

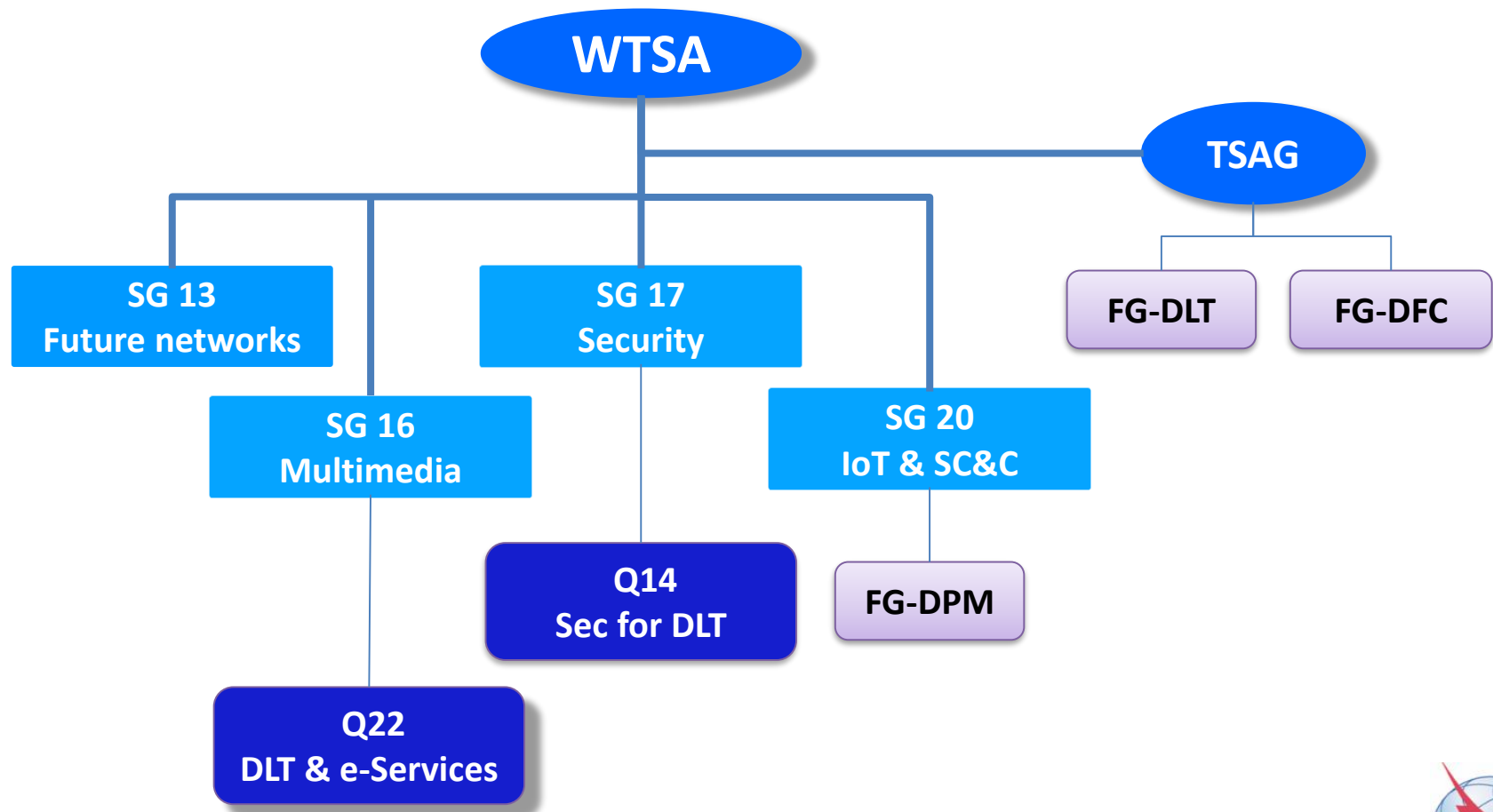
# **Blockchain related activities in ITU-T SG17 and FG-DLT**

