United Nations | Department of Economic and Social Affairs

ESCAP Economic and Social Commission for Asia and the Pacific

▶ Regulatory Sandbox Guideline on Central Bank Digital Currency for the Maldives Monetary Authority

Frontier Technology Policy Experimentation and Regulatory Sandboxes in Asia and the Pacific

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ESCAP Economic and Social Commission for Asia and the Pacific

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The Maldives Monetary Authority was established in 1981, under the mandate provided by the *MMA Act (1981).* Up until the second amendment to the MMA Act in 2007, the cabinet minister in charge of the Ministry of Finance and Treasury served as *ex officio* Governor of the MMA, while the State Minister of Finance and Treasury served as the *ex officio* Vice Governor.

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Acronyms

AML	Anti-Money Laundering
CBDC	Central Bank Digital Currency
FinTech	Financial technology
Guideline	MMA CBDC Sandbox Guideline
KYC	Know-your-customer
MMA	Maldives Monetary Authority

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Summary

This Guideline on Regulatory Sandbox for Central Bank and Digital Currency (CBDC) has been developed for the Maldives Monetary Authority (MMA).[1] The primary objective of the guideline is to provide knowledge and capacity to the MMA and its partnered businesses and institutions regulated by the MMA in exploring the possibilities of implementing a Central Bank Digital Currency (CBDC) in a controlled production environment.

This Guideline builds on earlier work of this project including the National Study on Central Bank Digital Currency in the Maldives;[2] the National Stakeholder Survey on Maldives capability to Implement Central Bank Digital Currency;[3] and the Regulatory Sandbox Framework for CBDC and FinTech in the Maldives.[4] By creating a Regulatory Sandbox, the MMA seeks to provide a conducive and contained space for experimentation with digital technologies, specifically CBDC.

The key sections of the Guideline paper focus on risk management and acknowledge, that a risk-free environment is unattainable in innovation. The Regulatory Sandbox aims to create a controlled space that promotes CBDC, while effectively mitigating risks associated with innovative solutions. The Guideline emphasizes achieving a balance between promoting experimentation and ensuring risk mitigation.

The Guideline outlines the Regulatory Sandbox requirements for the MMA, encompassing general requirements for entry, eligibility criteria, and the application process. Key components include legal compliance, financial stability, innovation, technology expertise, and a commitment to regulatory obligations. Moreover, the document details the application and evaluation processes, highlighting the MMA's considerations of factors such as fitness, eligibility criteria, and other relevant criteria. It delineates stages, from the application stage to the evaluation stage, allowing for adjustments during the exploratory nature of the regulatory sandbox approach.

Furthermore, the Guideline illustrates the conditions for the issuance of permits, extension, variation, or withdrawal from a Regulatory Sandbox. It also outlines the circumstances under which the MMA may suspend or revoke a Regulatory Sandbox permit, with corresponding actions that Regulatory Sandbox participants must take in case of revocation. Lastly, the Guideline addresses the importance of reporting throughout the Regulatory Sandbox period, detailing the submission of interim and final reports, including statistical information, key outcomes, risk management

[1] The authority in the Maldives responsible for regulating the banking and financing sector.
[2] https://www.unescap.org/kp/2022/national-study-central-bank-digital-currency-and-stablecoin-maldives
[3] https://www.unescap.org/kp/2022/national-stakeholder-survey-maldives-capability-implement-central-bank-digital-currency
[4] https://www.unescap.org/kp/2023/regulatory-sandbox-framework-central-bank-digital-currency-maldives

measures, and lessons learned. The MMA's role in monitoring and the Regulatory Sandbox participant's responsibilities are clearly defined.

This technical Guideline serves as a guiding framework, ensuring that experimentation with CBDC within the Regulatory Sandbox aligns with the MMA's objectives, promotes innovation, and safeguards the interests of all stakeholders involved.

Introduction

The purpose of this document is to assist the MMA in partnership with businesses/institutions regulated by the MMA in experimenting with the Central Bank Digital Currency ("CBDC") in a production environment, by limiting the experimentation to specific type of customers or setting a threshold on transaction values. This Guideline consolidates earlier work on country consultations [5] and background research.[6]

Scope

This document uses plain language to explain the relevant aspects in the Guideline.

