

A Regulatory Diagnostic Toolkit (RDT)

for

Analysing the Regulatory Frameworks for
Digital Financial Services (DFS) in Emerging Markets

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- JUNE 2018 -



ACKNOWLEDGEMENTS

The research funding for this project was provided by the Australian Research Council (ARC) and the United Nations Capital Development Fund (UNCDF) through Linkage Project 150100269.

This toolkit was developed by the UNSW DFS Research Team. Background on UNSW DFS Research Team can be found [here](#). We would like to thank the UNCDF organisations – the Mobile Money for the Poor (MM4P) and the Pacific Financial Inclusion Programme (PFIP) for their invaluable assistance in developing this toolkit. We would also like to thank Better Than Cash Alliance (BTCA), Consultative Group to Assist the Poor (CGAP) and Bankable Frontier Associates (BFA) for their comments and feedback during the drafting process. Thanks also to Colin Picker for his editorial comments. All responsibility is the authors’.

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ACRONYMS

Acronyms

AFI	Alliance for Financial Inclusion
AML	anti-money laundering
ATM	automated teller machine
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BTCA	Better Than Cash Alliance
CDD	consumer due diligence
CFT	countering the financing of terrorism or combating the financing of terrorism (also referred to as counter-terrorism financing or CTF)
CGAP	Consultative Group to Assist the Poor
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payment and Settlement Systems
DFS	digital financial services
EFTPOS	electronic funds transfer at point of sale
G20	Group of 20
G2P	government-to-person
GPFI	Global Partnership for Financial Inclusion
ICT	information and communications technology
IFC	Irving Fisher Committee on Central Bank Statistics
KYC	know your customer
MFI	microfinance institution
MM4P	Mobile Money for the Poor
MNO	mobile network operator
OCC	Office of the Comptroller of the Currency
PFIP	Pacific Financial Inclusion Programme
POS	point of sale
RDT	Regulatory Diagnostic Toolkit
SSB	standards-setting body
UNCDF	United Nations Capital Development Fund
UNSW	University of New South Wales
USAID	United States Agency for International Development
WDI	World Development Indicators

THE REGULATORY DIAGNOSTIC TOOLKIT IN A NUTSHELL

Digital financial services (DFS) are not new. What is new is the focus on how to promote the use of DFS to improve financial inclusion. This Regulatory Diagnostic Toolkit (RDT) provides a **framework for financial regulators to analyse their regulatory regimes** in order to identify barriers and/or remove gaps to DFS adoption and to promote financial inclusion.



*An ideal state of financial inclusion would require
'universal access to a wide range of financial services that
can be used when and as needed.'*

.....
– The Bank for International Settlements and World Bank Group



THE RDT WAS DESIGNED TO HELP FINANCIAL REGULATORS
REALISE THE FOLLOWING **FIVE OUTCOMES**:

1

Reduced entry barriers for digital payment services and other retail financial services

2

Levelled playing field and flexibility in the market to promote innovation

3

Effective, yet proportionate approach to consumer protection

4

Sustained rapid growth and large-scale volumes

5

Access to market information for providers along with data security and privacy for customers

THESE SEVEN RDT SUBJECT DOMAINS CAPTURE THE MAIN REGULATORY ISSUES CONNECTED TO DFS:



Overall regulatory architecture

This domain aims to depict an overview of the country's DFS regulatory regime and helps identify and assess factors that give rise to barriers/gaps preventing the adoption of DFS in relation to dimensions of regulatory mandate, capacity and coordination



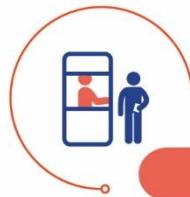
Building the ecosystem

This domain examines dimensions that concern the regulators' intention and capacity to implement enabling regulation so as to build a sustainable DFS ecosystem. These dimensions include competition, innovation, consumer demand, financial literacy, interoperability, partnerships, and public access to market data



Protection of funds

This domain assesses the country's regulatory regime for protecting the e-money funds, and evaluates whether these regimes effectively protect customers' funds from insolvency, liquidity and operational risks



The use of agents

This domain examines the existing regulatory and contractual arrangements with regard to the use of agents, the allocation of liability, and the management of credit, liquidity and consumer risk that may arise among the provider, agent and customer



Consumer protection

This domain assesses the effectiveness of the country's financial consumer protection framework in the following dimensions: regulatory mandate, industry codes, product disclosure, recourse mechanisms, use of agents and digital delivery of financial services. It is expected that in emerging markets a proportionate approach is taken, which means one that takes into consideration local context and the costs of the framework for regulators, providers and consumers are proportionate to the risks



AML/CFT

This domain evaluates how well the country is doing in terms of balancing the implementation of proportionate anti-money laundering/countering the financing of terrorism (AML/CFT) measures and the promotion of financial inclusion. Dimensions assessed include the use of a risk-based approach, the adoption of simplified consumer due diligence (CDD), transaction monitoring and reporting and new approaches to AML/CFT



Data privacy

This final domain reviews the country's regulatory and contractual mechanisms concerning the protection of customers' data and privacy. Four dimensions are considered: the rights of individuals to privacy and data protection; the sharing of customers' financial information among financial services providers; the use of customers' credit information; and dispute resolution and recourse mechanisms for consumers to redress misuse of data and infringement of privacy

THESE FOUR RDT PHASES COMPOSE THE PROCESS:

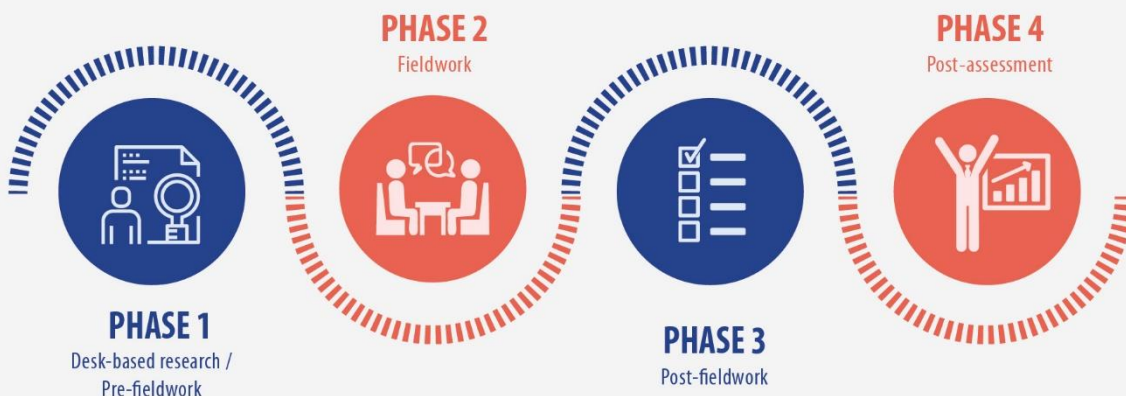


TABLE OF CONTENTS

Acronyms	4
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1. Background and Introduction	8
What the RDT does	8
Improved financial inclusion and DFS	8
Improved policy development will advance financial inclusion	9
Philosophy underpinning the RDT and its application	10
The RDT and international best practices for financial inclusion	11
Pilot of the RDT	12
2. Methodology for the RDT	13
3. Applicability and use of the RDT	14
4. Content of the RDT	15
5. Process for applying the RDT	18

Annexes

Annex A: RDT - Subject Domains and Subsidiary Issues for Consideration	22
Subject Domain – Overall Regulatory Architecture	22
Subject Domain – Building the Ecosystem	23
Subject Domain – Protection of Funds	25
Subject Domain – Regulating the Use of Agents	25
Subject Domain – Consumer Protection	26
Subject Domain – AML/CFT	26
Subject Domain – Data Privacy/Protection	27
Annex B - Checklist for Documents/Information Needed Prior to Fieldwork	29
Annex C – Resources	32

1. BACKGROUND AND INTRODUCTION

What the RDT does

This Regulatory Diagnostic Toolkit (RDT) provides a **framework of analysis for financial regulators to use to assess their regulatory regimes** to identify barriers and gaps preventing the adoption of Digital Financial Services (DFS).¹ After applying the RDT financial regulators will be well-positioned to determine whether their country has an enabling, and risk-based regulatory system in terms of DFS. With digital technology transforming the financial services industry, it is imperative, now more than ever, that financial regulators are well-equipped to regulate and supervise the provision of DFS.