**2019.01**

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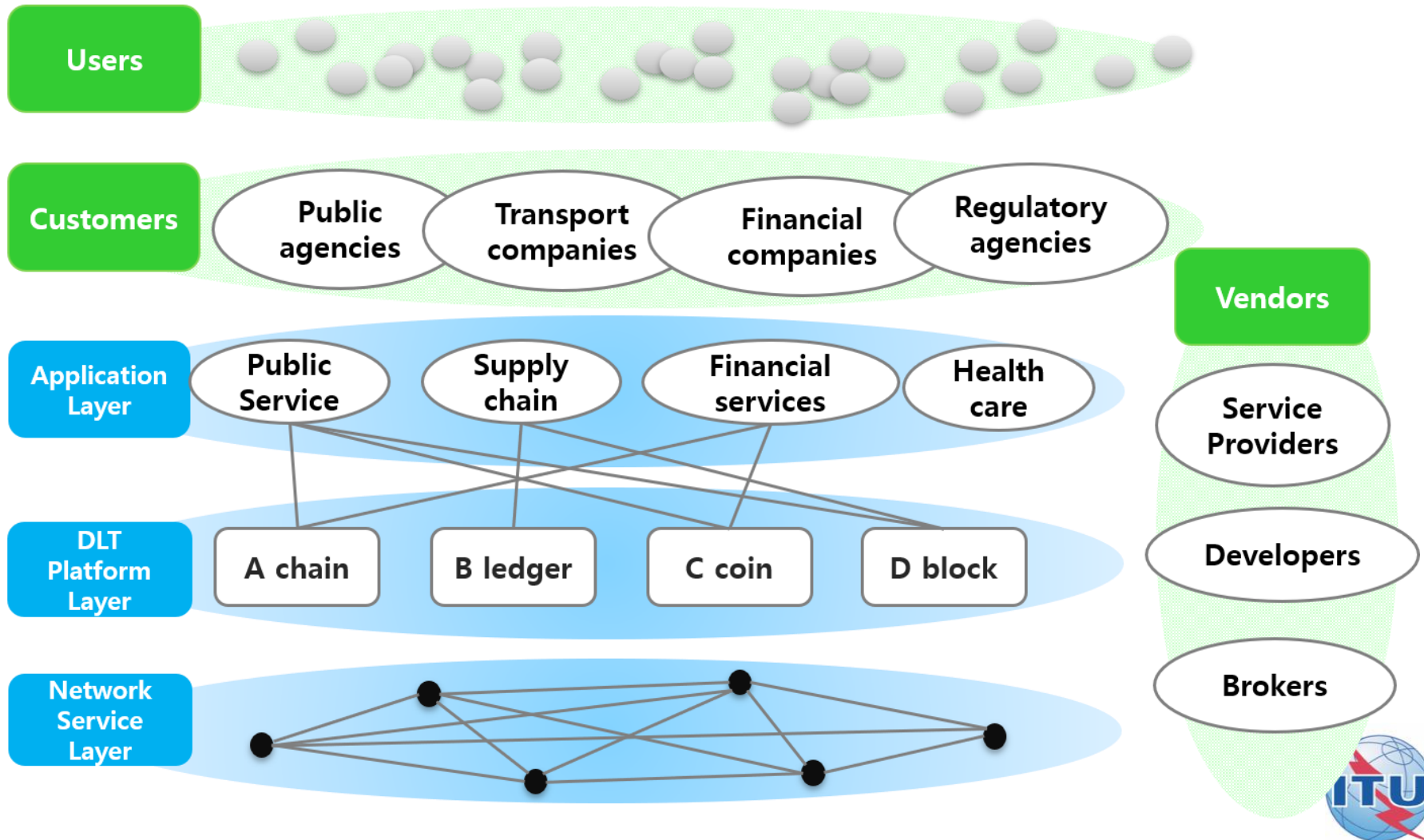


