain and distributed ledger technologies — Privacy and personally identifiable information protection considerations

[ISO/TR 23249:2022](#)

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

[ISO 23257:2022](#)

Blockchain and distributed ledger technologies — Reference architecture

[ISO/TS 23258:2021](#)

Blockchain and distributed ledger technologies — Taxonomy and Ontology

[ISO/TR 23455:2019](#)

Blockchain and distributed ledger technologies — Overview of and interactions between smart contracts in blockchain and distributed ledger technology systems

[ISO/TR 23576:2020](#)

Blockchain and distributed ledger technologies — Security management of digital asset custodians

[ISO/TS 23635:2022](#)

Blockchain and distributed ledger technologies — Guidelines for governance

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ISO TC307 Standards Under Dev

[ISO/CD TR 6039](#)

Blockchain and distributed ledger technologies — Identifiers of subjects and objects for the design of blockchain systems

[ISO/WD TR 6277](#)

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

[ISO/AWI 7603](#)

Decentralized Identity standard for the identification of subjects and objects

[ISO/DIS 22739](#)

Blockchain and distributed ledger technologies — Vocabulary

[ISO/AWI TS 23516](#)

Blockchain and Distributed Ledger Technology — Interoperability Framework

[ISO/WD TR 23642](#)

Blockchain and distributed ledger technologies - Overview of smart contract security good practice and issues

[ISO/DTR 23644](#)

Blockchain and distributed ledger technologies - Overview of trust anchors for DLT-based identity management



ISO TC307 Working Groups

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: Blockchain and distributed ledger technologies and IT Security techniques
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

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

How we reach to be here??



