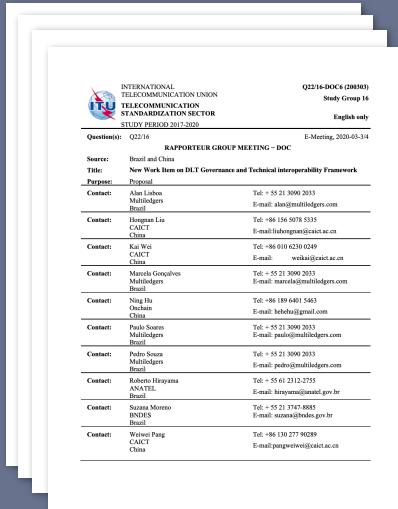# ITU-T SG 16 Q 22 | Work Item on DLT Governance and Technical Interoperability Framework (Governance Approach)

ITU is leading an effort to standardize interoperability between blockchain / DLT networks with the support of several national governments and engagement from organizations like ISO, IEEE, MIT, EU, WEF and OECD.

This initiative aims to lay the ground for interconnect with governance the different DLT networks that are being formed around the world.

INTERNATIONAL TELECOMMUNICATION UNION
TELECOMMUNICATION STANDARDIZATION SECTOR
STUDY PERIOD 2017-2020

Q22/16-DOC6 (200303)
Study Group 16

English only

Question(s): Q22/16   E-Meeting, 2020-03-3/4

RAPPORTEUR GROUP MEETING – DOC

Source: Brazil and China
Title: New Work Item on DLT Governance and Technical Interoperability Framework
Purpose: Proposal

Contact:	Alan Lisboa Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: alan@multiledgers.com
Contact:	Hongnan Liu CAICT China	Tel: +86 156 5078 5335 E-mail:liuhongnan@caict.ac.cn
Contact:	Kai Wei CAICT China	Tel: +86 010 6230 0249 E-mail: weikai@caict.ac.cn
Contact:	Marcela Gonçalves Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: marcela@multiledgers.com
Contact:	Ning Hu Onchain China	Tel: +86 189 6401 5463 E-mail: hchehu@gmail.com
Contact:	Paulo Soares Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: paulo@multiledgers.com
Contact:	Pedro Souza Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: pedro@multiledgers.com
Contact:	Roberto Hirayama ANATEL Brazil	Tel: + 55 61 2312-2755 E-mail: hirayama@anatel.gov.br
Contact:	Suzana Moreno BNDES Brazil	Tel: + 55 21 3747-8885 E-mail: suzana@bndes.gov.br
Contact:	Weiwei Pang CAICT China	Tel: +86 130 277 90289 E-mail:pangweiwei@caict.ac.cn

SG 16 Q 22 E- Meeting 2020-03-3/4

New Work Item on DLT Governance and Technical Interoperability Framework

Proposal editing for interoperability governance (Represented organizations)

ANATEL (ITU ADM Brazil)

BNDES (Brazil Bank of development)

Multiledgders (Brazil and US Company)

Proposal editing for interoperability Technical (Represented organizations)

CAICT (Research institute from China Ministry of industry and information technology)

Onchain (Chinese company)

**Proposal review (Represented organizations)**

Alastria (Blockchain network from Spain)

INATBA (Blockchain sectorial organization)

LACChain (Blockchain network from IDB)

KUNFUD (Private Techno-compliance firm)

F.DLT-GT

"DLT Governance and Technical interoperability Framework"

This work item defines the framework for distributed ledger technology that can support cross systems interoperability.

