



**Standing Committee  
for Economic and Commercial Cooperation  
of the Organization of Islamic Cooperation (COMCEC)**

**Proceedings of the 20<sup>th</sup> Meeting of the  
COMCEC Financial Cooperation Working Group**

**“Improving Cooperation among Central Banks in Terms of  
Digital Currencies: Challenges and Prospects for OIC Member  
Countries”**



**COMCEC COORDINATION OFFICE**

**October 2023**

**PROCEEDINGS OF THE 20<sup>th</sup> MEETING OF THE  
COMCEC FINANCIAL COOPERATION WORKING GROUP  
ON**

**“Improving Cooperation among Central Banks in Terms of Digital Currencies:  
Challenges and Prospects for OIC Member Countries”**

(9-10 October 2023, Ankara, Türkiye)

*(2<sup>nd</sup> Meeting – Final Draft of Research Report and Policy Recommendations)*

**COMCEC COORDINATION OFFICE**

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**Table of Content**

- 1. Introduction ..... 5**
- 2. Opening Session ..... 5**
- 3. COMCEC Financial Outlook 2023 ..... 6**
- 4. Overview of the Report ..... 8**
  - 4.1. General Overview of the Report..... 8**
  - 4.2. Selected Case Studies: Indonesia, Nigeria, Qatar, Pakistan and Singapore ..... 12**
    - 4.2.1. Indonesia ..... 12**
    - 4.2.2. Nigeria ..... 14**
    - 4.2.3. Pakistan ..... 16**
    - 4.2.4. Qatar ..... 17**
    - 4.2.5. Singapore..... 18**
- 5. Experiences/Perspectives of the Member States, International Institutions, and Private Sector ..... 21**
  - 5.1. Experiences/Perspectives of the Member States ..... 21**
    - 5.1.1. Iran ..... 21**
    - 5.1.2. Saudi Arabia ..... 22**
  - 5.2. Experiences/Perspectives of the International Institutions ..... 22**
    - 5.2.1. Islamic Development Bank Institute (IsDBI) ..... 23**
- 6. COMCEC Project Support Programs ..... 24**
- 7. Closing Remarks ..... 25**
- 8. ANNEXES..... 26**
  - Annex-I (Draft Agenda) ..... 26**
  - Annex-II (Draft Program) ..... 27**
  - Annex- III (List of Participants)..... 30**
  - Annex-IV (Policy Recommendations)..... 34**

## 1. Introduction

The 20<sup>th</sup> Meeting of the COMCEC Financial Cooperation Working Group was held on 9-10 October 2023, in Ankara at CPAnkara Hotel, Türkiye, with the theme of “Improving Cooperation among Central Banks in terms of Digital Currencies: Challenges and Prospects for OIC Member Countries”. The representatives of 14 Member States, which have notified their focal points for the Financial Cooperation Working Group, attended the Meeting.

*(The Agenda and Program of the Meeting are attached as Annex-I and Annex-II)*

The meeting was further attended by the representatives of the SESRIC, SMIIC, IsDB, OIC Exchanges Forum, COMCEC Capital Markets Regulators Forum, OIC-COMCEC Central Banks Forum, and COMCEC Coordination Office.

*(The List of Participants of the Meeting is attached as Annex-III)*

The Meeting started with a recitation from the Holy Quran. Then, Mr. Mücahit DUMAN as the Chairperson of the Meeting was selected by participants and Mr. Selçuk KOÇ, Acting Director General of the COMCEC, delivered an opening speech. It was followed by the final draft presentation provided by Mr. Prof. Dr. Mehmet BABACAN, the coordinator of the research team. Then, Dr. Ruslan NAGAYEV made a presentation on selected case countries.

The participants were presented the final draft of the research report including the introductory part, trends, issues, and challenges in digital currencies, case-countries examination, survey analysis and conclusion and policy recommendations. In the first presentation, background, main objectives and conceptual framework of the report were highlighted. In addition, the methodology of the report, interview questions and the criteria considered in the selection of case-countries are explained in detail. Following the introductory presentations on the report, selected case countries were presented in the second presentation which focused on issues and challenges regarding the general situation, historical perspective, monetary and payment systems, legal and regulatory framework, and initiatives towards Central Bank Digital Currencies (CBDCs).

Lastly, the representatives of the Member Countries and an international institution shared their experiences, achievements, and challenges faced in improving/developing digital currencies and promoting cooperation between Central Banks.

