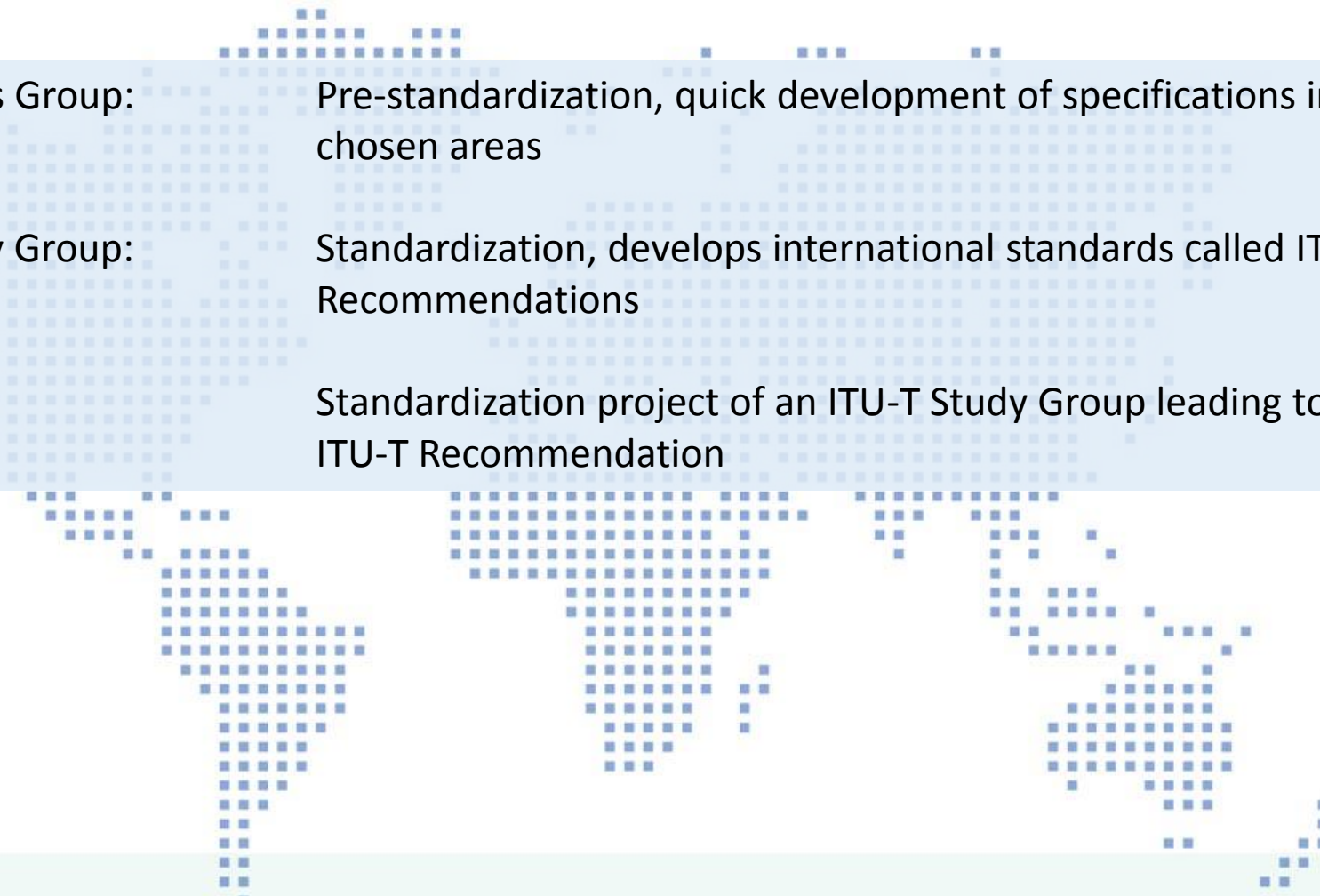


0 | *Terminology*

ITU-T Focus Group:	Pre-standardization, quick development of specifications in chosen areas
ITU-T Study Group:	Standardization, develops international standards called ITU-T Recommendations
Work item:	Standardization project of an ITU-T Study Group leading to an ITU-T Recommendation

1 | *Where we are coming from / Where we are today*

ITU-T standardization activities in the field of distributed ledger technologies are manifold.