The RDT, and the method of applying it, have been designed to be consistent with **international best practice** and to this end an expected outcome of using the RDT is an improved capacity of financial regulators to develop and promote **optimal linkages between financial inclusion, financial stability, financial integrity and consumer protection**.² The application of the RDT will also call for a **data-driven evidence-based approach** to underpin the policy development process. Accordingly, another expected outcome of using the RDT is an **improved policy development process** due to the identification of critical data gaps prior to the formalisation and endorsement of policy reforms. **Development partners** will also be able to use the results of the RDT to understand the legal and regulatory barriers and gaps faced by a country and to develop a consensus on how to prioritise assistance to the country.

Improved financial inclusion and DFS

The number of adults in the world without access to financial services has dropped from 2.5 billion in 2011 to 1.7 billion in 2017; 69 per cent of adults now have some form of financial services account compared to 62 per cent three years ago.³ However, there is still much to be done to cover those who remain excluded and to ensure financial services accounts do not lay dormant.⁴ DFS can be used to reach the financially excluded.⁵ Financial inclusion and DFS are important means to an end: access to, and use of, formal financial services provides economic empowerment and raised standards of living for individuals and broader benefits for economic development.⁶

¹ A 'regulatory regime' refers to both the tools (legislation/regulations/guidelines) and the use of these tools (oversight/supervision/market-monitoring).

² Stefan Staschen, 'Inclusion, Stability, Integrity, and Protection: Observations and Lessons for the I-SIP Methodology from Pakistan' (Report, CGAP, 2014) 42;

³ 'Financial Inclusion and the Linkages to Stability, Integrity and Protection: Insights from the South African Experience' (Report, CGAP, 2012) (these two CGAP documents are referred to together in this toolkit as 'CGAP I-SIP Methodology').

⁴ Asli Demirgüç-Kunt, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018, 'The Global Findex Database 2017: Measuring Financial Inclusion and the FinTech Revolution' Washington, DC: World Bank, xi and 4. <<https://globalfindex.worldbank.org/>>.

⁵ Elisabeth Rhyne and Sonja Kelly, 'Is Financial Inclusion Stalling? The 2017 Findex Results Raise Several Red Flags', Next Billion Blog, 14 June 2018, <<https://nextbillion.net/is-financial-inclusion-stalling-the-2017-findex-results/>>

⁶ DFS refer to all kinds of financial services accessible using digital platforms. These financial services include traditional products such as basic transaction accounts, savings, credit, insurance and investment, and more recent innovative products such as mobile money as well as virtual (including cryptographic) currencies. Digital platforms refer to platforms used to conduct transactions and access financial services. Examples of digital platforms include card payment networks, electronic funds transfer systems, mobile money systems and cryptocurrency platforms. DFS contrast with cash payments or traditional financial services accessed through physical means, such as visiting a bank branch or writing a cheque. DFS providers include banks, other authorised financial institutions, mobile network operators and other payments service providers. These providers make use of consumers' access to telecommunications networks and the internet using devices such as mobile phones, tablets and point-of-sale devices. These providers also rely on agent networks as opposed to bank branch networks.

⁷ Izabela Karpowicz, 'Financial Inclusion, Growth and Inequality: A Model Application to Colombia' (Working Paper No WP/14/166, International Monetary Fund, September 2014); Era Dabla-Norris et al, 'Identifying Constraints to Financial Inclusion and Their Impact on GDP and Inequality: A Structural Framework for Policy' (Working Paper No WP/15/22, International Monetary Fund, January 2015); Alicia García-Herrero and David Martínez Turégano, 'Financial Inclusion, Rather than Size, is the Key to Tackling Income Inequality' (Working Paper No 15/05, BBVA, February 2015).

An ideal state of financial inclusion, as pointed out by the Bank for International Settlements (BIS) and World Bank Group, would require ‘universal access to a wide range of financial services that can be used when and as needed’.⁷ Any regulatory initiative that aims to advance financial inclusion, therefore, must first take into account the objective of promoting universal access to transaction accounts⁸ and focus on addressing difficulties and barriers which may prevent the achievement of that objective.

Payment services are fundamental to such universal access as they not only serve as ‘gateways to other financial services’⁹ but also facilitate the efficient provision of those services.¹⁰ Therefore, the existence of ‘efficient, accessible and safe retail payment systems and services’¹¹ is considered a precondition for advancing financial inclusion. At a minimum, this means all individuals and businesses should be able to access and use at least one transaction account operated by a regulated payment service provider to perform most of their payment needs, safely store some value, and use that account to access other financial services.¹²

Improved policy development for DFS will advance financial inclusion

Universal access to transaction accounts must be addressed from several angles with the involvement of a range of stakeholders. There are no straightforward solutions. There is no silver bullet. Strong and clear commitment from all public and private stakeholders, adequate legal and regulatory frameworks, robust information and communications technology infrastructure, needs-satisfying transaction account products, readily available access points, greater financial literacy and sustainable volumes of payment streams are all conducive to financial inclusion.¹³ Not all of these core elements are within the financial regulators’ sphere of influence. In particular, the most basic and fundamental infrastructure required for successful and sustained financial inclusion such as electricity, telecommunications networks, roads and public transport are certainly not within the control of financial regulators.

Financial regulators are aware of the constraints on their efforts to promote successful financial inclusion strategies. They know they must work to implement the strategies in parallel with other government agencies responsible for addressing the broader key infrastructure issues on which the success of financial inclusion relies.¹⁴ The RDT does not purport to solve these challenges of public policymaking. However, the RDT does equip financial regulators to be the local champions in their respective countries for driving successful and sustained financial inclusion.

Financial regulators know that the advances in financial inclusion in recent years have been supported by the rising global penetration of digital technology.¹⁵ For this reason, these regulators are already adopting an advocacy role in order to mobilise other regulators and government bodies involved in financial inclusion matters to focus on the development of ‘DFS ecosystems’.

⁷ BIS and World Bank Group, ‘Payment Aspects of Financial Inclusion’ (April 2016), 4.

⁸ Transaction accounts are defined to include accounts (including e-money and prepaid) held with banks or other authorised and/or regulated payment service providers, which can be used to make and receive payments and to store value. See *ibid* 2, 65.

⁹ *Ibid* 2.

¹⁰ *Ibid* 4.

¹¹ *Ibid* 2.

¹² *Ibid*.

¹³ *Ibid* 56-61.

¹⁴ Other government agencies include, but are not limited to, Ministry of Finance, telecommunications regulators, agencies in charge of ICT policy, and regulators for nationwide competition and consumer protection matters.

¹⁵ It is recognised by SSBs that the potential for financial products to be offered via digital platforms is significant. These developments introduce new market participants and allocate roles and risks in different ways as compared with traditional delivery of retail financial services. Global Partnership for Financial Inclusion, ‘Global Standard-Setting Bodies and Financial Inclusion: The Evolving Landscape.’ (White Paper. Washington, D.C.: CGAP. License: Creative Commons Attribution CC BY 3.0, March 2016) 9-10.

Focusing on the 'DFS ecosystem' means promoting the use of DFS to improve financial inclusion.¹⁶ However, the new providers and newly banked customers that come with the adoption of digital technology for financial services create new challenges for financial regulators. Financial regulators must be alert not only to the tremendous opportunities afforded by digital technology, but also the possible risks and hazards.¹⁷

In emerging markets, where the regulators' roles are already stretched in terms of limited resources and capacity, the regulatory environment is now becoming more challenging and complex as a direct result of advancements in digital technology. There is an expanded range of products and services available to the previously unbanked or underbanked consumers, and these products and services are now provided by a wide range of entities and not simply banks or non-bank financial institutions. While the opportunities with digital technology for financial inclusion are immense, financial regulators may require guidance and support on how best to respond to these rapid changes. The application of the RDT and the resulting observations and findings provide a clear framework that offers this guidance and support.

Philosophy underpinning the RDT and its application

Security and efficiency of the retail payment market are typically two of the principal objectives pursued by the regulator.¹⁸ The former ensures the market's trustworthiness and enhances people's acceptance and uptake of retail payment services provided by nonbanks.¹⁹ The latter is often achieved by reducing barriers to entry for new players. Regulators in different jurisdictions adopt varying approaches to pursue these two objectives.