## 2. Opening Session

In line with the tradition of the Organization of Islamic Cooperation (OIC), the Meeting started with the recitation from the Holy Quran. At the outset, Mr. Selçuk KOÇ, Acting Director General of the COMCEC, welcomed all participants to 20<sup>th</sup> Meeting of the COMCEC Financial Cooperation Working Group (FCWG). Then, he made a comprehensive opening speech about the role and importance of cooperation in improving and harmonizing studies for CBDCs by touching upon the latest data on the sector.

Firstly, Mr. KOÇ, mentioned that recent years have witnessed a profound transformation in the financial sector, spurred on by rapid technological advancements. He noted that the financial sector is particularly dynamic, with a large number of innovative initiatives taking shape, and among these initiatives, payment systems, especially currency, have witnessed notable changes.

In this context, he stated that digital and contactless payment methods have gained huge attention, a trend further accelerated by the COVID-19 pandemic. Moreover, he also underlined that in this dynamic landscape, Central Bank Digital Currencies (CBDCs) have gained significant attention because it is desirable to assess the potential of these technologies to update the financial system and meet future financial needs. There are many reasons to explore digital currencies, and the motivation of different countries for issuing CBDCs depends on their economic situation.

Therefore, according to a recent survey conducted by the Bank for International Settlements, he emphasized that a significant 86 percent of Central Banks are actively researching the potential of CBDCs, with 60 percent in the experimental phase and 14 percent already deploying pilot projects. Several governments have made substantial progress in this realm, with some having fully introduced their own digital currencies. In parallel, certain member countries within the Organization of Islamic Cooperation (OIC) have also taken proactive steps in the field of CBDCs. However, there exists a notable divergence in terms of progress and interest among OIC member countries.

Afterward, he stated that given this landscape, it is crucial to develop a common knowledge pool on digital currencies within the OIC, so that Member States can collectively benefit from each other's expertise and lessons learnt by sharing experiences and insights from various initiatives.

He ended his opening remarks by stressing that enhancing the cooperation among the Member Countries in this field through sharing experiences and good practices would significantly contribute to the realization of related output areas of the COMCEC Strategy.

Lastly, as the Chairperson of the Meeting, Mr. MÜCAHİT DUMAN, Acting Deputy Director General from General Directorate of Financial Markets and Exchange of the Ministry of Treasury and Finance Republic of Türkiye, introduced himself, wished that the meeting would lead to fruitful discussions, thanked all participants, and spoke of the program of the meeting.

### **3. COMCEC Financial Outlook 2023**

Mr. Can AYGÜL, Head of Department of the COMCEC delivered a presentation on main findings of the COMCEC Financial Outlook 2023. He expressed that the presentation consists of three chapters: Global Economic Developments, Financial Outlook of the OIC Member Countries, and Islamic Finance.

In the first part of his presentation, Mr. AYGÜL provided an overview of the global economic developments and economic growth in OIC Member Countries. In this context, he stated that the global economy is expected to grow 2.1 per cent in 2023, following the 3.1 per cent growth last year. A high-interest rate environment and uncertainties in financial markets are impeding economic growth. Then, he added that the expectations for the following years for the performance of the global economy are also reflecting this and growth projections for 2024-2025 are 2.4% and 3.0%, respectively. Moreover, he highlighted that OIC countries' average growth rate slightly increased to 5.6 per cent in 2022, compared to 5.1 per cent in 2021. On the other hand, OIC countries' growth rate is expected to lose its pace in 2023 by decreasing to 3.9 per cent but rebound to 5.1 per cent in 2024.

Afterward he continued with Financial Outlook of the OIC Member Countries. In this part of the presentation, he firstly clarified that in this Financial Outlook, the OIC Member Countries are categorized into four main groups (based on GNI per capita levels) based on the World Bank Income Grouping Methodology. According to this classification updated with 2022 data, 14 countries [15 in 2021] are in the OIC Low Income Group (OIC-LIG), 21 countries [21 in 2021] are in the OIC Lower Middle Income Group (OIC-LMIG), 13 countries [13 in 2021] are in the OIC Upper Middle Income Group (OIC-UMIG) and 8 countries [7 in 2021] are in the OIC High Income Group (OIC-HIGH).

In the second part of the presentation, Mr. AYGÜL provided an assessment of the financial developments of the OIC member countries. He pointed out that in this section, World Bank's Global Financial Development Database was utilized. The report and presentation provided four principal measures of the financial systems. These measures are (1) Financial Access: the degree to which individuals can and do use financial institutions and markets, (2) Financial Depth: the size of financial institutions and markets, (3) Financial Efficiency: the efficiency of financial institutions and markets in providing financial services, and (4) Financial Stability: the stability of financial institutions and markets.