Addressing that a fundamental point for DLT interoperability will be to interoperate trust between ecosystems.
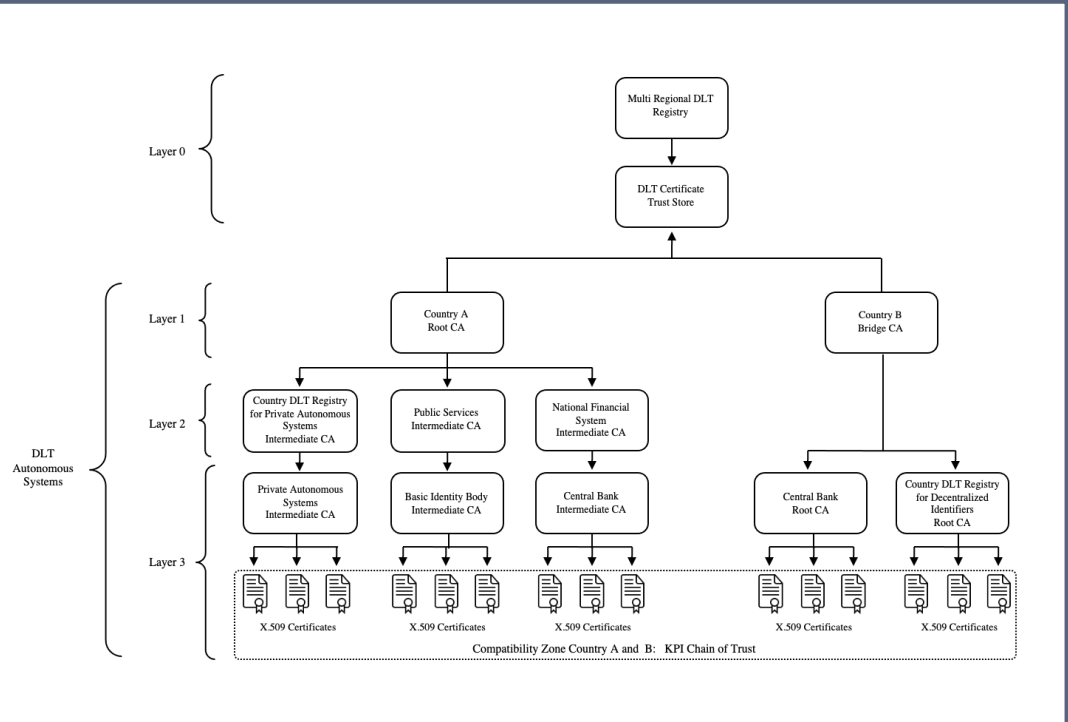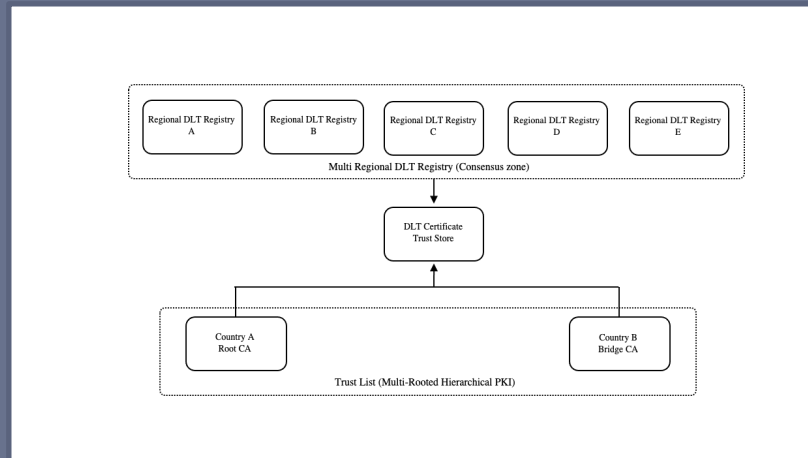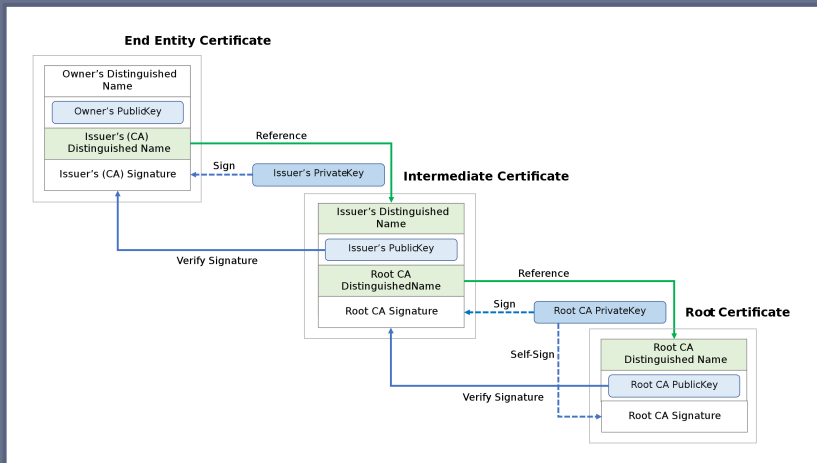
Describing a global chain of trust managed by DLT as a governance approach