One approach could be described as proactive as it aims to predict future market developments and prescribe corresponding regulations *ex ante*.²⁰ However, such an approach is likely to subject the market to the risk of innovation-stifling overregulation. Another approach is to 'wait-and-see' and 'let the market grow'. Under this approach regulators only formally act when specific market developments have emerged.²¹ A third approach, which is gaining momentum in developed countries and can be considered as a sub-type of the 'wait-and-see' approach, is to implement interim light-touch regulatory arrangements such as a regulatory sandbox.²²

Unlike the pure form of 'wait-and-see', a sandbox allows regulators to get involved in the early stages, not by *ex ante* and potentially premature regulation, but by collaborating with firms to experiment with new products or services in a controlled environment. Application of a regulatory sandbox often involves the granting of industry-wide or entity-specific waivers or the issuance of no-action letters.²³ Notwithstanding that the term 'regulatory sandbox' became popular relatively recently, similar outcomes have traditionally been engineered through the issuance of no-objection letters or the launch of regulatory pilot programs, on an ad hoc basis, in a number of countries.

On balance, the second or the third of these approaches are preferable as the price of overregulation is often very high. The potential drawback of these approaches is that when market developments

¹⁶ This is also called 'digital financial inclusion' and is defined by the GPFI Markets and Payment Systems Sub-Group to refer 'broadly to the use of digital financial services to advance financial inclusion. Digital financial inclusion involves using digital means to reach financially excluded and under-served populations with a range of formal financial services suited to their needs, delivered responsibly at a cost affordable to the customer and sustainable for the providers.' World Bank Group's Payment System Development Group, BTCA, and AFI for the G20 GPFI, 'Innovative Digital Payment Mechanisms Supporting Financial Inclusion Stocktaking Report' (2015) 15 ('GPFI Stocktaking Report').

¹⁷ Digital technology facilitates market entry by new providers who innovate in the means by which traditional services are delivered. Similarly, the digital technology is accessible and used by people who may have limited experience with financial services, let alone financial services provided digitally.

¹⁸ BIS, 'Innovations in Retail Payments' (May 2012) 37.

¹⁹ Ibid.

²⁰ Ibid. As pointed out by the BIS, one example was the E-Money Directive of 2000 adopted by the EU. 'In hindsight, however, this measure has turned out to be a barrier to innovation by setting overly strict legislative hurdles.' That directive was consequently revised in 2009 to allow for less stringent requirements.

²¹ Ibid.

²² The 'regulatory sandbox' in the context of financial services regulation was arguably first proposed by the UK's Financial Conduct Authority in its report entitled 'Regulatory Sandbox' published in November 2015. Financial Conduct Authority, 'Regulatory Sandbox' (November 2015) < <https://www.fca.org.uk/your-fca/documents/regulatory-sandbox> >. This approach is currently tested and practised in a number of markets such as Australia and Singapore. For instance, see ASIC, "Fintech: ASIC's Approach and Regulatory Issues", paper to the 21st Melbourne Money & Finance Conference (July 18-19, 2016) 10-12 ('ASIC Fintech Paper').

²³ ASIC Fintech Paper, Ibid.

occur, the regulators might not be able to react sufficiently swiftly.²⁴ Therefore, regular monitoring and routine assessment of the market conditions and regulatory capacity to respond are essential. Any guidance and support provided to regulators should therefore have as a key prerequisite a current assessment of market conditions and of regulatory capacity prior to applying the RDT. A focus on policy development which is data-driven and evidence based also provides the basis for an improved capacity of regulators to respond with policy reforms when necessary.

The RDT and international best practices for financial inclusion

There are numerous forums and tools available to financial regulators to assist with the focus on developing and supporting DFS ecosystems. For example, the Alliance for Financial Inclusion provides assistance to countries launching national financial inclusion strategies and the Better Than Cash Alliance (BTCA) undertakes similar work and has, for example, developed general diagnostic tools such as the *Ecosystem Diagnostics Toolkit*.²⁵ There is also considerable work being done by international standards-setting bodies (SSBs) to promote the integration of financial inclusion objectives into standards and guidance. This work is being led by the Global Partnership for Financial Inclusion (GPFI).²⁶ Most recently CGAP released its report providing evidence on “Basic Regulatory Enablers for Digital Financial Services”.²⁷ The RDT should be viewed as a support tool for alignment with these international standards, strategies and initiatives.

The RDT provides an analytical framework for conducting an improved policy development process which is firmly grounded in data-driven evidence-based research. The goals of this analytical framework can be summarised as:

1. Reduced barriers to entry for digital payment services and other retail financial services;
2. A level playing field and flexibility in the market to promote innovation;
3. An effective yet proportionate approach to consumer protection;
4. Sustained rapid growth and large-scale volumes of operations and underlying transactions;²⁸ and
5. Access to market information for providers while ensuring security and privacy of customer data.

The RDT has been designed to help regulators realise these outcomes and align with international best practice.²⁹ Nonetheless, the RDT does not presume that regulators in every jurisdiction will want to pursue all of these objectives, and political factors present in different jurisdictions may prevent regulators from pursuing any of these objectives.

It is important for financial regulators to be confident in the structure of their regulatory regimes and to review and revise these regimes in conjunction with the broader market systems approach.³⁰ Sound and responsive regulation is fundamental for providing people with the trust and confidence to use formal financial services and products. Trust and confidence are required to make investors, service providers and consumers genuinely interested in being part of the financial system.

²⁴ BIS, above n. 18, 38.

²⁵ See, eg, the Alliance for Financial Inclusion's Financial Inclusion Strategy Peer Learning Group: *Financial Inclusion Strategy Peer Learning Group (FISPLG)*, Alliance for Financial Inclusion <<http://www.afi-global.org/about-us/how-we-work/about-working-groups/financial-inclusion-strategy-peer-learning-group-fisplg>>. The Better Than Cash Alliance has a number of toolkits available at: *Toolkits*, Better Than Cash Alliance <<https://www.betterthancash.org/tools-research/toolkits>>.

²⁶ Global Partnership for Financial Inclusion, 'Global Standard-Setting Bodies and Financial Inclusion: The Evolving Landscape.' (White Paper. Washington, D.C.: CGAP. License: Creative Commons Attribution CC BY 3.0, March 2016) <http://www.gpfi.org/sites/default/files/documents/GPFI_WhitePaper_Mar2016.pdf>. G20 High-level Principles for Digital Financial Inclusion have also been endorsed at the Hangzhou Summit.

²⁷ Stefan Staschen and Patrick Meagher, 'Basic Regulatory Enablers for Digital Financial Services' CGAP Focus Note, No. 109, May 2018, <<http://www.cgap.org/publications/basic-regulatory-enablers-digital-financial-services>>.

²⁸ As pointed out by the GPFI Stocktaking Report, it is important to 'have the capacity to scale up payment innovations and leverage their benefits for larger volumes of payments' if innovations are to help advance financial inclusion. Above n 16, 14.

²⁹ For instance, Guiding Principle 2 of the BIS report 'Payment Aspects of Financial Inclusion' states that '[t]he legal and regulatory framework underpins financial inclusion by effectively addressing all relevant risks and by protecting consumers, while at the same time fostering innovation and competition.' This implies that consumer protection, innovation and competition are all important to the development of retail payment systems. Above n 7, 57-58.

³⁰ Deena Burjorjee and Barbara Scola, 'A Market Systems Approach to Financial Inclusion: Guidelines for Funders' (Report, CGAP, 2015).

Pilot of the RDT

The RDT was piloted 'in-country' in 2016. The RDT was refined and adjusted as a result of the pilot. The main lessons learned from the pilot suggest that early and extensive collaboration among domestic regulators, consultants and local champions from international donor agencies promotes the diagnostic process itself. Collaboration underpins the process of domestic regulators understanding and engaging in the RDT process and the recommendations that emerge from it.

This paper is organised as follows:

- Section 1, this section, is the background and introduction;
- Section 2 summarises the methodology for the RDT;
- Section 3 explains for which countries the RDT is most applicable;
- Section 4 details the content of the RDT;
- Section 5 describes the method of applying the RDT in a country (referred to as the Target Country);
- Annex A accompanies Section 4. It details the Subject Domains and list of issues within each domain which may be considered in the review of regulatory regimes to identify barriers and gaps preventing the adoption of DFS;
- Annex B accompanies Section 5 and contains the Checklist for Documents/Information needed prior to commencing the fieldwork phase of the regulatory diagnostic; and
- Annex C lists resources used in developing the RDT and this paper.

2. METHODOLOGY FOR THE RDT

The RDT provides assistance to financial regulators wanting to focus specifically on legislative and regulatory issues associated with DFS. The RDT begins with an assessment of the current market situation, where it is headed, and the regulator's objectives for the market.³¹ Using this assessment as a guide for expected outcomes, the RDT then provides a **framework of analysis for regulators to use to assess their regulatory regimes** to identify and/or remove barriers to, and gaps in, the adoption of DFS.³²

The RDT aims to support regulators navigating their way towards compliance with current standards of SSBs while simultaneously responding to the opportunities that DFS present for financial inclusion and economic growth. To this end, an expected outcome of using the RDT is an improved capacity of regulators to promote **optimal linkages among financial inclusion, financial stability, financial integrity and consumer protection**.³³

Observations and findings from the application of the RDT will also focus on whether there is a data-driven evidence-based approach underpinning the policy development process. This will ensure there is an improved policy development process due to the identification of critical data gaps prior to the formalisation and endorsement of policy reforms.