ITU WORKSHOP 1/04/2019

Voluntary efforts



TRUST 2019可信区块链峰会
TRUSTED BLOCKCHAIN SUMMIT 2019

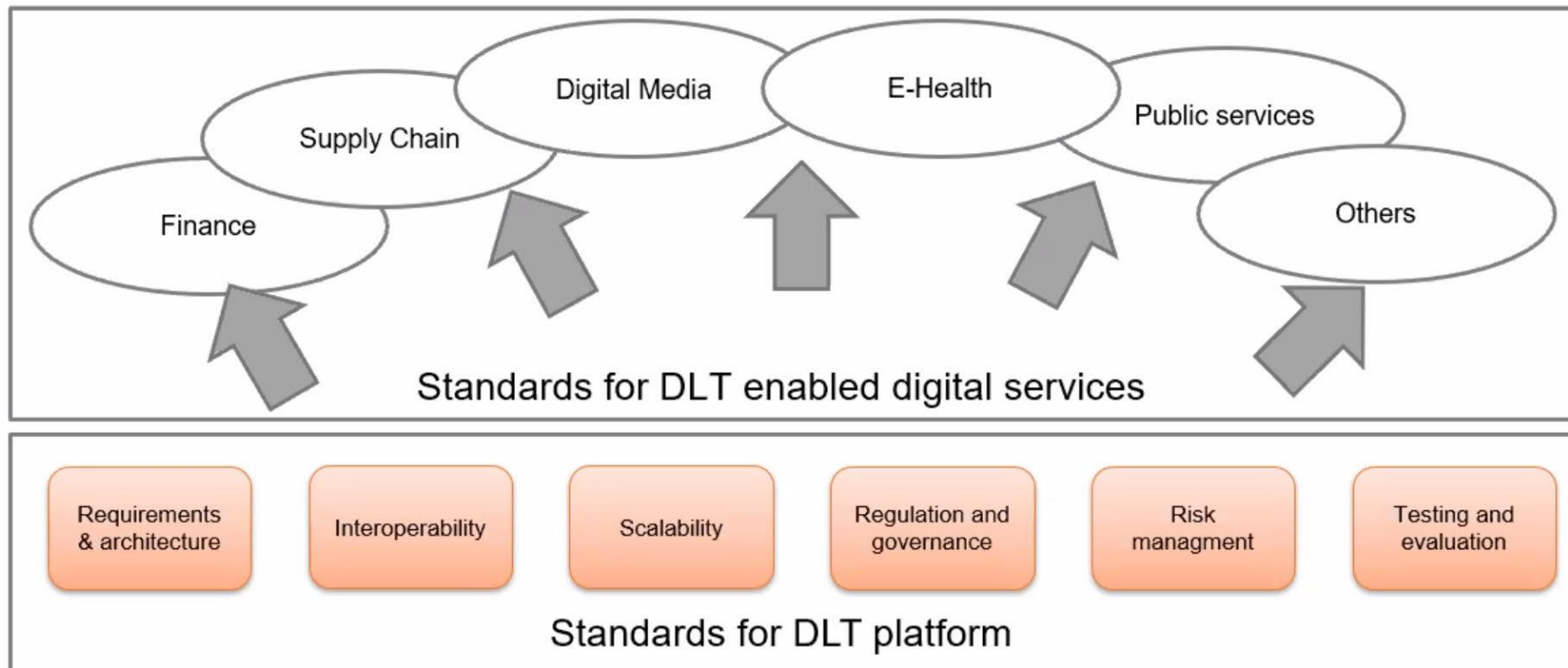




ITU-T Recommendation Y.3500 08/2014

INTEROPERABILITY IS THE ABILITY OF TWO OR MORE SYSTEMS or APPLICATIONS TO EXCHANGE INFORMATION AND TO MUTUALLY USE THE INFORMATION THAT HAVE BEEN EXCHANGED:

ITU-T Q22/16 Strategy-two layered approach



CURRENT SITUATION

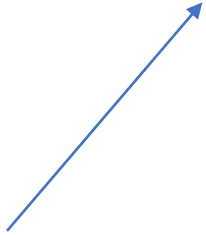
Convenor for PNE 71308 en UNE
CONVENOR ISO TC307 WG3
Smart Contracts and their
applications

Liaison officer TC307 y
TC292 (security and
resilience)

Rapporteur ETSI ISG PDL



3 Enterprises



2023

Multidisciplinary knowledge and constant
adaptation
Advanced computing technologies

Co-chair at Standards Committee in INATBA

Liaison officer CEN CENELEC JTC19 y ETSI ISG PDL

Liaison officer ITU-T SG16 Multimedia with INATBA

Vicechairmen of ITU-T FG Metaverse (WG2 Applications and Services)

15 use cases under experimentation

Piloting on





Development plan

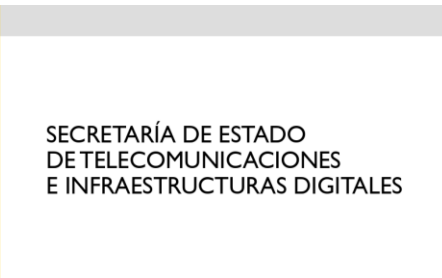
Global Alliance program Spain, Korea,, England, UAE, Belgium, Egypt.

EU

Global

EU and the world

2022



14.04.2023



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14.04.2023

ISO/TC 307

Blockchain and distributed ledger technologies



UNIVERSITY *of* NICOSIA

15.06.2023

TECHNICAL COMMITTEES

ISO/TC 307

Blockchain and distributed ledger technologies

TC 307 WG 3: SMART CONTRACTS
AND THEIR APPLICATIONS

Disclaimer



HETEROGENEOUS NETWORKS STANDARDIZATION as ENABLER?

