

Security of Digital Financial Services (DFS)

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ITU Digital Finance & Inclusion Journey

ITU-T
TELECOMMUNICATIONS STANDARDIZATION SECTOR OF ITU

Y.2741
(01/2011)

SERIES Y: GLOBAL INFORMATION INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS AND NEXT-GENERATION NETWORKS
Next Generation Networks – Security

Architecture of secure mobile financial transactions in next generation networks

Recommendation ITU-T Y.2741

ITU FOCUS GROUP DIGITAL FINANCIAL SERVICES: MAIN RECOMMENDATIONS

ITU-T FOCUS GROUP ON DIGITAL FINANCIAL SERVICES

FIGI symposium
29 November - 1 December 2017
Bengaluru, India
#financialinclusion

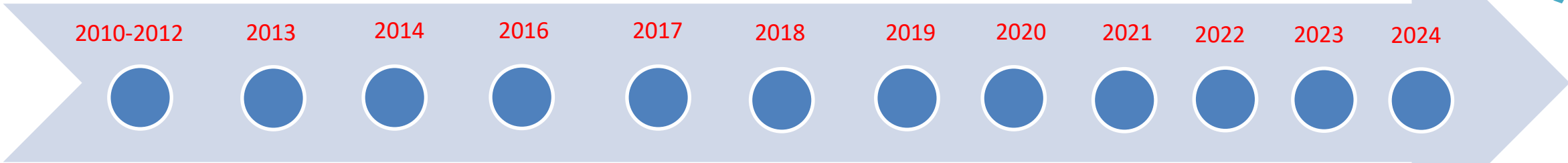
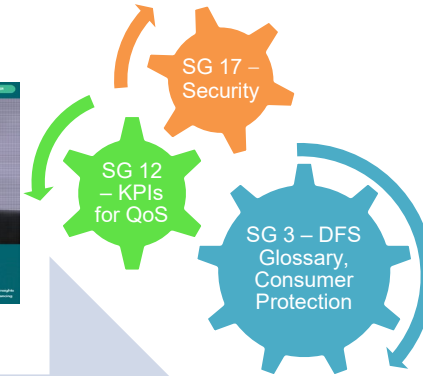
FIGI FINANCIAL INCLUSION GLOBAL INITIATIVE

FIGI Symposium
22-24 January 2019
Cairo, Egypt

FIGI FINANCIAL INCLUSION GLOBAL INITIATIVE

FIGI Symposium 2021
13 May - 24 June

In 2017, 1.7 billion adults worldwide were unbanked. Of those, 1.1 billion have a mobile phone.



The Mobile Money Revolution
Part 2: Financial Inclusion Enabler
ITU-T Technology Watch Report
May 2013

Tech Watch Report Mobile Money

FOCUS GROUP
Digital Currency including Digital Fiat Currency
Standards for digital fiat currency for financial inclusion

#DigitalFinanceITU

Res. 89

wtsa.16
TUNISIA

WORLD TELECOMMUNICATIONS STANDARDIZATION ASSEMBLY
25 OCTOBER - 3 NOVEMBER
HAMMAMET, TUNISIA

Workshop on standardizing Digital Fiat Currency and its Applications
18 - 20 July 2018
New York City, USA

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Cornell University

Digital Currency Global Initiative

ITU Events
Insights on Digital Financial Services during COVID-19 Webinar Series

ITU DFS Security Lab

For a common approach for regulators, developers and DFS providers to test DFS mobile apps in a complex mobile ecosystem in order to provide clarity on the level of assurance on security agent systems, collaborations.

Lab objectives

- Collaborate with DFS regulators on DFS security
- Perform DFS security audits of DFS Apps
- Organize security ethics
- Assess DFS capabilities to evaluate the cyber preparedness for DFS ecosystem
- Knowledge sharing on threats to security of DFS apps

Resources

- Security testing for USSD and STK
- Security audit of Android DFS apps using OWASP mobile top 10 risks
- Developer resources for strong authentication using FIDO

Get in touch

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Security by Design

DFS Security Recommendations

The [DFS Security Recommendations](#) contain the following specific guidelines that may be adopted by regulators

1. Model Memorandum of Understanding between a Telecommunications Regulator and a Central Bank Related to Security for Digital Financial Services
2. Recommendations to mitigate SS7 vulnerabilities
3. Recommendations for securing mobile payment apps
4. Recommendations for operators and regulators for SIM card risks such as SIM swap fraud and SIM card recycling.



Guidance to mitigate SIM fraud

1. Regulatory coordination between telco and DFS regulator on SIM vulnerabilities. - e.g. An MOU between the DFS regulator and Telecom regulator
2. Standardization by regulators of SIM swap rules amongst MNOs/MVNOs - including SIM swaps leading to porting of numbers to other MNOs/MVNOs
3. Recommending security measures for MNOs on SIM risks



DFS Security Lab - Objectives



Collaborate with regulators to adopt DFS security recommendations



Perform **security audits** of mobile payment apps (USSD, Android and iOS)



Encourage adoption of **international standards on DFS security**



Organise **security clinics & Knowledge transfer** for Security Lab



Assist regulators to **evaluate the cyberresilience of DFS critical infrastructure**



Networking platform for regulators for knowledge sharing on threats and vulnerabilities