Regulatory barriers and gaps are identified by:

- understanding in detail the policy and regulation development approach of regulators and the importance of local context (discussed further below);
- using the RDT to systematically review all relevant legislation and regulation pertaining to DFS;
- gathering data and documents which support existing or planned policy;
- interviewing regulators to understand how policies and regulations are developed if there is an absence of data or other evidence; and
- interviewing relevant stakeholders to understand how they are affected by existing and proposed legislation and regulation (or lack thereof).

Barriers can include but are not limited to: prohibitions on new players piloting the provision of DFS without a licence; licensing arrangements for new players which discourage new entrants; or weak or fragile regulatory capacity for the implementation and enforcement of well-intended regulation. Legislation and regulations to be analysed in the RDT include those related to banking and payments, and, more generally, policy and legislation that directly impact the uptake of DFS, including anti-money laundering, competition, data protection, data privacy and consumer protection laws and regulations.

³¹ In addition to BTCA's Ecosystem Diagnostics Toolkit, the GPFI Stocktaking Report on 'Innovative Digital Payment Mechanisms Supporting Financial Inclusion' also provides a good conceptual framework that helps regularly assess market developments and new innovations. GPFI Stocktaking Report, above n 16, 11.

³² In this paper, a 'regulatory regime' refers to both the tools (legislation/regulations/guidelines) and the use of these tools (oversight/supervision/market-monitoring). See above n 1.

³³ CGAP I-SIP Methodology, above n 2.

3. APPLICABILITY AND USE OF THE RDT

The RDT is designed for financial regulators who are implementing national financial inclusion strategies or who want to ensure the regulatory framework is conducive to DFS innovation.³⁴

Prior to applying the RDT, the financial regulators in the relevant jurisdictions must first articulate the current market situation and where they wish to position themselves in relation to DFS. The group of experts, responsible for applying the RDT in the Target Country (the 'Diagnostic Team'), will then conduct interviews with the financial regulators and stakeholders to understand the current policy making processes and establish whether there are gaps in the evidence by way of data or documentation which could support the policy and regulatory decisions. The RDT then focuses on the issues that will need to be addressed for the financial regulators to achieve their DFS goals. Financial regulators which have implemented national financial inclusion strategies should be able to identify readily the current market situation and how they want DFS to develop in their country.

The RDT has been designed for financial regulators to use as an objective means of assessing, reviewing and refining regulatory frameworks that support DFS. It is a tool to enhance regulatory capacity. The RDT can be refined over time so that it continues to meet the purpose of assisting regulators to support DFS ecosystems.

³⁴ It is assumed that the financial regulators most interested in the application of the RDT for their country would be the regulators who are responsible for overseeing the country's financial system, including the payments system, and whose regulatory measures would have direct implications for the development of DFS.

4. CONTENT OF THE RDT

The RDT has seven subject domains to capture the main regulatory issues connected to DFS. Each subject domain contains a subsidiary list of issues for financial regulators to consider when assessing how well their regulatory regime supports the development of the DFS ecosystem. These subject domains and subsidiary lists of issues have been compiled in consultation with UNCDF (including MM4P and PFIP), BTCA and CGAP and build on earlier versions of regulatory diagnostics.³⁵

Financial regulators are not expected to address each subject domain comprehensively in their regulatory regime. Rather, the subject domains provide a structured approach to assessing a regulatory regime so that the main regulatory issues connected with DFS are considered and not inadvertently overlooked. Each country will have its own local context which influences both ideas about how the DFS ecosystem should be developed and how regulatory regimes should address the various risks associated with DFS. This local context (e.g. regulation and market structure) is important to maintain relevance for the country in which the RDT is being applied. In other words, assessments using the RDT must align with local definitions of success and the regulators' visions and objectives. The RDT does not seek to produce a generic approach to the regulation of DFS throughout the world. Regulations work best when they are specific to the needs and realities of a country. The data/evidence gathering exercise assists regulators to decide which of the seven domains they might best address first. The diagnostic exercise will also assist development partners to have perspective and reach consensus on prioritising different regulatory issues facing a country which is wanting to focus on legislative and regulatory issues associated with DFS.

In summary the RDT seeks to encourage regulators to set and prioritise regulatory objectives in terms of how they want DFS to develop in their country, and then, using the available data, to determine how far the current regulatory regime is away from those objectives. This can also be thought of as a regulator's level of 'regulatory preparedness' for having a regulatory framework which is conducive to DFS and improving financial inclusion.

³⁵ See Annex A and C of this Toolkit on the subsidiary issues and complementary resources for consideration. See also digital financial services diagnostics in West Africa: Tenzin Keyzom Ngodup, *Digital Financial Services Diagnostics in West African Fragile States Guinea, Liberia and Sierra Leone* (1 April 2016) UNCDF <<http://www.uncdf.org/en/digital-financial-services-diagnostics-west-african-fragile-states-guinea-liberia-and-sierra-leone>>.

The seven subject domains are:



1. Overall Regulatory Architecture

This domain aims to depict an overview of the country's DFS regulatory regime and helps identify and assess factors that give rise to barriers/gaps preventing the adoption of DFS in relation to dimensions of regulatory mandate, capacity and coordination.



2. Building the Ecosystem

This domain examines dimensions that concern the regulators' intention and capacity to implement enabling regulation so as to build a sustainable DFS ecosystem. These dimensions include competition, innovation, consumer demand, financial literacy, interoperability, partnerships, and public access to market data.



3. Protection of Funds

This domain assesses the country's regulatory regime for protecting the e-money funds, and evaluates whether these regimes effectively protect customers' funds from insolvency, liquidity and operational risks.



4. The Use of Agents

This domain examines the existing regulatory and contractual arrangements with regard to the use of agents, the allocation of liability, and the management of credit, liquidity and consumer risk that may arise among the provider, agent and customer.



5. Consumer Protection

This domain assesses the effectiveness of the country's financial consumer protection framework in the following dimensions: regulatory mandate, industry codes, product disclosure, recourse mechanisms, use of agents and digital delivery of financial services. It is expected that in emerging markets a proportionate approach is taken, which means one that takes into consideration local context and the costs of the framework for regulators, providers and consumers are proportionate to the risks.



6. AML/CFT

This domain evaluates how well the country is doing in terms of balancing the implementation of proportionate anti-money laundering/countering the financing of terrorism (AML/CFT) measures and the promotion of financial inclusion. Dimensions assessed include the use of a risk-based approach, the adoption of simplified consumer due diligence (CDD), transaction monitoring and reporting and new approaches to AML/CFT.



7. Data Privacy

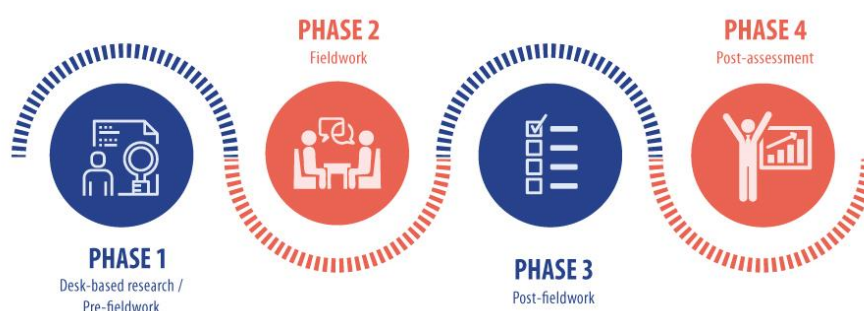
This final domain reviews the country's regulatory and contractual mechanisms concerning the protection of customers' data and privacy. Four dimensions are considered: the rights of individuals to privacy and data protection; the sharing of customers' financial information among financial services providers; the use of customers' credit information; and dispute resolution and recourse mechanisms for consumers to redress misuse of data and infringement of privacy.

Annex A details the subsidiary list of issues for each subject domain.