# ITU-T activities related with DLT



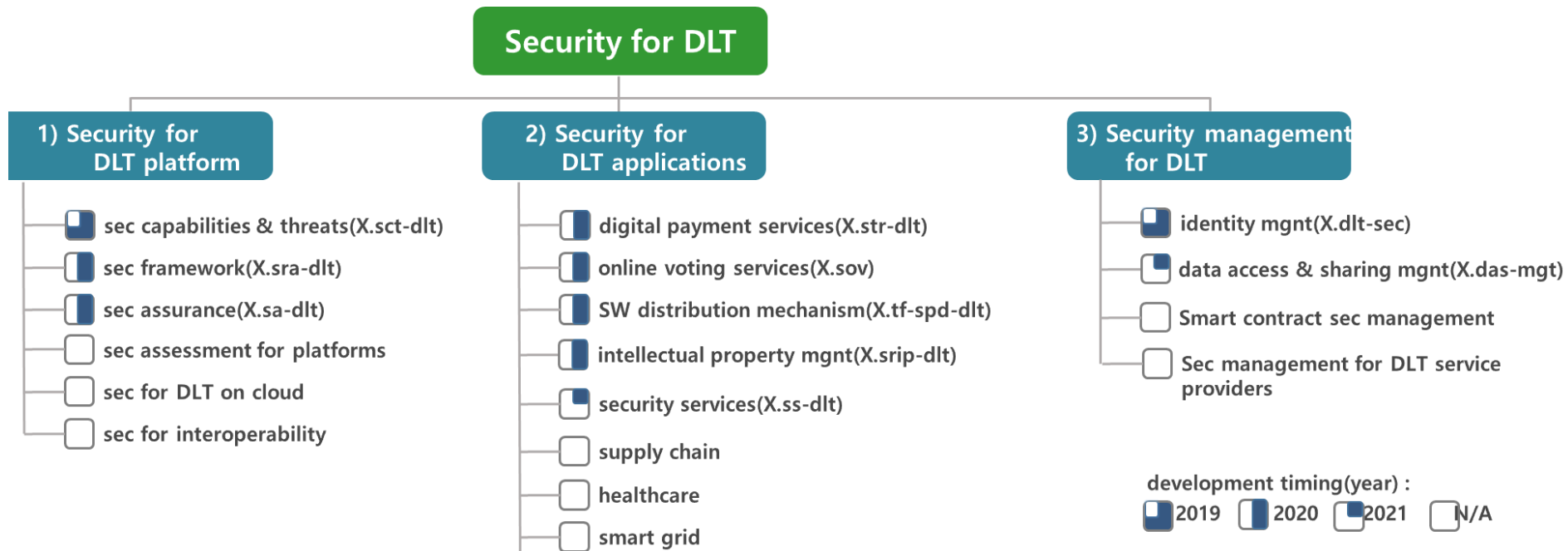
Sept. 2017 : SG 17 seminar on Security aspect for Blockchain\*

