

Terms of reference of Focus Group Digital Currency including digital fiat currency

1 Background

Mobile money and other digital financial services are becoming one of the main telecommunication/ICT success stories for socioeconomic development of many nations, especially in developing countries. The use of mobile phones for mobile financial services offers opportunities to enhance growth and development. In the meantime, mobile financial services can provide benefits to the telecommunication/ICT industry by making it the indispensable infrastructure for future financial services for everyone.

Digital Fiat Currency (DFC) is a term used by ISO TC68/SC7 for allocating currency code, and is also known as Central Bank issued digital currency used in a whitepaper published by the Bank of England.

Many Central Banks including the Federal Reserve Bank of United States, Bank of England, and People's Bank of China have all stated that they are researching and working on a central bank issued digital currency. Implementations of DFC using different technology and in different phases of deployment have begun, and it is the objective of this Focus Group to include all solutions in the discussions. Like fiat currency in paper form that played a key role for financial inclusion for the past centuries, and continuing doing so, a digital fiat currency must also be accessible by all citizens of a country and could be a catalyst to accelerating interoperability in digital financial services. Telecommunications/ICT infrastructure provide the best platform today that can help central bank issued digital currency to achieve this goal. Digital fiat currency will require even more efficient, secure and seamless interoperable services to be built within the ICT infrastructure.

This Focus Group will address the key challenges of security, interoperability, prevention of counterfeiting and consumer protection/acceptance for digital fiat currency.

2 Terms of reference

The Focus Group will carry out an investigation of the digital fiat currency platforms, focusing on the platform features and characteristics, security challenges to prevent counterfeiting of currencies in digital form and overcome challenges of interoperability with other payment systems.

The ITU-T Focus Group on Digital Currency including Digital Fiat Currency will incorporate expertise and specialist from Central Banks, ICT regulatory authorities, financial institutions, financial service providers, security professional, other standard bodies such as Global Platform and ISO, and academics to address the governance, ICT infrastructure support, and security aspects of Digital Fiat currency and its implication to further the fruit of Financial Inclusion effort currently achieve through ICT projects and solutions. The focus group will analyze ICT solutions and projects in the area of infrastructure services regarding how a secure and interoperable digital instrument and their applications can enhance current financial inclusion solutions and projects in the area of regulatory compliance, security, protocols and processes that ITU-T study groups can standardize, and best practices that could facilitate the implementation of such solutions on a global scale.

This Focus Group will work primarily on Digital Fiat Currency and does not exclusively work or endorse on a single particular solution.

The Focus Group will study the network functionality necessary to support digital fiat currency including network security and protocol requirements as well as interoperability of digital fiat currency with other digital currencies.

2.1 Objectives

The main objectives of the Focus Group are:

- Study the economic benefit and impact of introducing DFC over mobile money;
- Investigate the ecosystem of digital fiat currency implementation for financial inclusion;
- Map the functional network reference architecture and process components required to implement digital fiat currency and integration with existing payment systems for interoperability;
- Identify use cases, requirements and applications of digital fiat currency;
- Develop better understanding of the security, regulatory implications, consumer protection, fraud prevention and counterfeiting issues of DFS and how can digital fiat currency can address these concerns;
- Identify critical sovereign security, transparency and verifiability of DFC technology and provide guidelines towards the escrow of critical software and hardware components to ensure trust and verifiability; and
- Identify new areas for standardization in ITU-T study groups.

2.2 Relationships

This Focus Group will work in close collaboration with all ITU-T and ITU-D study groups especially ITU-T SG 17.

This Focus Group will collaborate with relevant entities, in accordance with Recommendation ITU-T A.7.

These entities include the following: financial institutions, telecommunications regulators, financial regulators, non-governmental organizations (NGOs), policy makers, SDOs , industry forums and consortia (such as ISO TC 68, W3C, etc.), payment systems networks, remittances companies, ICT companies, academic institutions, research institutions and other relevant organizations.