5. PROCESS FOR APPLYING THE RDT

The Diagnostic Team is responsible for applying the RDT in a country. During the pilot of the RDT in 2016, the functions of the Diagnostic Team were carried out by the UNSW Digital Financial Services Research Team in coordination and consultation with UNCDF represented by MM4P and PFIP. In addition to being used to carry out regulatory diagnostics by the Diagnostic Team, it is also expected that the RDT may be used by financial regulators to initiate and undertake their own assessment, with some support, as necessary, from outside consultants or local specialists of international development organisations. Self-diagnosis without outside support could be particularly difficult, as the regulators who carry out the diagnostic may be constrained in terms of capacity and resources. The challenges in coordinating matters outside of a financial regulator's direct control must also be taken into consideration when considering implementation of the recommendations arising from the diagnostic.

The method used to apply the RDT has four phases. These phases are outlined below.



Phase 1 - Desk-Based Research – Pre-Fieldwork

During Phase 1 the Diagnostic Team will:

- 1.1. produce a background **context paper**;
- 1.2. conduct **preliminary briefings** with the lead regulator(s) and development partners;
- 1.3. complete a **checklist** of required background information and documents; and
- 1.4. **prepare for the interviews** during Phase 2.

The Diagnostic Team undertakes research on the Target Country context. The objective of this phase is to work with financial regulators to ensure a clear understanding of the current state of the market and the legal and regulatory landscape. The desk-based research will seek to clarify the specific policy and regulatory objectives for DFS (for example, those stated in the national strategy, if available) and the regulator's vision for the DFS ecosystem.

- 1.1. A **context paper** prepared by the Diagnostic Team will address: an overview of the financial sector, the Target Country's financial inclusion policies, the existing legal and regulatory frameworks, the telecommunications infrastructure and mobile phone penetration, the general access to finance in the Target Country, the state of play of DFS, challenges to DFS growth and initiatives to promote DFS. The context paper will provide the background for the Diagnostic Team to have informed discussions during fieldwork (Phase 2), and, after extensive revision to reflect all that has been learned from the in-country fieldwork, it will be incorporated into the final Target Country diagnostic report.
- 1.2. A **preliminary briefing** will be scheduled with the lead financial regulator(s) regarding the scope and purpose of the research. Preliminary contact with development partners will also be sought at this stage to ascertain previous, current and planned development assistance pertaining to DFS. These briefings will be done either via email exchange or phone conference. One objective of the preliminary briefing with the lead regulator(s) will be to start discussions on the regulatory objectives to later appropriately gauge the level of 'regulatory preparedness' (see discussion above in Section 4 on 'regulatory preparedness').
- 1.3. A **checklist** of required background information and documents is completed by the Diagnostic Team. Local facilitators (such as UNCDF (MM4P and PFIP)) typically play a critical role by assisting with this task. The checklist is forwarded to the relevant regulators so they may assist in its completion with the objective of developing a thorough understanding of the Target Country context (an example of this checklist is attached in Annex B).
- 1.4. **Interviewees** for fieldwork will be **determined** in this phase. Interviewees will be chosen in consultation with the lead regulator and are drawn from both government and private sectors. Private sector interviews will be sought with MNOs, banks, medium sized service providers, payment aggregators, agent network managers, e-money institutions, microfinance institutions (MFIs), etc. Phone consultation with local facilitators (such as UNCDF and PFIP) will be conducted.

The **schedule of interviews** will be set prior to the commencement of fieldwork. Additional time will be allocated (i) to facilitate follow-up on various issues with key stakeholders, as they arise, and (ii) to interview additional relevant parties identified in the course of the fieldwork.

Interview questions will be based on the desk research undertaken and structured using the seven subject domains. Interview questions will also be aimed at helping the Diagnostic Team understand the regulatory rule- and decision-making process and evidence base behind intended regulatory initiatives. The subject domains and subsidiary list of issues are *not* expected to be completely, or exhaustively, addressed. These domains and subsidiary issues serve to focus research in a structured and comprehensive manner: during Phase 2 the interviewers will refer to these issues to guide their questions, and the issues may be highlighted throughout the course of the interviews if relevant to the local context. **This is important because it is not expected that a regulator should address every subsidiary issue in each domain, nor should interviewees be given the impression that the lead regulator will be moving to a regulatory regime that looks to address every issue noted in the RDT.**

Phase 2 - Fieldwork

During Phase 2 the Diagnostic Team will:

- 2.1. organise an **opening meeting** with the lead regulators;
- 2.2. conduct **interviews** with entities identified in Phase 1;
- 2.3. have discussions with the lead regulators' **legal counsel**; and
- 2.4. organise the **second meeting** with the lead regulator and development partners.

2.1. The Diagnostic Team will commence the fieldwork with an **opening meeting** with the lead regulator. The scope and purpose of the research will be explained again and clarification will again be sought on the regulator's understanding of the current state of the market and the specific policy and regulatory objectives for DFS (i.e. those stated in any national strategy (if available), including the data and documentary evidence underpinning the policies) and the regulator's vision for the DFS ecosystem. It is considered important to cover this ground again at the beginning of fieldwork and in a face-to-face meeting because this contributes towards ensuring the Diagnostic Team truly understands how the regulator perceive their current position and how they want DFS to develop in the Target Country.

2.2. The Diagnostic Team will then proceed to conduct **interviews** with the entities identified in Phase 1. The interviews will aim to provide the Diagnostic Team with a deeper and more comprehensive understanding of existing regulatory approaches with respect to DFS and to identify regulatory barriers to further adoption of DFS and any gaps in current DFS regulation. Interviews with government bodies will focus on understanding their respective roles in relation to the provision of DFS. Private sector interviews will focus on understanding local issues, interviewees' business plans and any regulatory issues (perceived and actual) that may need to be addressed from an industry perspective to support market development. Interviews with local representatives of development partners will also be sought for an update on development assistance related to DFS.

Questions are asked and information is gathered throughout the interviews using the seven subject domains. As noted above (see Phase 1), the subject domains and subsidiary list of issues serve to focus discussions in a structured and comprehensive manner; they are not a fixed set of questions and they do not all need to be answered. Only questions and issues relevant to the local context will be raised.

This stage involves discussions with a large number of interviewees. The interviews aim to provide a nuanced picture of the Target Country's local context so as to deepen the Diagnostic Team's understanding of existing regulations and how these regulations are being implemented from the perspective of both the regulator and the regulated. ***It is critical that the application of the RDT allows for robust consultation with industry stakeholders.***

2.3. It is important to engage with the **legal counsel** of the lead regulator(s) early in the fieldwork. The legal counsel is crucial in providing an applied understanding of the relevant laws and regulations and up-to-date information and guidance on how to interpret the laws and regulations and how they are being applied in practice.

2.4. Prior to the completion of fieldwork, time will be allocated to meet the local development partners and the lead regulator(s) once more. The purpose of the **second meeting** with development partners is to report and reflect on what has been learned from fieldwork interviews. The purpose of the **second meeting** with the lead regulator is to discuss general matters of interest raised during the interviews and to confirm the regulator's view on how they want DFS to develop in the Target Country, and how they plan to coordinate with other regulators and government bodies to move in that direction, given what has been learned from the interviews. It is likely that during the course of interviews, the interviewers will have gained a deeper understanding of the local context. The interviewers should be in a better position to understand gaps in data-driven evidence and reasons for the barriers and gaps in the existing regime. This deeper level of understanding should result in better discussions with local development partners and regulators, to assist the lead regulator(s) in identifying what needs to be done to achieve their desired position in respect of DFS.

Phase 3 - Post-Fieldwork

During Phase 3 the Diagnostic Team will:

- 3.1. **assess the information** gathered;
- 3.2. **present its findings** to the Target Regulators and other stakeholders; and
- 3.3. prepare a **preliminary report**.

- 3.1. The Diagnostic Team **assesses the information** gathered against the understanding of the regulator's goals in relation to DFS. Time will be allocated for requesting extra information identified as necessary or clarifying issues raised in the interviews.
- 3.2. Observations and **findings** will be **presented** to the lead regulator and other key stakeholders with the focus on addressing barriers or gaps preventing the regulatory regime from supporting the realisation of the vision of the regulator. Gaps in data-driven evidence will be communicated to UNCDF for their further assessment and investigation. It may be that a discrete project is necessary, or another development partner or source of expertise needs to be brought into the process, to address these evidential gaps. The lead regulator will then be asked to consider the actions they want to pursue and the means to be used to achieve their objectives.
- 3.3. A **preliminary report** will be prepared detailing the research findings and proposing the next steps for the regulator. This report will be submitted to the regulator for comment. This phase entails close collaboration between the regulator and the Diagnostic Team so as to ensure a clear understanding of the recommendations and the feedback from the regulator.