Accordingly, he expressed that the OIC countries have shown significant fluctuations among various income groups in terms of financial depth. While the high-income and upper-middle-income countries have performed better than the other groups, the averages of the indicator for other groups have been recorded below than world averages. Consequently, he emphasized that in terms of the efficiency characteristic and financial stability, the OIC average has performed slightly similar to the world average between 2013 and 2020.

In the last part of the his presentation, Mr. AYGÜL shared information on Islamic finance. He stressed that Islamic finance as a useful tool for financial development worldwide became an inseparable part of the international financial system. Islamic finance has the potential to help in addressing the challenges of ending poverty and sharing prosperity.

In this framework, he pointed out that according to the latest data from IFSB, the total assets of the Islamic finance sector increased from USD 3,06 trillion in 2021 to USD 3,25 trillion in 2022 with 6.1% YoY growth rate [2021: 13%] after the recovery from the COVID-19 pandemic. In addition, regarding the concentration of Islamic finance, according to the region, he expressed that the GCC region still had the most significant share (53.6%), USD 1,730.3 billion in 2022. GCC is followed by Southeast Asia, one of the most potential regions for the growth of the Islamic financial market, with regional countries such as Malaysia and Indonesia recording USD757.4 billion in total assets and a 23.3% share in the global Islamic finance sector in 2022. Furthermore, he stressed that the market share of the Middle East and South Asia (MESA), which significantly decreased from 20.3% (in 2020) to 17.4% in 2021, has seen a rebound by achieving to raise its share to 18.6% in 2022. On the other hand, Africa, which had 2.1 per cent of the worldwide industry in 2021, underperformed in the following year, and its share decreased to 1.7% from 2.1% with a USD55.2 million asset size.

He completed his presentation by giving information about Islamic Finance Sector. Accordingly, he highlighted that the Islamic financial sector comprises three main sectors: Islamic banking, Islamic capital markets, and Islamic insurance (takaful).

Consequently, Islamic banking was still the dominant segment, with 69.3 percent [2021: 68.8%] in 2022. The Islamic banking sector grew 6.9 percent and reached USD 2,249.2 billion [2021: USD 2.104,1 billion] in the relevant year. Sukuk market and Islamic funds constitute Islamic

capital markets and represented 25.6 percent [2021: 25.4%] and 4.2 percent [2021: 5.1%] of total Islamic finance assets, respectively, in 2022. Moreover, he indicated that Islamic funds shrank by 1.1 in 2022. The share of the Takaful segment increased to 0.9 percent in 2022 from 0.8 percent in 2021. Although there was a slight advancement in the Takaful sector's share in the Islamic finance industry, total Takaful contributions increased by 23.5 per cent in 2022.

## **4. Overview of the Report**

### **4.1. General Overview of the Report**

The presentation session started with an introduction to the topic of the report by Prof. Dr. Mehmet BABACAN from Marmara University Türkiye with a research team of academicians and professionals.

The first presentation by Prof. Mehmet BABACAN were in three parts as he started his presentation with background information along with the aim, scope and significance of the study. Accordingly, the main objective was to analyze: i) digital currencies and the CBDCs in a comparative way, ii) current initiatives in different jurisdictions on CBDCs among the OIC member countries, iii) roles of responsible institutions to introduce and regulate DCs, iv) the challenges and prospects of digital currencies for OIC member countries based on the field study results derived from country cases, and v) policy recommendations for the OIC member states with respect to CBDC development. Main objective of the study is presented as providing a perspective over i) digital currencies, ii) current initiatives on the CBDCs, iii) roles of institutions in the CBDCs, and iv) challenges and prospects of the CBDCs. The scope and relevance of the study on the other hand comprehends i) in-depth analysis of challenges and prospects, ii) policy conclusions from the lessons learnt in case studies, and iii) policy recommendations for cooperation in CBDC development.

According to Prof. BABACAN's presentation, the project was significant as it i) reveals key factors in success and performance of CBDC development, ii) provides concise, systematic, and viable policy recommendations (to the OIC), iii) proves to be beneficial to policy-makers and regulators (both OIC and non-OIC), iv) draws conclusions and strategies for cross-border operations, and v) lays down the foundations of international collaboration.