This Guideline is not an exhaustive source of the MMA's policy on the exercise of its statutory powers and discretions. In the discharge of its regulatory mandate, the MMA may impose other parameters to address any specific risks posed by the CBDC.

The MMA is not bound by the requirements set out in this Guideline and may waive or modify these requirements at its discretion where appropriate.

This Guideline is not legal advice and is not intended to replace the MMA regulations.

This document intends to set out the MMA's approach to experimenting with the CBDC ("Regulatory Sandbox"), and covers the following:

1) the eligibility and authorisation criteria applicants must satisfy to be authorised as the Regulatory Sandbox participants;
2) the authorisation process;
3) types of restrictions that the MMA may impose on the Regulatory Sandbox participants' conduct;
4) the information that the Regulatory Sandbox participants may be required to produce to the MMA.

Applicability

All businesses/institutions regulated by MMA pursuant to relevant laws and regulations of the Maldives.

Objectives of the Regulatory Sandbox

The policy experimentation and regulatory sandboxes have emerged among countries and have proven to be effective in creating a more conducive and contained space where governments, in partnerships with relevant stakeholders, can experiment and

[5] https://www.unescap.org/events/2021/national-consultation-frontier-technology-policy-experimentation-and-regulatory

[6] https://www.unescap.org/kp/2023/regulatory-sandbox-framework-central-bank-digital-currency-maldives

trial with digital technologies and innovations at the edge or even outside of the existing policy space and regulatory framework.

In light of these considerations, the MMA has created the Regulatory Sandbox regime to assess the opportunities, the potential implications, risks, and challenges for the implementation of CBDC on a system within the MMA premises in the Maldives. The Regulatory Sandbox allows the MMA to identify any current regulatory gaps and the monetary policy issues raised by digital currencies and new financial services.

The Regulatory Sandbox is not intended to create a risk-free environment – an acceptable degree of risk is unavoidable in all innovations and entrepreneurial endeavours. What the Regulatory Sandbox aims to achieve is:

(a) a controlled environment that promotes CBDC yet mitigation of any risks posed by these innovative solutions;

(b) reducing the time, and potentially the cost, of getting CBDC to market.

Effective date

The Guideline comes into effect on "__" _____ 2023.

The Regulatory Sandbox requirements

a) General

Entry into the Regulatory Sandbox and acceptance of application by participants will be granted if the MMA is satisfied that the non-exhaustive requirements detailed in this guideline have been met, while the authorisation will be granted at the absolute discretion of the MMA.

b) Eligibility criteria

An applicant seeking the MMA's approval to participate in the Regulatory Sandbox must demonstrate the following:

- **Legal Compliance:** Applicants seeking the MMA's approval to participate in the Regulatory Sandbox should be legally registered and authorized as banks or MPSPs by the MMA pursuant to relevant laws and regulations of the Maldives.
- **Financial Stability:** Applicants should demonstrate financial stability and solvency to ensure their ability to sustain operations during the testing phase and thereafter as well. This requirement helps mitigate the risk of participants facing financial difficulties that could negatively impact the Regulatory Sandbox environment or project outcomes.
- **Innovation and Technology:** Proposed financial service includes new or emerging technology or uses existing technology in an innovative way.
- **Expertise and Experience:** Applicants should possess relevant expertise and experience in areas such as FinTech, blockchain or distributed ledger technology,

digital assets and payments. This ensures that participants have the necessary knowledge and skills to contribute meaningfully to CBDC testing and innovation.