# Distributed ledger technology Ecosystem

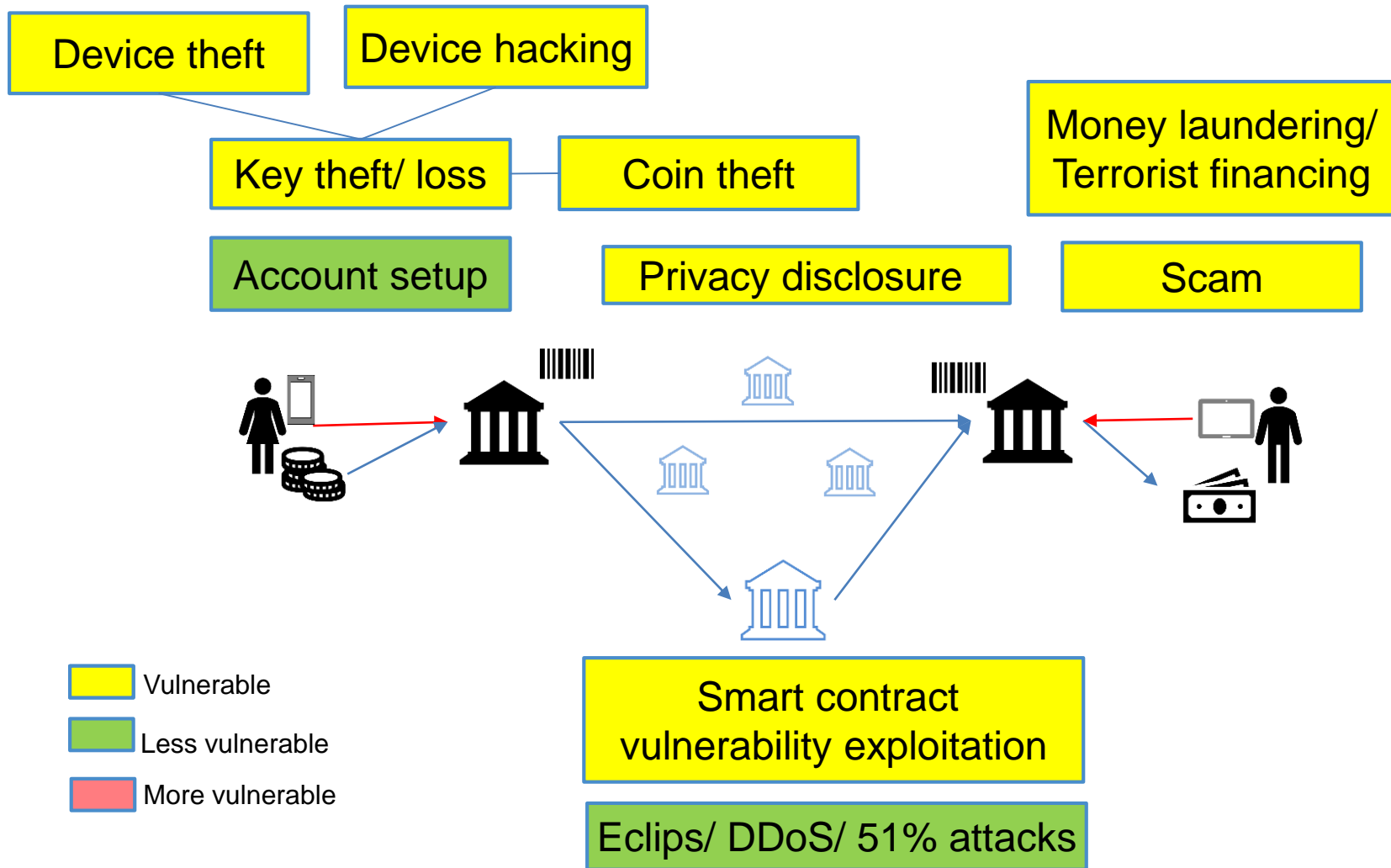




# Q14 Standardization roadmap

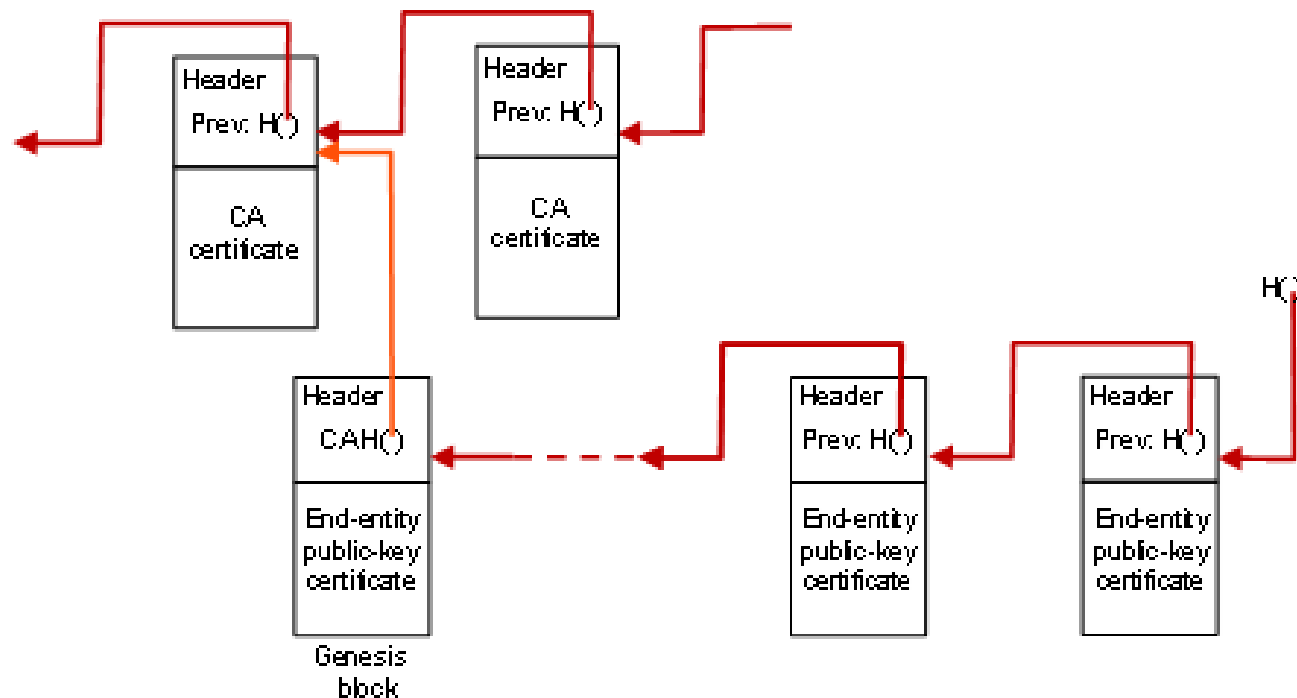


# Q14 Working items - example



# Q11: Revision for X.509 including D-PKI

- With ISO/IEC JTC 1/SC6
- Common text of ISO/IEC 9594-8



Main chain of CAs and respective side chains

# ITU-T FG DLT Working Groups

WG	Title	Mission	Leader
1	State of the Art: Ecosystem, Terms, Definitions, Concepts	Identify and introduce key elements of the DLT ecosystem (e.g., terminologies, definition, taxonomy, standardization), general concepts for DLT and related technologies, and identify and analyze standardization gaps in the DLT ecosystem.	Heung Youl Youm, Mee Yeon Kim (Soonchunhyang University, Korea (Rep. of))
2	Applications & Services	Identify and describe DLT-based use cases, specify which DLT features are required. Highlight the competitive advantage brought by DLT to the use cases. Highlight how the use cases could benefit from a standardization effort.	Suzana Maranhão Moreno (BNDES, Brazil), Zongxiang Li (China)
3	Technology Reference Framework	Study architectural aspects of DLT including interoperability and abstract a high level technology reference framework. Provide a mapping of existing DLT platforms on the framework, and explore criteria and methods for assessment.	Hu Ruifeng (Huawei Technologies, China), Wang Dong (ZTE, China)