On the methodology front, Prof. BABACAN revisited the five phases of design thinking - discovery, interpretation, ideation, experimentation, and evolution. The first phase includes literature review on the significance and challenges of currency digitalization as the second phase provides a detailed account of currency digitalization initiatives and current challenges through open-ended interviews and survey for different groups of stakeholders as well as sample analytical models. Third phase is about the creation and implementation of the semi-structured interviews to put forth a summary of the main findings and basic elements of policy conclusions. Fourth phase of the proposed methodology aims at informing policy makers on the process of currency digitalization with the help of pilot studies over stakeholders as the fifth and the last phase is expected to expand the pilot studies through an iterative learning process.

Accordingly, main research tools utilized in the study are as follows: i) literature review on the CBDCs to analyze information from the related documentation of the field, ii) generalized form of survey and interviews to collect data from the stakeholders, and iii) case studies based on the semi-structured interviews and the survey results to identify structural, regulatory, and technical opportunities or challenges that foster or hinder currency digitalization including the CBDCs as well as cooperation among central banks at the OIC level.

In the second part of his presentation, Prof. BABACAN made a tour on the historical development of digital currencies with respect to their nature, use and significance in comparison to the CBDCs. BABACAN referred the rise of digital currencies as the fourth transformation period of monetary system. He then highlighted the relevance and importance of the topic as the CBDCs constitute an alternative/reaction to decentralized finance and its instruments.

Prof. BABACAN discussed the nature of digital currencies with respect to the role of decentralized digital currencies (i.e., cryptocurrencies) vs. the CBDCs. In a comparative way, he analyzed the potential roles that both type of digital currencies might play as well as challenges they might create for the existing financial architecture around the globe. Defined as decentralized digital currencies that use cryptography to secure transactions and control the creation of new units, cryptocurrencies were discussed on the grounds that they were not issued or backed by a government or central authority while they were designed to be borderless and censorship-resistant (i.e., Bitcoin, Ethereum, and Litecoin).

In contrast, the CBDCs as digital currencies issued and backed by a central bank or government should be regarded as digital versions of fiat currencies that would offer greater financial inclusion, faster and cheaper payment systems, and enhanced monetary policy tools. The CBDCs might take either a retail form introduced for the use of general public or wholesale form only produced for the financial institutions' use. Prof. BABACAN also emphasized that the potential benefits and challenges of CBDC development among the OIC member countries should be discussed in three main dimensions: i) technological breakthrough and potential driving force for digital innovation, ii) interoperability questions and iii) regulatory and legal issues.

Prof. BABACAN underlined three main categories of challenged ahead as structural, regulatory, and technical. Among the structural issues he cited i) lack of clear and consistent regulations and standards and ii) digital currencies (thus the CBDCs) as complex monetary systems that make integration complex and difficult to the existing structures. Regulatory challenges on the other hand included potential issues like i) money laundering and terrorist financing which might lead to the use of digital currencies for illegal activities, ii) need for consumer protection as they might become vulnerable to scams and fraud and iii) addressing privacy concerns so that regulators should balance privacy concerns with need for financial surveillance. Last, technical challenges are related to i) scalability that requires the need to handle large amounts of transactions, ii) security to ensure prevention of hacking and theft which requires significant investment, iii) interoperability to make them work seamlessly with existing payment systems that takes technical integration and compatibility, and iv) user-friendliness that needs significant investment in user experience design and testing.

With respect to the comparative performance of CBDC development efforts across the world, Prof. Babacan cited the importance of the level of financial development and digitalization of currencies as he suggested that:

- the degree of financial sector development has substantial influence on the process of digitalizing currencies
- robust financial sector lays a solid groundwork for the acceptance and effective execution of digital currencies
- countries with underdeveloped financial infrastructure, substantial investment in technology is needed for the CBDCs

- well-defined and robust regulatory framework is crucial to guarantee the stability, security, and legality of CBDC operations
- well-established regulatory frameworks are more adept at tackling anti-money laundering (AML) and know-your-customer (KYC) concerns, safeguarding consumer interests, and mitigating fraudulent activities
- level of financial sector development is closely linked to financial inclusion
- in countries with well-developed financial infrastructures and services, a significant portion of the population has access to banking and digital payment options
- introduction of CBDCs in such environments complements the existing services and enhance financial inclusion
- in countries with underdeveloped financial sectors, CBDCs are expected to bridge the financial inclusion gap as a secure and accessible digital payment solution to underserved populations
- under robust and enduring economic conditions, there is a greater likelihood available resources for research, development, and implementation of a CBDC
- significant level of acquaintance and confidence is a must in digital financial exchanges given a robust electronic payments framework, encompassing card-based transactions and digital wallets
- given a well-established and trusted banking system, users may be more inclined to embrace CBDCs as an extension of the existing financial system