Phase 4 - Post-Assessment

This phase involves the preparation of a final report by the Diagnostic Team in consultation with the lead regulator. Ideally the final report is then presented for industry consultation and plans for implementation of the recommendations are formulated.

ANNEX A: RDT - SUBJECT DOMAINS AND SUBSIDIARY ISSUES FOR CONSIDERATION

Note: The subject domains, and issues for consideration within each domain, provide a framework for conducting the diagnostic work in a structured and comprehensive manner. There is no compulsion or expectation to completely, or exhaustively, address all domains or all issues within a domain. The purpose of the framework is to identify barriers and gaps in a regulatory regime preventing the adoption of DFS, as relevant in the local context.

Subject Domain – Overall Regulatory Architecture

Dimensions	Issues for Consideration
Responsibilities of Regulators	<ol style="list-style-type: none"> 1. How does the law prescribe the lead regulator(s) for DFS? 2. How are the responsibilities and objectives of each regulator defined in the law? 3. What efforts are made to ensure market participants understand the responsibilities of the regulators for DFS? 4. Does the relevant regulatory framework accommodate DFS and financial inclusion generally?
Regulatory Mandate	<ol style="list-style-type: none"> 1. How are non-financial firms that wish to provide DFS treated? Do they need to be registered or licensed, or to establish a separate legal entity to seek registration or a licence to operate?³⁶ 2. What powers are given to regulators to review the activities of DFS providers (and their affiliated companies) to determine the risks such activities may pose to the safety and soundness of the supervised institution and the wider financial system?³⁷ 3. Which aspects of DFS lie outside the competencies of regulators and can only be addressed in a statute?
Regulatory Capacity	<ol style="list-style-type: none"> 1. What resources and training in relation to DFS are provided to frontline supervisors? 2. Are supervisors responsible for overseeing multiple types of institutions? For example, is oversight and supervision activity-focused or provider/technology-neutral? 3. What is done with the reports/data received from regulated institutions? <ol style="list-style-type: none"> a) How is the information collated by the regulator (e.g. manually or automatically uploaded into databases)? b) How is the information analysed? c) How do supervisors follow-up on issues identified from information reported?

³⁶ Basel Committee on Banking Supervision, 'Guidance of the Application of the Core Principles for Effective Banking Supervision to the Regulation and Supervision of Institutions Relevant to Financial Inclusion' (Consultative Document, Bank for International Settlements, December 2015) 15.

³⁷ Ibid 15–17.

Regulatory Coordination	<ol style="list-style-type: none"> 1. What are the arrangements in place to ensure cooperation and collaboration among domestic and foreign authorities responsible for the regulation and supervision of DFS?³⁸ 2. What are the processes for cooperation and coordination between the payment system overseer and other regulatory authorities such as the prudential regulator, market conduct regulator, competition authority, financial consumer protection authority and the finance ministry?³⁹ 3. What is the consultation process among the relevant authorities for the drafting of regulations and guidelines for institutions supervised by more than one authority?⁴⁰
Payments Oversight versus Prudential Supervision	<ol style="list-style-type: none"> 1. What is the role of payment system overseer with respect to the provision of DFS? 2. What laws govern the payment system and payment service providers (i.e. definition, registration and licensing requirements, and eligibility to be a payment service provider)? 3. Does payment legislation/regulation define retail payments to include e-money and agent networks? 4. What are the arrangements for coordination between prudential supervisors and payments overseers?

Subject Domain – Building the Ecosystem

Dimensions	Issues for Consideration
Regulatory Intention	<ol style="list-style-type: none"> 1. What is the involvement of regulators in supporting the ecosystem for DFS? 2. What is the national strategy to coordinate financial inclusion efforts? 3. What regulatory actions have been taken to promote agent networks?
Competition	<ol style="list-style-type: none"> 1. How is competition promoted? Are anti-competitive practices prohibited? Are there specific rules (e.g. statutes) on the matter?⁴¹ 2. How does the law ensure that the incumbents do not create undue barriers to entry and that entrants can have equal access to information and infrastructure needed to provide DFS?⁴² 3. Are there rules which prohibit rivals from colluding with each other with the purpose or effect of hindering the competitive process? 4. Does the law define the role and power of financial, telecommunications and competition regulators in protecting and promoting competition in the DFS sector?⁴³ 5. How is the issue of regulatory arbitrage between regulated and non-regulated providers of DFS being addressed?
Innovation	<ol style="list-style-type: none"> 1. Are the regulators structured such that their approach is flexible and they can promote or support innovation in DFS? <i>Supplemental questions:</i> <ol style="list-style-type: none"> a. Does there exist a unit within the financial regulators that serves as their central point of contact on DFS promotion or innovation more generally, providing a channel of communication so industry can seek guidance from the regulator prior to product development and launch? b. Are there mechanisms which allow institutions to test new products and services on a small scale prior to licensing being required? c. Is there a focus on streamlining the licensing procedures for providers of DFS?⁴⁴ 2. What steps have been taken to ensure the regulators foster an internal culture supportive of innovation in DFS?⁴⁵ <i>Supplemental questions:</i>

³⁸ Ibid 6–7.

³⁹ Ibid 7.

⁴⁰ Ibid 7, 35.

⁴¹ CGAP, 'Branchless Banking Diagnostic Template' (February 2010) 21.

⁴² See Ibid 22.

⁴³ Ibid.

⁴⁴ Office of the Comptroller of the Currency, 'Supporting Responsible Innovation in the Federal Banking System: An OCC Perspective' (March 2016) 5-6.

⁴⁵ Ibid 6-7.

	<ol style="list-style-type: none"> a. Do the regulators have a sufficient level of background knowledge, adequate staffing of subject domain experts (or fiscal resources to hire these experts to do the evaluation for them)? b. Is there sufficient continuing education/training to help equip regulators with the expertise needed?
Consumer Demand	<ol style="list-style-type: none"> 1. Is there, or might there be, any dialogue between the regulators and Treasury to encourage the use of digital financial systems for G2P payments given that G2P payments are a particularly effective means of introducing consumers to DFS? 2. What research or surveys have been undertaken by the regulators to enhance their understanding of customer/end-user demand and perceptions of DFS? 3. Is there data available to facilitate an understanding of the evolution of DFS among regulated and non-regulated providers?
Financial Literacy	<ol style="list-style-type: none"> 1. Do regulators see a need to support financial literacy programs to drive regular use of DFS products? 2. Are regulators actively involved in financial literacy programs? 3. What mechanisms exist to improve financial literacy on issues of DFS? 4. Do the regulators encourage providers to incorporate financial literacy training in product launches?
Interoperability	<ol style="list-style-type: none"> 1. How do the regulators view their role in facilitating interoperability among DFS providers? 2. Are there regulator-driven industry discussions or arrangements in place for exploring interoperable and interconnected systems (i.e. interoperability of platforms and interoperability of agents)?
Partnerships	<ol style="list-style-type: none"> 1. What methods do the regulators use to assess partnerships between banks and non-banks in providing and delivering DFS? 2. How do the regulators expect regulated entities to manage collaboration risk arising from partnerships?
Access to Market Data	<ol style="list-style-type: none"> 1. Which institution collects data relating to financial inclusion?⁴⁶ Is the current data collection framework supported by adequate resources?⁴⁷ 2. Does the current data collection framework on financial inclusion separately identify financial services delivered via digital means? If yes, what types of data have been collected and from what sources? 3. Do regulators use the data collected to measure the success of the strategies to support DFS and financial inclusion? 4. Does the current data collection framework cover non-bank financial service providers such as post offices, microfinance institutions, savings groups or telecommunications companies? If yes, what types of data have been collected and from which sources?⁴⁸ 5. Does the current data collection framework face any challenges? These may include the cost of demand-side surveys, or insufficient integration of data collection process with national statistical frameworks.⁴⁹ 6. Is there a need for the regulators to share data with other government bodies and supervisory authorities?⁵⁰ If yes, is the data currently being shared and through what arrangements? 7. Do regulators disclose or publish the data they have collected? If yes, how often and through what medium and format? 8. Might there be excessive requirements for provision of data? Have DFS providers been overwhelmed with data requests? Have the purposes of data provision requirements (such as risk analysis or industry evolution) been established?

⁴⁶ Irving Fisher Committee on Central Bank Statistics, 'Measures of Financial Inclusion – A Central Bank Perspective' (Bank for International Settlements, 2016) 33 (Appendix 2).

⁴⁷ Ibid.

⁴⁸ Ibid 36.

⁴⁹ Ibid 33.