Recommendation ITU-T X.509 | ISO / IEC 9594-8 | public-key infrastructure (PKI)

DLT certificate chain of trust

Memo RFC 4158 | Internet X.509 Public Key Infrastructure | Certification Path Building

Trust Store managed by smart contract

The interoperation of national PKI legacy systems and DLT to build trust trust between ecosystems

National PKI policies have been adopted by several countries as a means of identification in the digital environment, bringing a layer of legal trust to digital transactions.

DLT BGP protocols can rely on the National PKIs approach to build trust between end entities, providing a reliable environment between different ecosystems.
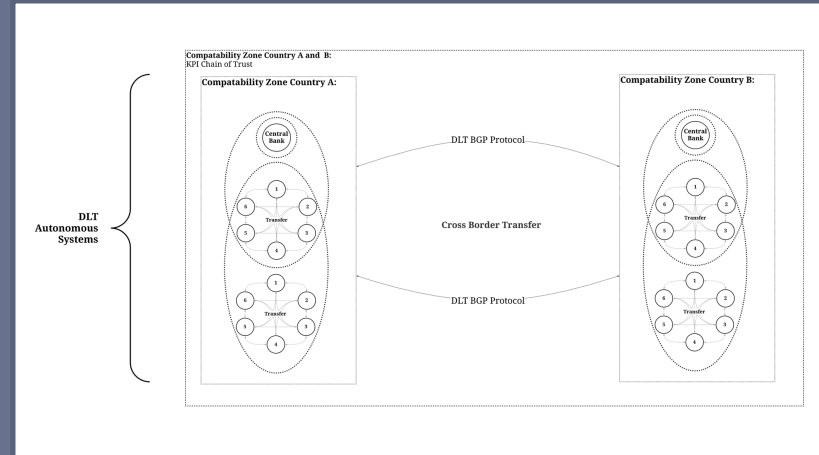
National PKI policies as a legacy of trust

National PKI policies have been implemented in different business models and with different purposes.

Different levels of authentication and identity verification provide a foundation of trust for electronic transactions.
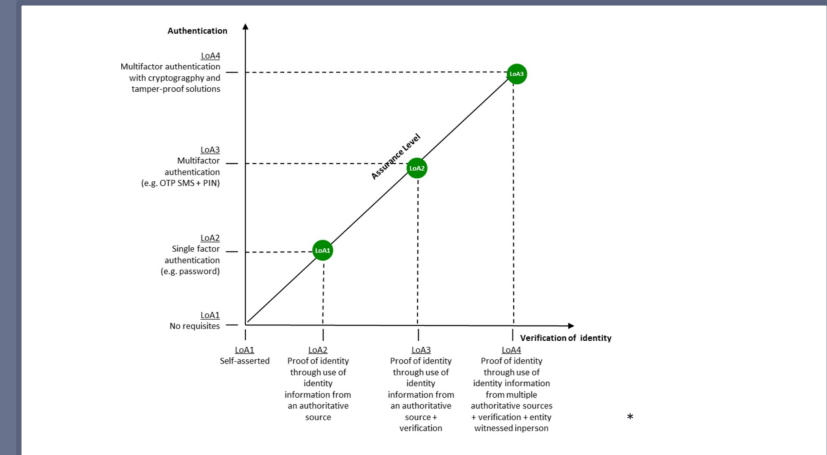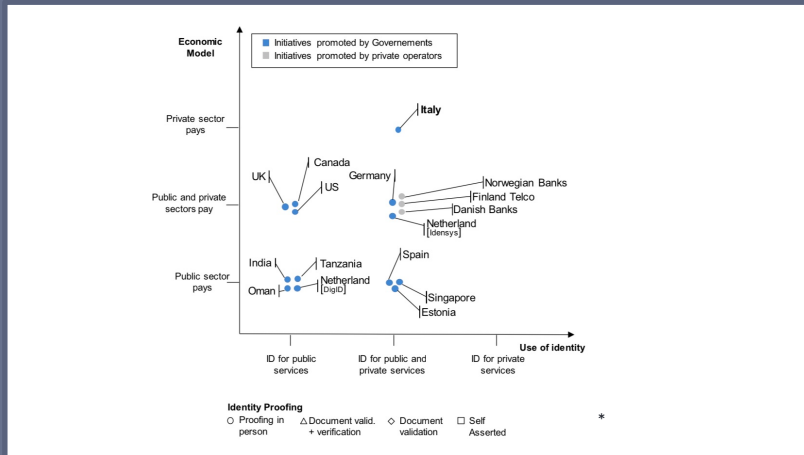
Interoperability experiment based on "Work Item on DLT Governance and Technical interoperability Framework"