MANDATORY IS LAW

IMPERATIVE

OFF-CHAIN

JURISDICTION

VOLUNTARY IS STANDARDIZATION

TRUST

ON-CHAIN

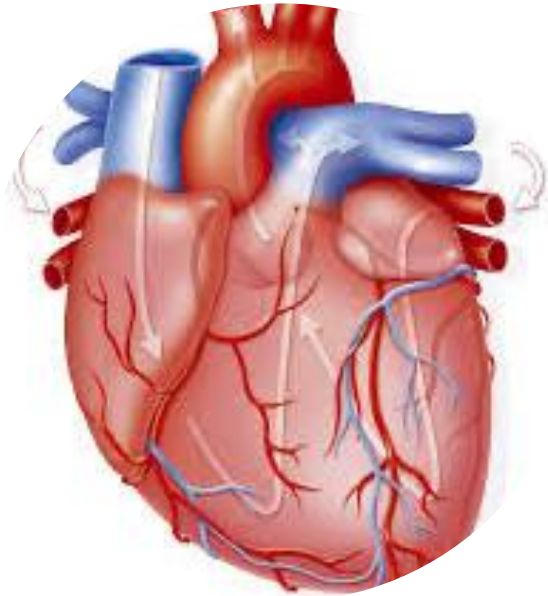
CROSS-BORDER

COMPLIANCE + CONFORMANCE

PERFORMANCE

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IN

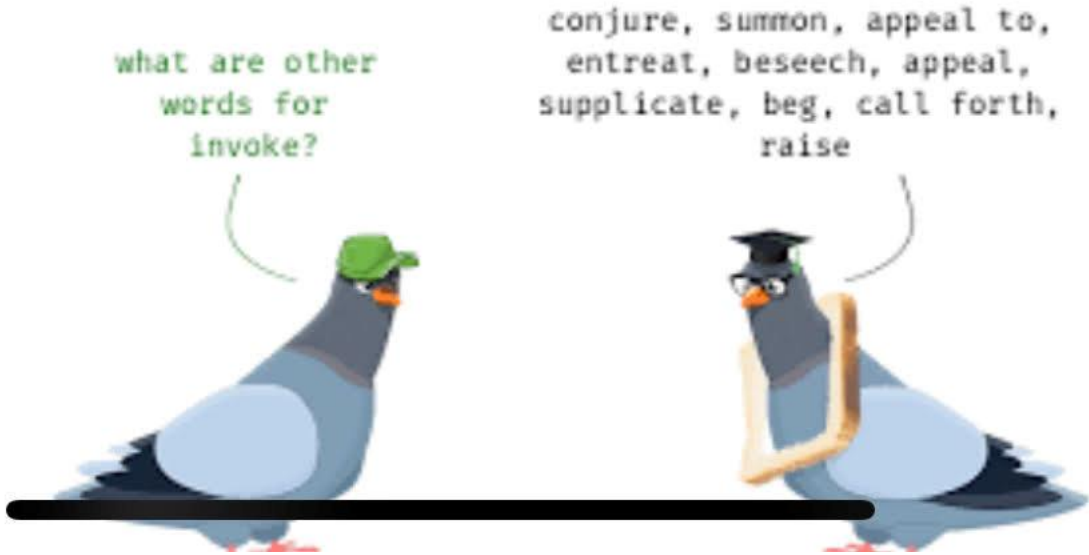


ON

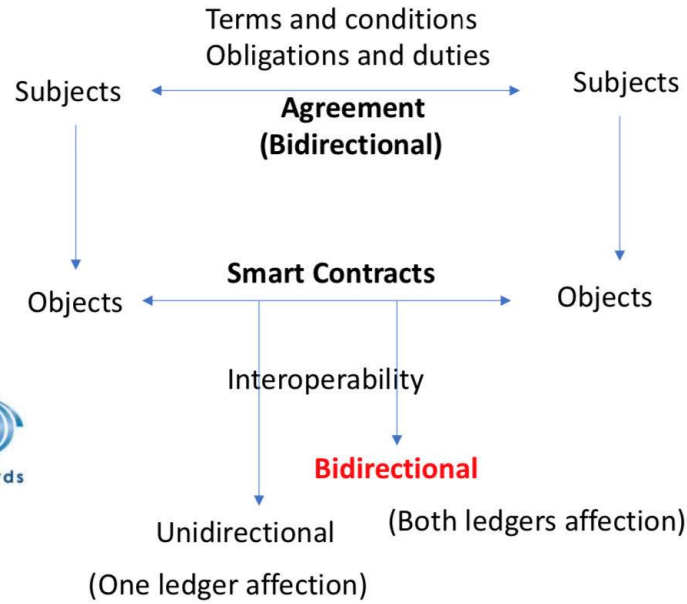


OFF





SIMPLISTIC APPROACH



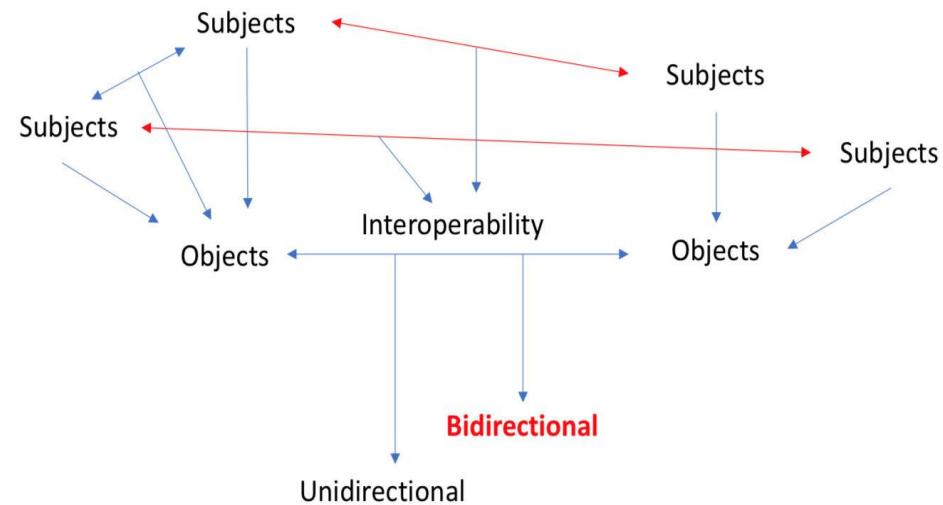
ISG PDL

Individuals (persona)