4	Regulatory reference Framework	Identify and describe relevant policy and regulatory dimensions (e.g., auditability, traceability, privacy, legal compliance) and highlight associated constraints (e.g., GDPR, lawful intercept) to the adoption of DLT-based applications and services. Provide a mapping of existing DLT platforms on the dimensions, and explore methods for assessment.	Alexander Chuburkov (Fintech Association, Russian Federation)
5	Standardization Roadmap		TBD

# ITU-T FG DLT Deliverables (1/2)

WG	Title	Deliverables (Completion)		Description
1	State of the Art: Ecosystem, Terms, Definitions, Concepts	<a href="#">D1.1</a>	Terms and definitions (Apr)	Harmonization with related terminology from ITU-T SG17, ISO/TC 307, NIST, and others
		D1.2	Overview, concepts, ecosystem (Apr)	TBD
		D1.3	Standardization landscape (Apr)	Ongoing presentations and liaisons from ITU-T SGs and FGs and other SDOs working on DLT.
2	Applications & Services	<a href="#">D2.1</a>	Use cases (Horizontal & vertical) (Jan)	More than 40 use cases reviewed, including from finance, healthcare, utilities, telecoms sectors, as well as cross-cutting DLT applications (e.g., identity management, data provenance).
3	Technology Reference Framework	<a href="#">D3.1</a>	DLT reference architecture (Apr)	Includes hierarchical relationships, specific functions and modules.
		<a href="#">D3.2</a>	Overview of existing platforms and mapping to DLT reference architecture (Aug)	Covers most popular DLT platforms.
		<a href="#">D3.3</a>	Assessment criteria for DLT platforms (Jan)	Introduction of 17 DLT platform assessment criteria.