Report on **DLT and financial inclusion** of the Focus Group on Digital Financial Services.⁽¹⁾

Focus Group on Application of Distributed Ledger Technology (FG DLT) to

- Identify and analyse DLT-based applications and services;
- Draw up best practices and guidance, which support the implementation of those applications and services on a global scale;
- Propose a way forward for related standardization work in ITU-T Study Groups, i.e., develop a standardization roadmap for interoperable DLT-based services, taking into consideration the activities underway in ITU, other SDOs, forums and groups.

Participation in FG DLT is **open to any interested party**, and the first meeting will take place in **Geneva, 17-19 October 2017**.⁽²⁾

2 | *Where we are today*

ITU workshop on security aspects of blockchain (March 2017)⁽³⁾ led to **Study Group 17 (Security)** new Question 14: Security aspects of DLT⁽⁴⁾

Tasks include:

- Produce a set of standards providing comprehensive security solutions for DLT-based applications and services
- Study and identify PII protection issues and threats in DLT-based applications and services

Current DLT work items:

- Security architecture for DLT
- Security capabilities and threats of DLT
- Privacy and security considerations for using DLT data in identity management
- Security assurance for DLT
- Security threats and requirements for digital payment services based on DLT
- Security services based on DLT
- Security threats to online voting using DLT

Study Group 13 (Future networks)

- Scenarios and capability requirements of blockchain in next generation network evolution⁽⁵⁾

Study Group 16 (Multimedia)

- Requirements for distributed ledger services⁽⁶⁾

Study Group 20 (IoT, smart cities and communities (SC&C))

- Framework of blockchain of things as decentralized service platform⁽⁷⁾

Focus Group on data processing and management to support IoT + SC&C⁽⁸⁾

- Overview of IoT and blockchain
- Blockchain-based data exchange and sharing
- Using blockchain to improve data management

Focus Group on digital fiat currency⁽⁹⁾

- Use of DLT to support digital fiat currency for financial inclusion

3 | *Considerations for cooperation*

ITU has a global membership comprising the 193 UN member states, as well as 700+ ICT organizations and academic and research institutions.

ITU-T is a **consensus-based** and **contribution-driven** SDO. All groups, work items discussed in this presentation were established following due process and on the basis of technical contributions / proposals submitted by the ITU membership.

ITU-T standards are **published free of charge** on the ITU webpage. Participation in the Focus Groups mentioned here is **open to any interested party**. Most meetings allow for **remote participation**.

ITU-T has category-A liaison status with ISO TC307, and ITU-T initiatives working on DLT intend to leverage this relationship.

ITU-T is regularly reporting its standardization activities – including those on blockchain – to the **Rolling Plan on ICT Standardization**, maintained by the European Commission.



B | References

Further reading:

- 1) https://itu.int/en/ITU-T/focusgroups/dfs/Documents/201703/ITU_FGDFS_Report-on-DLT-and-Financial-Inclusion.pdf
- 2) <https://itu.int/en/ITU-T/focusgroups/dlt/>
- 3) <https://itu.int/en/ITU-T/Workshops-and-Seminars/201703/>
- 4) <https://itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q14.aspx>
- 5) https://itu.int/ITU-T/workprog/wp_item.aspx?isn=14282
- 6) https://itu.int/ITU-T/workprog/wp_item.aspx?isn=14071
- 7) https://itu.int/ITU-T/workprog/wp_item.aspx?isn=14099
- 8) <https://itu.int/en/ITU-T/focusgroups/dpm/>
- 9) <https://itu.int/en/ITU-T/focusgroups/dfc/>

Contact:

Martin Adolph, martin.adolph@itu.int