- **Technological Capability:** Applicants should have the technological infrastructure and capabilities to develop and test CBDC and FinTech effectively. This may include access to necessary hardware, software, networks, and development environments to support their testing activities.
- **Consumer Benefits:** Applicants should provide a clear explanation of the benefits that consumers, businesses, or the financial industry as a whole will gain from the implementation of the service.
- **Security and Risk Management:** Applicants should demonstrate robust risk management frameworks, security protocols, and contingency plans to protect against potential cyber threats, data breaches, fraud, and other vulnerabilities. This requirement ensures the safety and integrity of the Regulatory Sandbox environment and participants' testing activities.
- **Compliance with Regulatory Obligations:** Applicants should demonstrate a commitment to comply with relevant regulatory obligations other than those for which the MMA has granted a leeway, such as anti-money laundering (AML) and know-your-customer (KYC) requirements, and any other applicable laws and regulations.
- **Test Scenario and Reporting:** Test scenarios and expected outcomes of the sandbox experimentation should be clearly defined, and the sandbox entity should report to the MMA on the test progress based on an agreed schedule.
- **Risk Assessment and Mitigation:** Applicants should conduct a thorough risk assessment of their proposed financial service within the sandbox environment. They must provide evidence of preliminary testing and plans for how they intend to mitigate identified risks. The risk assessment and mitigation plans should be submitted as part of the sandbox application and updated as needed throughout the experimentation period.
- **Capacity for Collaboration:** Applicants should demonstrate a willingness to collaborate and share knowledge within the regulatory sandbox environment. This encourages collective learning, the exchange of ideas, and fosters an environment of cooperation among participants.
- **Exit plans:** Applicants must have a genuine intention and the demonstrated ability to deploy the proposed financial service within the Maldives upon successful completion of the Regulatory Sandbox testing. Applicants should have an acceptable exit and transition strategy to ensure a well-planned and seamless transition out of the Regulatory Sandbox in the event that the testing has to be discontinued or can proceed to be deployed on a broader scale after exiting the Regulatory Sandbox. Applicants must include a section in their exit and transition strategy document that outlines the available options after exiting the Regulatory Sandbox, and a mechanism to compensate customers (in case of revocation of permission to participate in the sandbox).

These requirements aim to ensure that applicants have the necessary qualifications, capabilities, and commitments to contribute effectively to the Regulatory Sandbox and achieve the desired outcomes.

c) Application process for authorisation

A person seeking the MMA's approval to participate in the Regulatory Sandbox submits an application form accompanied by supporting documents. The MMA may request or require any information that it deems relevant to its consideration of an application to enter the Regulatory Sandbox.

Prior to submitting an application, the applicant may clarify any questions regarding the Regulatory Sandbox by contacting the MMA. The MMA will communicate with the applicant during the evaluation of the application.

The MMA may, on the application of an applicant or its own initiative and by written notice, waive or modify the requirements of the requirements under applicable laws and regulations, which the MMA is empowered to waive or modify where it considers it necessary or desirable for the purpose of experimenting with the CBDC.

In assessing the application, the MMA will consider whether:

1) the applicant is fit and proper;
2) the applicant meets the eligibility criteria;
3) other criteria that the MMA may consider relevant have been met.

Upon submission of materially complete application form, the MMA will review the application and endeavour to inform the applicant of its potential suitability for a sandbox within 21 working days ("Application Stage")

If the applicant is suitable participant for the Regulatory Sandbox, the MMA will examine the application ("Evaluation Stage"). The time required to fully assess the application is dependent on its completeness and complexity, and the specific legal and regulatory requirements involved. During the Evaluation Stage, the MMA will work with the applicant to determine the specific regulatory requirements and conditions (including test parameters and control boundaries) to be applied to the proposed innovation. Due to the exploratory nature of the sandbox approach, the applicant is allowed to make adjustments to the application after discussing with the MMA.

The applicant will be informed in writing whether to proceed with the testing in a sandbox or whether the application is rejected.

The procedures for assessing the application, terms and conditions of issuance of the permit are defined by the MMA.

Nothing in this Guideline prevents the applicant whose application has been rejected from applying to the Regulatory Sandbox, provided that the issues causing the rejection of application have been addressed. Applicants cannot submit the same application without material changes if it has been previously rejected. A cooling-off period of

three months shall apply after rejection, during which the same application cannot be resubmitted.

d) Licence (permit)

The applicant that qualifies for authorisation under this Guideline may be granted a permit to experiment with innovative financial services in the production environment but within a well-defined space and duration.

e) Extension, varying, withdrawal of the permit

The Regulatory Sandbox participant is entitled to apply to the MMA to extend, vary or withdraw the permit. The Regulatory Sandbox participant may submit an application for the permit extension, but no later than 2 (two) months prior to the permit expiration date.

Each application for an extension, variation or withdrawal of the permit must be accompanied by sufficient reasons for such an application. The MMA may approve the extension, variation or withdrawal of the permit on a case-by-case basis.

f) Suspension, revocation of the permit

The MMA may suspend or withdraw the permit based on an application of the Regulatory Sandbox participant.