Phases of the experiment (May to December 2021)

1. Integration of national PKI with DLT application for signing transactions

2. Integration of national PKI with DLT Trust Store

3. Second national PKI integration with DLT Trust Store for interoperable transaction signature between organizations in 2 countries

Call for collaboration

The editors of this document kindly invite other members and not members of the ITU to eventually collaborate with this experiment on a voluntary basis.

INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR
STUDY PERIOD 2017-2020

Q22/16-DOC4 (210126)
Study Group 16
Original: English

Question(s): Q22/16 — E-Meeting, 2021-1-26/28

DOC

Source:	Editors
Title:	Interoperability Experiment Based On "Work Item on DLT Governance and Technical interoperability Framework" Output (E-Meeting, 2021-1-26/28)
Purpose:	[Information]

Contact:	Alan Lisboa Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: alan@multiledgers.com
Contact:	Marcela Gonçalves Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: marcela@multiledgers.com
Contact:	Paulo Soares Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: paulo@multiledgers.com
Contact:	Pedro Souza Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: pedro@multiledgers.com
Contact:	Rodrigo Bueno Multiledgers Brazil	Tel: + 55 21 3747 8885 E-mail: rodrigo.bueno@multiledgers.com
Contact:	Caroline Poli Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: caroline.poli@multiledgers.com
Contact:	Alan Lloyd Multiledgers Brazil	Tel: + 55 21 3090 2033 E-mail: alan.lloyd@multiledgers.com

Keywords: DLT, Interoperability, Governance, Experiment, Information exchange, Quality of Recommendations

Abstract: This document contains an interoperability experiment to support the DLT interoperability architecture addressed by the proposal "New Work Item on DLT Governance and Technical interoperability Framework" being evaluated in Study Group 16 / Question 22.

Summary
Based on ITU-T A-series Recommendations - Supplement 2 - guidelines on interoperability experiments, this document addresses the future realization of an experiment outside the ITU by ITU members in partnership with other organizations related to the "Work Item on DLT

Disclaimer

This presentation contains the view on a particular subject exposed by Multiledgers, the opinions of third parties mentioned in this document are entirely their responsibility.

All the considerations contained in this document which are not present in the proposal of the New Work Item on DLT Governance and Technical Interoperability Framework (submitted in March 2020) are the exclusive opinion of Multiledgers and still need an appropriate evaluation to eventually become effective.

This presentation is not intended to serve as any kind of standardization at this time and its statements are still in the process of initial discussion.

About Multiledgers

We want to integrate and simplify to empower organizations with robust IT infrastructure and cutting-edge security. A group of different technology companies to support our business goals, focusing on cloud management and Blockchain-as-a-Service.

Any questions?

You can find us at contact@multiledgers.com

multiledgers.com

Multiledgers Group

USA | 16192 Coastal Hwy Lewes, DE 19958 | + 1 302 444 8040

Brazil | Av. Rio Branco, 26 – Centro, Rio de Janeiro RJ 20040-001 | + 55 21 3090 2033