Use Case Technical Report and new Insights

Suzana Maranhão Moreno, BNDES

Associate Rapporteur of the group
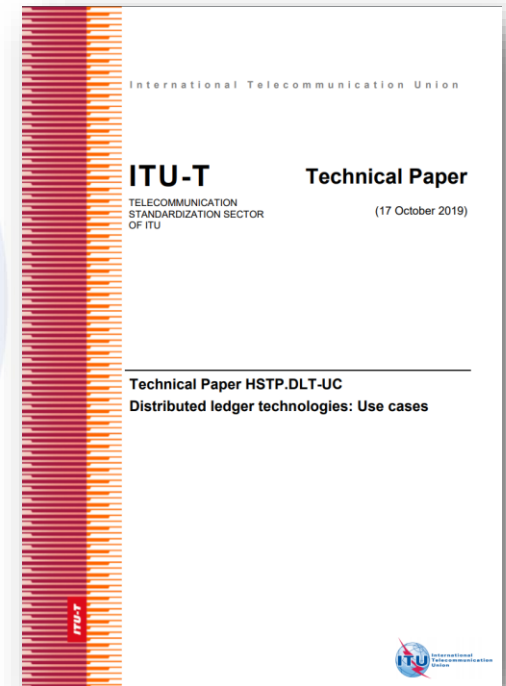
"Distributed ledger technologies and e-services"

Why a Use Case Technical Report?

• Collect and document information on current initiatives in applications and services based on DLT.

• Produce standards and other publication based on real projects

• 50 use cases

- Standard Makers
- Policy Makers
- Industry
- Implementers

International Telecommunication Union

ITU-T
TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

Technical Paper

(17 October 2019)

Technical Paper HSTP.DLT-UC
Distributed ledger technologies: Use cases

TEMPLATE (1/3)

Section 1 Summary

Use Case Summary			
Use Case ID:		Use Case Type:	Vertical/Horizontal
Submission Date:		Is Use Case supporting SDGs	Yes/no
Use Case Title:		Domain:	List 1 Appendix 1
Status of Case	e.g. Concept, PoC, Pilot, Implementation	Sub-Domain	If necessary
Contact information of person submitting/ managing the use-case	Full Name E-mail address: Social media:	Job Title Telephone number: Web site:	
Proposing Organization	Legal name, Country and national registration number (as applicable)		
Short Description	1-3 sentences		
Long description	1200 characters maximum		
SDG in Focus (when applicable)	Enter one or more number (1-17) and specific corresponding indicator/s as applicable See https://www.un.org/sustainabledevelopment/sustainable-development-goals/		
Value Transfer:	If potential solution allows to transfer any value (e.g. assets, tokens, etc.)	Number of Users:	
Types of Users:	Those who execute some step in the process		
Stakeholders	Those who are impacted by this use case		
Data:	What data are expected to be stored in distributed ledger in terms of types, record structure, privacy, etc. How DLT solution would interact with external data and other systems.		
Identification:	Identification mechanism and rules; ability of participants to be anonymous, etc.		
Predicted Outcomes:			

Overview of the Business Problem or Opportunity
Explanation of the business problem or opportunity.
Why Distributed Ledger Technology?

USE CASE REPORT - SECTIONS

- 5. Competitive Advantage of DLT
- 6. Vertical Domains
- 7. Horizonal Domains
- 8. Barriers to DLT Adoption
- 9. Significance of DLT in the attainment of SDGs
- 10. Standardization Efforts
- 11. Key Findings and Recommendations

Section 1 Summary

Use Case Summary			
Use Case ID:		Use Case Type:	Vertical/Horizontal
Submission Date:		Is Use Case	Yes/no

Section 2 Current process

Current Solutions

If there are existing systems which automate the above business problem/opportunity.

Existing Flow (as-is)

Step	User Actions	System Actions
1.		

Process scheme (as-is)

Data and information (as-is)

Data	Type	Description
1	Documents	

Participants and their roles (as-is)

Actor	Type/Role	Description
1	Lawyers	

Section 3 Expected process

Expected Flow (to-be)

Step	User Actions	System Actions
1.		

Process scheme (to-be)

Participants and their roles

Actor	Type/Role	Description
1	Lawyers	

Data and information

Data	Type	Description
1	Documents	

5. Competitive Advantage of DLT

6. Vertical Domains

7. Horizonal Domains

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TEMPLATE (3/3)

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Submission Date:		Is Use Case	Yes/no

Use Ca...

Status ...

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Propos... Organi...

Short ...

Long d...

SDG in... applica...

Value ...

Types ...

Stakeh...

Data:

Identifi...

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Explan...

Why D...

Section 2 Current process

Current Solutions

If there are existing systems which automate the above business problem/opportunity.

Existing Flow (as-is)

Step	User Actions	System Actions
1.		

Security and privacy

1.

Process scheme (as-is)

Main Success Scenario + expected time line

Description of DLT-based solution, which potentially will be created

Conditions (pre- or post-)

1.

Data and information (		
Data	Type	
1	Documents	

Performance needs

What potential performance specs (frequency of use, transactions per second, confirmation time, sync time, etc.) are expected. What scalability, interoperability, reliability, accessibility needs exist.

