National Stakeholder Survey on Maldives capability to implement Central Bank Digital Currency

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Table of Contents

1. Introduction

This report presents the findings of the national stakeholder survey that was conducted to determine the overall capabilities of the Maldives concerning the implementation of Central Bank Digital Currencies (CBDC) and Stable Coins in the country.

The survey was conducted in the private sector, including start-ups or payment services operators that are potential implementers of central bank digital currencies and stablecoin. The purpose of this report is to identify the overall capabilities of the country to implement these technologies.

The survey aims to answer the following questions:

- Identify potential start-ups in the Maldives that could benefit from a Regulatory Sandbox initiative.
- Identify their capacity to implement CBDC and/or stable coin digital currency technologies

The survey aims to examine the country's capability to implement CBDC and stablecoins by evaluating the stakeholder readiness. Furthermore, the survey aims to identify the current industry knowledge, interest and risks associated with implementing CBDCs and stablecoin through the lens of the private sector.

For reporting, an inductive approach has been taken to understand the problem through investigation and develop a set of recommendations.

Due to the limited number of stakeholders, quantitative data collection methods were not ideal for this survey. Hence, the survey was carried out as a qualitative survey by collecting data through interviews and semi-structured questionnaires. The interviews and semi-structured questionnaires were organized to save time but were designed as open-end questions that let the participants build up on the questions and share their opinions, views and thoughts on the subject.

The data collected through interviews and questionnaires were analyzed to identify particular patterns and topics. The topics were established by relying on the observations of answers, contexts and natural actions. Following an inductive approach, the author gathered the interviewees' responses and behaviours to generate a comprehensive understanding of the research subject.

1.1 Central Bank Digital Currency (CBDC)

Central bank digital currency (CBDC) is a digital representation of sovereign currency that is issued by a jurisdiction’s monetary authority such as a central bank and appears on the liability side of the monetary authority’s balance sheet. CBDC is managed on a digital ledger, commonly on a blockchain (a distributed ledger technology), expediting and increasing the security of payments between entities[1].

According to Atlantic Council, an independent think tank based in Washington, DC.a total of 91 countries are exploring issuing a CBDC as of May 2022. Two years ago, in May 2020, this number was 35 countries[2]. As of May 2022, nine countries have launched CBDC projects. This includes several different countries in Eastern Caribbean, the Bahamas and Nigeria.

Use-cases

There is two major use-cases for CBDC[3]:

- **Retail.** Retail CBDCs are equivalent to the digital version of cash and is used for payments between individuals and businesses.

- **Wholesale.** Wholesale CBDCs are used for interbank settlements. Payments between banks and entities that have accounts at the central bank.

Benefits:

Retail	Wholesale
- Digital currencies can be distributed on mobile devices, increasing access and usability for the unbanked. - Due to the digital nature of CBDC, settlements and reconciliation can be faster. - CBDC enables low barriers to entry for new firms in the payment sector, thus fostering competition and innovation.	- With automation and decentralized netting solutions, interbank payments can be settled between counterparties on an individual order basis, reducing the risk of overnight batch processing and collateralization. - CBDC enables end users to benefit from streamlined banking infrastructure and ensures central banks maintain a role in interbank settlement amidst the wider adoption of stablecoin technology.

[1] Deloitte, "An introduction to central bank digital currencies (CBDCs)", 21 September 2021. Available at https://www2.deloitte.com/global/en/pages/financial-services/articles/cbdc-central-bank-digital-currency.html
[2] Atlantic Council, "Central Bank Digital Currency Tracker", 2022. Available at https://www.atlanticcouncil.org/cbdctracker/
[3] Accenture, "CBDC for retail, wholesale and international Payments", 15 January 2021. Available at https://bankingblog.accenture.com/cbdc-retail-wholesale-international-payments

	- CBDC mitigates credit risk in cross-border payment transactions by enabling payment-versus-payment settlement for transfers in different currencies.

1.2 Stable-coins

Stablecoins are cryptocurrencies whose value is pegged or tied to that of another currency, commodity or financial instrument[4]. Stablecoins aims to provide an alternative to the highly volatile cryptocurrencies such as Bitcoin (BTC), Ethereum (ETC), etc.

Stablecoins have more potential as a medium of exchange than other cryptocurrencies not pegged against a financial instrument. There are four main types of stablecoins: Fiat-collateralised stablecoin, Crypto-collateralised stable coins, Algorithmic stablecoins, and commodity-backed Stablecoin[5].

- Fiat-collateralised stablecoins are pegged against a fiat currency such as the US dollar on the 1:1 ratio.
- Crypto-collateralised, unlike fiat-collateralised stable coins, are pegged against a cryptocurrency.
- Algorithmic stablecoins are managed by algorithms and smart contracts to manage the supply of tokens in circulation. They're not pegged against any asset.
- Commodity-based stablecoins are backed by physical assets such as gold.

Use-cases

Stablecoins can be used as a medium of exchange and improve the movement of value between parties, whether it's a peer-to-peer payment, a business-to-business or a consumer-to-business payment.

[4] Investopedia, "Stablecoin", 11 May 2022. Available at https://www.investopedia.com/terms/s/stablecoin.asp
[5] Gemini, "What Are Stablecoins?", 21 June 2022. Available at https://www.gemini.com/cryptopedia/what-are-stablecoins-how-do-they-work#section-how-do-stablecoins-work

- **Money remittance.** Moving money across borders is inefficient and expensive, including complying with assorted global banking facilities[6]. Stablecoins have the potential for these transactions to run on a chain instantly for a fraction of the current cost.
- **The gig economy.** Stable-coin is a potential medium of exchange for freelance workers and micro-payments. With stable-coin, transactions can be done for a lower fee and a fast speed without involving traditional financial institutions[7].
- **Peer-to-peer payments.** For domestic peer-to-peer (P2P) and international payments, stablecoins can be used as a medium of exchange with a lower fee[8].
- **Decentralized Finance / Programmable Money.** Stablecoins hold the potential for new payment innovations through decentralized finance or DeFi, a protocol enabled by the composability and programmability of stablecoins. The DeFi protocol allows collateralized lending, derivatives, asset management and other services[8].

1.3 Regulations

Stablecoins continue to come under scrutiny by regulators, given the rapid growth of the $130 billion market and its potential to affect the broader financial system[9].

In July 2022, The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) published a guideline on stablecoin arrangements, confirming that stablecoins should be regulated as financial market infrastructure alongside payment systems and clearinghouses. The proposed rules focus on stablecoins deemed systemically important by regulators, with the potential to disrupt payment and settlement transactions[10].

2. Survey Findings