⁵⁰ Ibid 39.

Subject Domain – Protection of Funds

Dimensions	Issues for Consideration
Deposits	<ol style="list-style-type: none"> 1. Does the law clearly define the scope of deposits and what types of entities may engage in deposit taking? 2. If there is a deposit insurance scheme in place, what is its scope? And, specifically, does it cover customers' e-money funds? 3. Are there different levels of licensing, registration and supervision based on different risk levels as a result of the nature of the deposit-taking entity, account balance limits or channels through which deposits are taken?
E-Money	<ol style="list-style-type: none"> 1. Does the law clearly define e-money and what types of entities may engage in e-money issuance? 2. Is there a regulatory regime in place for non-banks to issue e-money? 3. Are there legal or regulatory arrangements in place to safeguard customers' funds from insolvency, liquidity and operational risk of the e-money issuer? Has there been consideration of adopting approaches other than relying on trust arrangements to protect funds such as the EU approach – choosing either to ensure funds are not commingled or funds are covered by an insurance policy?⁵¹ 4. What is the regulators' view on how the interest accrued on the e-money float should be used?

Subject Domain – Regulating the Use of Agents

Dimensions	Issues for Consideration
Use of agents	<ol style="list-style-type: none"> 1. Do retail payment regulations allow banks and payment service providers to provide payment services through agent networks? 2. Are regulatory obligations with respect to the use of agents placed on the principal rather than the agent itself? 3. Do regulators concern themselves with what type of entities may be agents? 4. Does a notification regime exist for the use of agents, in contrast to a registration or licensing regime? 5. Does the law allow for agent sharing between different DFS providers? 6. Do the regulators oversee the business of agents and have inspection powers? 7. Do the regulators receive reports on agent activity? What is the frequency of such reporting?
Agent services	<ol style="list-style-type: none"> 1. Does the law require principals to be responsible for the actions of their agents in relation to DFS? 2. How do the regulators satisfy themselves that credit or liquidity risk which may arise between the provider, agent and customer is adequately managed?
Agent compensation	<ol style="list-style-type: none"> 1. Is there any legal or contractual arrangement in place to ensure that agents are not able to add additional fees and charges to customers' transactions?

⁵¹ For example, Article 10 (1) of the Revised Directive on Payment Services (PSD2) provides that 'The Member States or competent authorities shall require a payment institution which provides payment services as referred to in points (1) to (6) of Annex I to safeguard all funds which have been received from the payment service users or through another payment service provider for the execution of payment transactions, in either of the following ways: (a) **funds shall not be commingled at any time with the funds of any natural or legal person other than payment service users on whose behalf the funds are held and**, where they are still held by the payment institution and not yet delivered to the payee or transferred to another payment service provider by the end of the business day following the day when the funds have been received, **they shall be deposited in a separate account in a credit institution or invested in secure, liquid low-risk assets as defined by the competent authorities of the home Member State**; and they shall be insulated in accordance with national law in the interest of the payment service users against the claims of other creditors of the payment institution, in particular in the event of insolvency; (b) **funds shall be covered by an insurance policy or some other comparable guarantee from an insurance company or a credit institution**, which does not belong to the same group as the payment institution itself, for an amount equivalent to that which would have been segregated in the absence of the insurance policy or other comparable guarantee, payable in the event that the payment institution is unable to meet its financial obligations.' Full text of the PSD2 available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L2366>.

Consumer Protection	<ol style="list-style-type: none"> 1. Are agents provided with training in relation to any consumer protection and disclosure requirements which apply to their principal – be it either a bank or non-bank? Are they required to explain the mechanisms for redress? 2. Do agents play a role in enhancing consumers' financial literacy for DFS?
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Subject Domain – Consumer Protection

Dimensions	Issues for Consideration
Mandate	<ol style="list-style-type: none"> 1. Does the responsibility for consumer protection rest with one regulator? 2. If there are different regulators in charge of consumer protection matters, how do they coordinate enforcement mechanisms and the creation of a level playing field? 3. Do the regulators tasked with consumer protection have a clear consumer protection supervisory mandate for each type of DFS provider? 4. Do the regulators tasked with consumer protection have powers to carry out enforcement actions? 5. How do the regulators tasked with consumer protection undertake market monitoring, off-site supervision, and on-site supervision?
Industry Codes	<ol style="list-style-type: none"> 1. How do the regulators make use of existing industry codes? For example, the regulators may ask regulated entities which codes they have signed up to and to demonstrate how they are complying with those codes.⁵²
Disclosure	<ol style="list-style-type: none"> 1. Is clear product disclosure assessed by the regulators? 2. Do regulators seek to ensure that product disclosure makes it clear who consumers approach for recourse?
Recourse	<ol style="list-style-type: none"> 1. Are DFS providers required to have a dedicated internal complaints handling department and to publish contact details and procedures for complaints handling? 2. Are DFS providers required to record complaints received from consumers and their outcomes? If yes, are DFS providers required to report these details to the regulators? 3. Is there an ombudsman, or a similarly independent body, with whom consumers can lodge complaints? 4. Are procedures for recourse clear, easy to understand, available and affordable? 5. Are recourse mechanisms regularly tested or used?
Agents	<ol style="list-style-type: none"> 1. How do consumer protection arrangements apply to agents?
Digital Delivery	<ol style="list-style-type: none"> 1. How do consumer protection requirements extend to digital methods of delivering financial services? 2. Do existing supervisory arrangements include reviewing business continuity plans to minimise disruptions due to technology and infrastructure problems?

Subject Domain – AML/CFT

Dimensions	Issues for Consideration
Risk-Based Approach	<ol style="list-style-type: none"> 1. How does the law provide for the use of a risk-based approach to implementing AML/CFT measures? 2. How do the regulators identify and assess the ML/TF risks posed by DFS?

⁵² Codes include the SMART campaign [Client Protection Principles](#) and GSMA's [Code of Conduct for Mobile Money Providers](#).

Remote Account Opening permitted	1. Does the law allow agents to open accounts for customers prior to providers' verifying identification documents?
Simplified versus Enhanced CDD	<ol style="list-style-type: none"> Does the law permit the use of simplified consumer due diligence (CDD) where risks are lower? If yes, then: <ol style="list-style-type: none"> are identification, verification and monitoring less intensive and less formal under simplified CDD? are clear procedures in place for institutions to decide when simplified CDD can be used? Is flexible or tiered KYC allowed? How are AML/CFT rules enforced through agents?
Transaction monitoring and reporting	<ol style="list-style-type: none"> How do the regulators review providers' procedures for transaction monitoring, record keeping and reporting of suspicious transactions? Is a systematic approach used for investigating information from suspicious transaction reports?
New approaches to AML/CFT	1. What plans, if any, are in place with respect to using new technologies/approaches such as biometric identification to improve identification of ML/FT?

Subject Domain – Data Privacy/Protection

Dimensions	Issues for Consideration
Individual's Rights	<ol style="list-style-type: none"> Does the law respect and protect the rights of individuals to privacy and data protection?⁵³ Does the law require consumer authorisation or consent for the collection, sharing and use of personal information by financial services providers and other non-bank DFS providers?⁵⁴ How does the law provide for individuals to be sufficiently informed about the processing and use of their personal data and about their corresponding rights?⁵⁵ What mechanisms does the law provide for an individual to object to the processing and use of information concerning him or her? If yes, is the right to object restricted in any way (e.g. when an objection can be made only when based on certain grounds permitted by the law)?⁵⁶ How do regulators make customers aware of the issues regarding data privacy in the context of DFS?
Information Sharing	<ol style="list-style-type: none"> How does the law govern the use, storage and sharing of customers' financial information by banks, nonbanks, such as mobile network providers, or other types of non-financial institutions?⁵⁷ How does the law govern information sharing among banks and nonbanks?⁵⁸
Credit Information	<ol style="list-style-type: none"> Is there a credit bureau to collect customer information and provide consumer credit information?⁵⁹ Does the law allow the collection of both positive and negative customer credit information and address the use of credit information by credit bureaus?⁶⁰ Does the law govern who can have access to credit bureaus' databases and on what terms?⁶¹

⁵³ European Data Protection Supervisor, 'Guidelines on Data Protection in EU Financial Services Regulation' (November 2014) 6-9.

⁵⁴ Ibid 13-15.

⁵⁵ Ibid 18-19.

⁵⁶ Ibid 20.

⁵⁷ CGAP, above n 41, 26.

⁵⁸ Ibid 25.

⁵⁹ Ibid 26-27.

⁶⁰ Ibid.

⁶¹ Ibid.