Furthermore, Prof. BABACAN stated that the Shari’ah compliance and an accordingly perspective is inseparable feature of any CBDC development process as he referred to i) internal (for compatibility of the CBDC to Islamic principles) like acceptability, being medium of exchange, and store of account as well as ii) external parameters such as being a legal tender, compliance with regulatory requirements, stability, avoidance of gambling and speculation, mitigation of technology risk, transparency and disclosure and having an asset-backed nature.

In the last part of his presentation, Prof. BABACAN referred to the five selection criteria for the case study countries. Five criteria that the study adopts were lined up as follows: i) four countries among the OIC members and one non-OIC country, ii) countries from different geographic regions, iii) countries with different legal systems/regimes, iv) countries with different levels of financial sector development and v) countries with different CBDC adoption levels were picked.

**Table 1.** Selection Criteria and Description for the Case Study Countries

Criteria	Description	Approach
<b>I</b>	OIC member countries	COMCEC List
<b>II</b>	Geographic groups: African, Arab, and Asian	COMCEC List
<b>III</b>	Legal system/regime	World Factbook
<b>IV</b>	Development level of financial sector	IMF FD Index
<b>V</b>	CBDC adoption and implementation level	Atlantic Council

Accordingly, five selected case countries among OIC members are Nigeria from the African Group with Common Law, Pakistan from the Asian Group with Common Law and Shari’ah, Qatar from the Arab Group with Civil Law and Shari’ah, and Indonesia from the Asian Group

with Civil Law and Shari’ah. The only non-OIC country among the selected case studies is Singapore with Common Law.

**Table 2.** OIC member countries with respect to their CBDC status

Status	OIC Countries
Pilot	Iran, Kazakhstan, Malaysia, Nigeria (Launch), Saudi Arabia, UAE, Türkiye
Development	Bahrain, Indonesia, Tunisia
Research	Azerbaijan, Bangladesh, Jordan, Oman, Pakistan, Qatar
Inactive	Benin, Egypt, Kuwait, Lebanon, Palestine
Cancelled	Senegal

Prof. Mehmet BABACAN finalized his presentation with a brief look at the country case studies with the derived policy outcomes for a prospective cooperation among the OIC member central banks. Those benchmark points made are as follows:

- a comprehensive strategy for transition at the national level
- raising public awareness and educational campaigns
- technological capacity build-up, technical and physical infrastructure
- user-friendliness (i.e. downloadable apps in smartphones etc.) along with the security assurances
- meeting higher demand for digitally enabling devices such as smart phones, and computers / require governments’ involvement in mitigating the costs in lower-income countries
- privacy concerns along with the security of the total system addressed by the central banks, in particular when cross-border transactions take place
- banking supervisory institutions and other financial/capital market regulatory institutions must collaborate with central banks
- inter-governmental sharing of biometric information might become another sensitive issue in that regard

**Questions and Answers Section (Q&A)**

**Question-1:** Representative of Senegal asked why Nigeria cancelled the E-Naira implementation and what are the challenges and disadvantages that need to be overcome for the consumer and policy makers in terms of adoption of CBDCs.

**Answer-1:** Prof. BABACAN started his remarks by noting that by considering the Nigerian case, they basically recognized that each case can provide a unique situation for the development of CBDC in terms of its own challenges and opportunities. He said that there are many common underlying objectives, such as achieving greater efficiency in the payment system through more stable monetary and financial macro environments, or reducing transaction costs, improving security, and these are the basic outlines that we find in all the literature and in the case studies that are presented as the main objectives for the development of CBDCs. However, he emphasized that what is more important is the level of financial

development in the countries, which varies considerably among OIC member countries. Therefore, on the one hand, E-Naira Project proves how strong countries can be in finding alternatives to their traditional weaknesses in the financial sector, but on the other hand, it also reflects some fundamental vulnerabilities. He explained that governments will fail if they do not have the necessary public support, and if they adopt an integrative approach between existing infrastructure and newcomers. On the other hand, if states have a fairly well-developed financial or banking sector, if they are already operating with existing schemes, or if they are already internationalized, this can be quite a good ground and the initial costs of investing can be quite low to cover. So far, many of the emerging markets and developing countries, some are adopting the retail approach, and some are adopting the wholesale approach, but this is also highly dependent on public awareness and the presence or absence of the necessary technological and other infrastructure. Thus, the challenges for regulators, policy makers, perspective and consumers may be different.