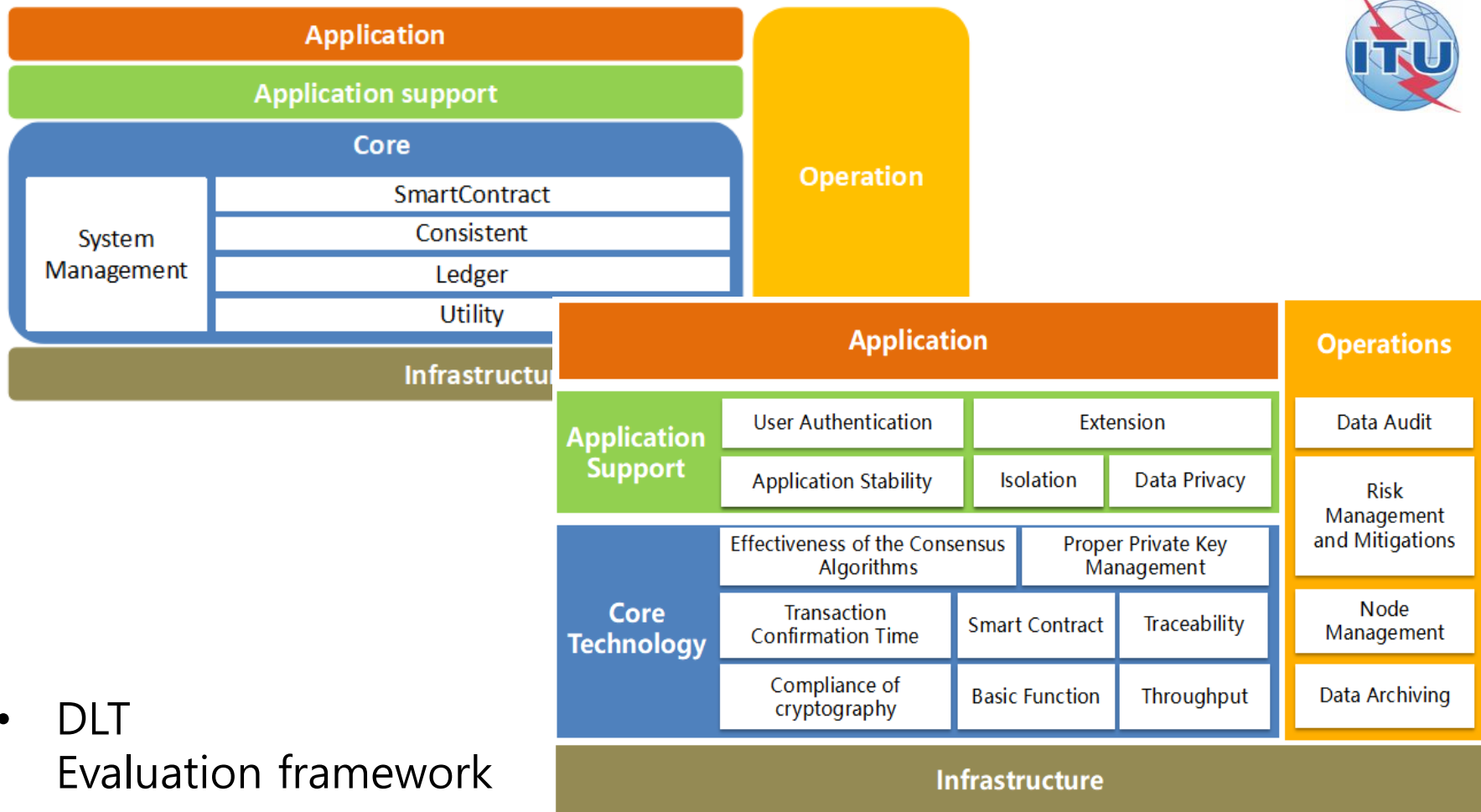
# ITU-T FG DLT Deliverables (2/2)

WG	Title	Deliverables		Description
4	Regulatory reference Framework	<a href="#">D4.1</a>	Regulatory framework (Apr)	Discussion of key DLT features and associated regulatory challenges. Examples of approaches for users, regulators and solution providers to address these challenges.
		D4.2	Mapping of existing DLT platforms to policy and regulatory dimensions and constraints, and assessment criteria	TBD
5	Standardization Roadmap	<a href="#">D5.1</a>	Outlook on future DLT (Jan)	Introduction of emerging concepts related to DLT.

FG-DLT invited TSAG to approve an extension of its lifetime from April to September 2019  
The deliverables will be sent appropriate SGs to develop Recommendations

# ITU-T FG-DLT deliverables : Examples

- DLT architecture



- DLT Evaluation framework





**Thank you for your  
attention**