The MMA may suspend or revoke all or some of the terms of the permit at any time and at its own discretion if the MMA:

1) is satisfied that there is a breach or likely breach of any law or regulation; or there is a failure or likely failure, to comply with any obligation to which the Regulatory Sandbox participant is subject under the permit;
2) considers that the exercise of the power is necessary or desirable in the interests of the MMA as the risks posed by the testing of CBDC exceed the benefits to consumers or the financial system;
3) is of the view that the intention/scheduled outcomes of the regulatory sandbox have not been achieved;
4) discovers significant issues or risks during experimentation.

Upon revocation or withdrawal of the permit, the Regulatory Sandbox participant must:

1) immediately implement its exit strategy to cease the provision of CBDC testing activities to new and existing customers;
2) provide notification to customers informing them of the cessation and their rights to redress, where relevant;
3) compensate any customers who had suffered financial losses from engaging with the Regulatory Sandbox participant pursuant to the safeguards submitted by the Regulatory Sandbox participant while submitting the application for authorisation;

4) ensure that the exit strategy is employed, and all existing obligations to its customers must be fully fulfilled or addressed; and

5) submit a final report to the MMA on the actions taken pursuant to this Guideline within 30 (thirty) days after the revocation or withdrawal.

g) Reporting

The Regulatory Sandbox participant is subject to monitoring by the MMA throughout the validity period of the permit. The MMA requires that the Regulatory Sandbox participant submit information on the fulfilment of the testing requirements.

The Regulatory Sandbox participant must ensure the proper maintenance of records during the testing period to support reviews of the test by the MMA.

i. Interim reports

The Regulatory Sandbox participant must submit interim reports to the MMA on the progress of the testing, which must, without limitations, include information on the following:

1) statistical information, covering the number of clients served, number of transactions performed, values of transactions, the number of customer complaints and other indicators;

2) key issues observed from fraud or operational incident reports and resolution of customer complaints (if any); and

3) actions or steps taken to address the key issues referred to in (2) above.

The frequency of and specific details for reporting will be defined by the MMA, depending on the duration, complexity, scale and risks associated with the testing of CBDC.

ii. Final report

The Regulatory Sandbox participant must submit a final report containing the following information to the MMA within 30 (thirty) calendar days from the expiry, or the revocation, or withdrawal of the permit:

1) key outcomes, key findings, risk management measures of the testing CBDC and other information as per the request of the MMA;

2) the exit plan and post exit proposal;

3) a full account of all incident reports and resolution of customer complaints (if any); and

4) in the case of a failed test, the lessons learnt.

iii. Miscellaneous

Upon expiration of the permit's validity, the legal and regulatory requirements that have been waived or modified by the MMA will also expire.

h) Conditions and limitations on the Regulatory Sandbox participants

Upon being granted the permit to participate in the Regulatory Sandbox, the MMA may impose any of the following limitations and conditions, among others, on the Regulatory Sandbox participant:

1) the number and type of clients with or for whom the Regulatory Sandbox participant carries on, or intends to carry on testing activities;
2) the type and size of client transactions that the Regulatory Sandbox participant is permitted to enter into;
3) the manner and type of financial promotion that the Regulatory Sandbox participant may undertake and the associated disclosures that the Regulatory Sandbox participant is required to make to clients willing to use the CBDC in order for clients to make an informed decision;
4) the key information required to be contained in a client agreement that outlines the risk disclosure;
5) the prevention of money laundering and countering the financing of terrorism measures that the Regulatory Sandbox participant is required to implement;
6) additional capital requirements for the Regulatory Sandbox participants;
7) the Regulatory Sandbox participant's financial and other reporting requirements;
8) a requirement for the participant to disclose to its customers that the service is operating within a sandbox, along with the associated risks and to obtain an acknowledgment from its customers on having read and understood the risks;
9) any other safeguards to protect the interests of clients or maintain the safety and soundness of the financial system as the MMA may prescribe.

The MMA may publish the Regulatory Sandbox participant's details and details of the sandbox (business activities, start and end dates) on the MMA website.

The MMA may, at any time through the life-cycle of testing the CBDC, by notice in writing to the Regulatory Sandbox participant, cancel or vary any condition or restriction imposed on the Regulatory Sandbox participant or impose such further condition or restriction as it may think fit in accordance with the applicable law.