Dispute Resolution and Recourse

1. Does the law require DFS providers to retain records of all services and transactions undertaken for a certain period of time?⁶² If yes, how is such period defined?
2. How does the law require DFS providers to implement appropriate measures to protect personal data against accidental or intentional destruction, alteration, unauthorised disclosure, and all other illegitimate forms of processing?⁶³
3. Are dispute resolution and recourse mechanisms in place for consumers to redress misuse of personal data and infringement of personal privacy? How do these mechanisms operate?⁶⁴

⁶² European Data Protection Supervisor, above n 53, 15.

⁶³ Ibid 21.

⁶⁴ Ibid 22.

ANNEX B: CHECKLIST FOR DOCUMENTS/INFORMATION NEEDED PRIOR TO FIELDWORK

Note:

This checklist is to be completed prior to fieldwork - FIRST by the Diagnostic Team and SECOND by the lead regulator for DFS.

Initial responses to this checklist have been completed, where possible, with information obtained from the Diagnostic Team's desk-based research and other sources such as local facilitators, FinScope, WDI, the World Bank's Global Financial Inclusion (Global Findex) database, etc.

Where responses require the attachment of additional information, please itemise this information using Annex numbers or hyperlinks if available online.

It is requested that the lead regulator for DFS coordinates with the relevant stakeholders to check the initial responses completed by the Diagnostic Team and complete any remaining items in this checklist.

The completed checklist should be forwarded to the Diagnostic Team (contact details of Diagnostic Team to be provided at the time of requesting the lead regulator to assist with the checklist's completion:

Diagnostic Team contact details:

Name:

Title:

Organisation:

Email:

Documents/Information Required		Response	Annex/Hyperlink
Legal Documents (for each law and regulation - include details on both those currently in force as well as upcoming or proposed changes)	1. Laws and regulations (i.e. pertaining to Digital Financial Services (DFS) , such as regulations that govern e-money, mobile banking or digital payment services).		
	2. Laws and regulations that govern consumer protection .		
	3. Laws and regulations that govern AML/CFT .		
	4. Laws and regulations that govern data privacy of customers in banking or finance.		
	5. Laws and regulations that govern deposit taking activities		
Key Organisations and Contact Details	6. Names and contact details of key regulatory staff for: - banking; - non-bank financial institutions; - payments systems and payments service providers; - mobile network operators; - telecommunications; - market conduct / consumer protection; and - Regulator(s) for competition.		
	7. Names and products of the main DFS providers in the country, along with contact details of the DFS provider staff who oversee the compliance, technical and marketing aspects for products and services.		
	8. Names of industry organisations – both government and non-government – with activities relating to DFS, along with contact details of key staff in these organisations.		
	9. Names of development partners involved in activities which may affect DFS, along with contact details of key staff in these organisations.		
	10. Names of institutions (such as the postal service) permitted to provide money transfer services , if any, along with contact details of those in charge of compliance, technical and marketing aspects for these services.		
Strategic Planning related to DFS	11. Financial inclusion strategies or DFS strategies which have been undertaken in recent years. <i>Identify and provide an overview of any upcoming or proposed changes/revisions and superseding strategies.</i>		
	12. Customer/end-user demand surveys which have been carried out on DFS.		

	<p>13. Retail payment systems and channels (e.g., agent network, e-wallets, and cards at POS) which are interoperable or are to be made interoperable.</p> <p>Provide:</p> <ul style="list-style-type: none"> a) the name of each system/channel, b) the type of transactions processed in each system/channel, c) the level of interoperability, and d) the role of the regulators in facilitating the interoperability and any specific laws that empower the regulators to mandate interoperability. 		
Data	<p>14. Data:</p> <ul style="list-style-type: none"> a) Population; b) Rural population; c) Financial inclusion rate;⁶⁵ d) Bank account penetration;⁶⁶ e) Gross Domestic Product per capita; f) Gross National Income per capita; g) Mobile phone penetration; h) Bank branches and percentage of which are in the capital/largest city; i) Bank ATMs and percentage of which are in the capital/largest city; j) Bank EFTPOS terminals and percentage of which are in the capital/largest city; k) Branchless banking agents and percentage of which are in the capital/largest city;⁶⁷ l) Electronic payments in relation to total payments (%; value); m) Payments by payer and payee (both electronic and non-electronic) (Government, Business, Person) (%; value); and n) Transactions (%; value) conducted via: <ul style="list-style-type: none"> i. internet; ii. mobile phones; iii. EFTPOS; iv. ATMs; v. agents; vi. branches; and vii. other channels. 		

⁶⁵ Number and percentage of people in the country who use financial services of any type.

⁶⁶ Number and percentage of people in the country who use bank deposit accounts.

⁶⁷ This number provides an indication of points-of-access to branchless banking/digital financial services – however, there may be some double counting for agents who represent two or more banks, unless banks are able to indicate how many of their agents are exclusive at time of the data being collated.

ANNEX C: RESOURCES

- Louise Malady, Ross Buckley and Cheng-Yun Tsang, 'Regulatory Handbook: The Enabling Regulation of Digital Financial Services' (2015)
- Stefan Staschen and Patrick Meagher, 'Basic Regulatory Enablers for Digital Financial Services', CGAP Focus Note, No. 109 (May 2018) (<http://www.cgap.org/sites/default/files/Focus-Note-Basic-Regulatory-Enablers-for-DFS-May-2018.pdf>)
- CGAP, 'Branchless Banking Diagnostic Template' (2010)
- Asli Demirgüç-Kunt, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018, 'The Global Findex Database 2017: Measuring Financial Inclusion and the FinTech Revolution' Washington, DC: World Bank, xi and 4. <<https://globalfindex.worldbank.org/>>.
- GPFI, 'G20 High-Level Principles for Digital Financial Inclusion' (2016)
- Elisabeth Rhyne and Sonja Kelly, 'Is Financial Inclusion Stalling? The 2017 Findex Results Raise Several Red Flags', Next Billion Blog, 14 June 2018, <<https://nextbillion.net/is-financial-inclusion-stalling-the-2017-findex-results/>>
- GPFI, 'Global Standard-Setting Bodies and Financial Inclusion: The Evolving Landscape' (White Paper, 2016)
- GPFI, 'G20 Principles for Innovative Financial Inclusion' (2010)
- John Villaseñor, Darrell West, and Robin Lewis, 'The 2015 Brookings Financial and Digital Inclusion Project Report' (Brookings Institute Report, 2015)
- BIS documents:
 - Measures of Financial Inclusion – A Central Bank Perspective (IFC, 2016)
 - Payment Aspects of Financial Inclusion (CPMI & World Bank Group, 2016)
 - Guidance on the Application of the Core Principles for Effective Banking Supervision to the Regulation and Supervision of Institutions relevant to Financial Inclusion (BCBS, 2015) ('BIS Financial Inclusion Guidance')
 - Range of Practice in the Regulation and Supervision of Institutions relevant to Financial Inclusion (BCBS, 2015)
 - Non-Banks in Retail Payments (CPMI, 2014)
 - Innovations in Retail Payments (CPSS, 2012)
- GSMA Mobile Money Policy and Regulation Resources (<http://www.gsma.com/mobilefordevelopment/programmes/mobile-money/policy-and-regulation>)
- BTCA, 'Ecosystem Diagnostic Toolkit' and relevant Country Diagnostics
- Kenya School of Monetary Studies, USAID, and Booz Allen Hamilton, 'Mobile Financial Services Risk Matrix' (2010)
- European Data Protection Supervisor, 'Guidelines on data protection in EU financial services regulation' (2014)
- OCC, 'Supporting Responsible Innovation in the Federal Banking System: An OCC Perspective' (OCC White Paper, 2015)
- Innovative Digital Payment Mechanisms Supporting Financial Inclusion - Stocktaking Report (A report by the World Bank Group's Payment System Development Group, the Better Than Cash Alliance, and the Alliance for Financial Inclusion for the G20 Global Partnership for Financial Inclusion)
- CGAP's I-SIP Methodology:
 - Stefan Staschen, 'Inclusion, Stability, Integrity, and Protection: Observations and Lessons for the I-SIP Methodology from Pakistan' (CGAP, 2014)

- 'Financial Inclusion and the Linkages to Stability, Integrity and Protection: Insights from the South African Experience' (CGAP, 2012)
- Template questionnaires developed for UNSW Digital Financial Services Diagnostic Team's Regulation of Mobile Money Project (2013 – 2015) (on file with the authors)

June 2018

United Nations Capital Development Fund and Mobile Money for the Poor

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