Participants and their		
Actor	Type/Role	
1	Lawyers	

Legal considerations

1.

Expected Flow (to-be)

Step	User
1.	

Risks

Legal, business and technical risks related to use case

Process scheme (to-be)

Special Requirements

Business and technical requirements of use case

Participants and their		
Actor	Type/Role	
1	Lawyers	

External References and Miscellaneous

List of references for standards or well-defined mechanisms if any of requirements calls for the implementation of a standard or protocol or other well-defined mechanism. If the use case needs non-standard consensus mechanisms or cryptographic tools, such information should be included here.

Data and information		
Data	Type	
1	Documents	

Other Notes

Any assumptions, issues

Use Case Report – Sections

- 5. Competitive Advantage of DLT
- 6. Vertical Domains
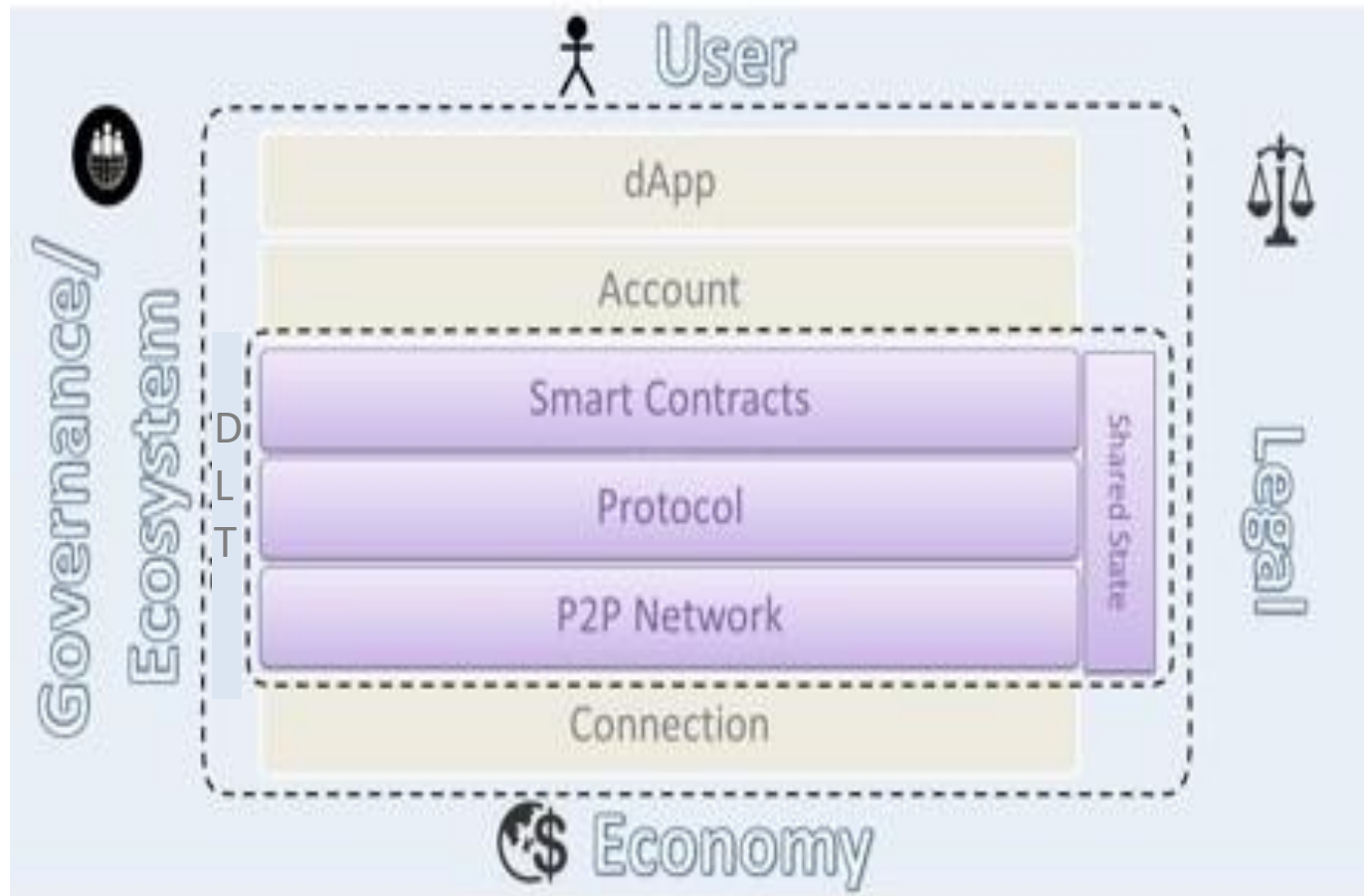- 7. Horizonal Domains
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(Work-in-progress) DLT-based Application Development Risks and their Mitigations

- FG DLT (with use cases): https://www.itu.int/en/ITU-T/focusgroups/dlt/Pages/default.aspx
- Final technical report: https://www.itu.int/dms_pub/itu-t/opb/tut/T-TUT-DLT-2019-UC-PDF-E.pdf