2.3 Specific Tasks and deliverables

The main tasks for the Focus Group will be to:

- Create a repository of documentation of the legal, regulatory and policy aspects of Digital Fiat Currency that serves as the governance foundation.
- Collect and document information on current initiatives from the stakeholders involved in digital fiat currency. This will involve developing use cases, requirements, and identifying exist standards related to digital financial services deployments across the world.
- Perform a gap analysis between the existing ICT infrastructure services and what is required by a seamless interoperable DFC solution.
- Perform a gap analysis on the work that was completed on DFS, the ongoing work in ISO TC 307, and other ongoing work in digital financial services.

- Collect best practices and lessons learned from existing efforts in achieving interoperability among different payment systems by the integration of traditional payment systems with digital fiat currency.
- Investigate use cases of architecture and ICT infrastructure used for implementation of digital fiat currency.
- Undertake an assessment of the benefits and lessons learned of implementations of existing digital fiat currency technology, focusing on the impact of digital fiat currency on enhancing security and interoperability in digital financial services to advance financial inclusion.
- Undertake an assessment of current security standards and best practices from other standards bodies and industry consortia that are applicable to the different components of an ICT infrastructure using digital fiat currency.
- Investigate current standardization work in digital fiat currency to identify areas which could be standardized in ITU-T.
- The Focus Group shall send its deliverables to the parent group, at least four calendar weeks before the parent group meeting.

The main deliverables of the Focus Group are as follows:

- Collect documentation that provides a reference foundation to the governance aspects of Digital Fiat Currency from the Central Bank and regulator perspective.
- Report on best practices and guideline on policy and processes to ensure the sovereign security, transparency and verifiability of critical technology components.
- Report on the possible economic benefit and impact of DFC on mobile payment eco-system.
- Develop definitions of terminologies and taxonomy for digital fiat currency and its ecosystem.
- Report on digital fiat currency ecosystem, describing the role and responsibilities of various stakeholders and uses cases for financial inclusion.
- Report on interoperability scenarios for digital fiat currency implementation.
- Develop a security architecture and reference model for implementation of digital fiat currency.
- Report on use cases for digital fiat currency and integration framework with existing payment systems for interoperability and consumer protection.
- Report on use cases for big data analytics in digital fiat currency implementation.
- Report on ICT security and governance reference model for digital fiat currency and assurance framework for compliance.
- Report on new areas for standardization in ITU-T study groups.
- Organize thematic workshops and events in order to collect inputs from various stakeholders.

2.4 Parent group

The parent group is TSAG.

2.5 Leadership

See clause 2.3 of Recommendation ITU-T A.7.

2.6 Participation

See clause 3 of Recommendation ITU-T A.7. A list of participants will be maintained for reference purposes and reported to the parent group.

It is important to mention that the participation in this Focus Group has to be based on contributions and active participations.

2.7 Administrative support

See clause 5 of Recommendation ITU-T A.7.

2.8 General financing

See clauses 4 and 10.2 of Recommendation ITU-T A.7.

2.9 Meetings

The frequency and location of meetings will be determined by the Focus Group and the overall meetings plan will be announced as soon as possible. The Focus Group will use remote collaboration tools to the maximum extent, and collocation with existing meetings to the maximum extent. The meetings will be announced by electronic means (e.g., e-mail and website, etc.) at least four weeks in advance.

2.10 Technical contributions

Contributions are to be submitted at least twelve calendar days before the meeting takes place.

2.11 Working language

The working language is English.

2.12 Approval of deliverables

Approval of deliverables shall be taken by consensus.

2.13 Working guidelines

See clause 13 of Recommendation ITU-T A.7.

2.14 Progress reports

See clause 11 of Recommendation ITU-T A.7.

2.15 Announcement of Focus Group formation

The formation of the Focus Group will be announced via TSB Circular to all ITU membership, via the ITU-T Newslog and other means, including communication with the other involved organizations.

2.16 Milestones and duration of the Focus Group

The Focus Group lifetime is two years from the first meeting, but extensible by decision of the parent group if necessary.

The first meeting of the Focus Group is planned to be in the fourth quarter of 2017.

2.17 Patent policy

See clause 9 of Recommendation ITU-T A.7.