Legal entities, etc.

Blockchain / DLT network

RELATIONSHIP UNDER FOUNDATIONAL SMART CONTRACTS

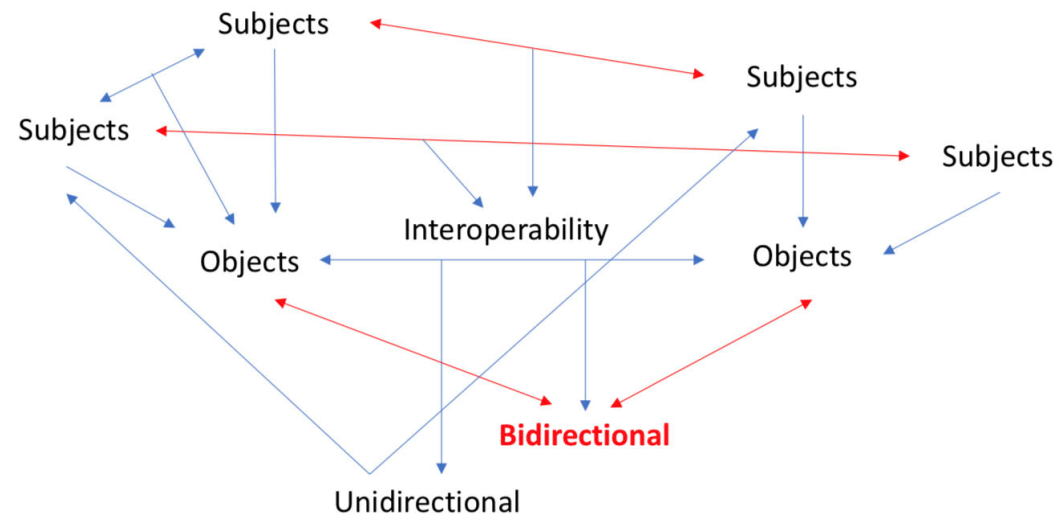
WHICH AFFECTS... is able based on governance??



**ON – CHAIN
NEUTRALITY**

RELATION UNDER FOUNDATIONAL SMART CONTRACTS

OFF CHAIN to SECURE THE ACCOUNTABILITY ??



**OFF-CHAIN
ENHANCEMENT**



ISO/TC 307

Blockchain and distributed ledger technologies



15.06.2023

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