**Question-2:** Representative of Brunei Darussalam enquired that what the status of physical currency was in the countries that have launched the CBDC initiative, in other words, whether they have planned to remove physical currencies from circulation altogether and, if so, what their strategy for removing physical currencies has been.

**Answer-2:** Prof. BABACAN said that different types of experts are continuing their discussions to find out what will happen in the final stage, whether this will end with a dual system or whether it will disappear completely. However, he stated that he thought it was quite difficult to maintain a dual system. For this reason, he explained that countries need time and a transition period.

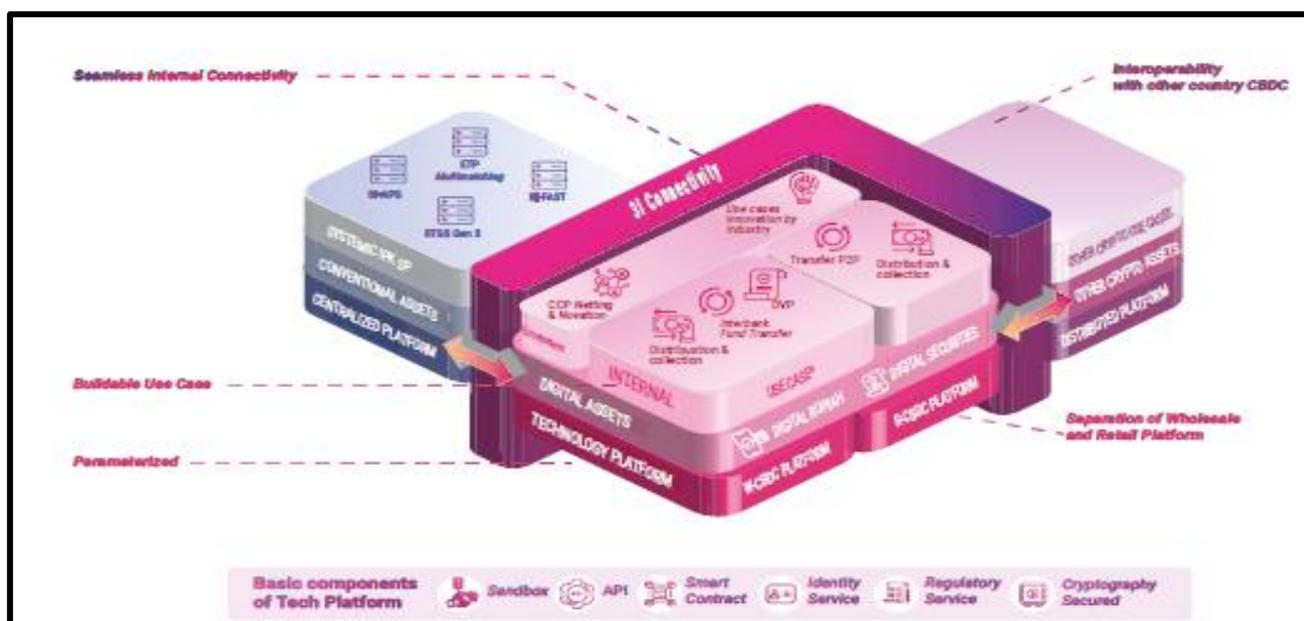
#### **4.2. Selected Case Studies: Indonesia, Nigeria, Qatar, Pakistan and Singapore**

After the first presentation, Dr. Adam NAGAYEV academician from Istanbul Sabahattin Zaim University, Türkiye and a visiting fellow at the Hamad bin Khalifa University, Qatar, made a detailed presentation on the country case studies in the following sequence: i) Indonesia, ii) Nigeria, iii) Pakistan, iv) Qatar, and v) Singapore. He both outlined the country-specific features of CBDC development processes and commonalities from the case studies to constitute an overall framework and guide for the OIC member countries.

##### **4.2.1. Indonesia**

Dr. NAGAYEV started the country case studies with Indonesia, which currently at the piloting and testing state in CBDC development, while describing the digital rupiah and its distribution mechanism as he suggested the following points: i) both wholesale and retail digital rupiah will be developed using an integrated end-to-end approach from wholesale to retail, ii) digital rupiah would be a complementary to banknotes, coins, and third-party reserves at Bank Indonesia (BI), iii) w-digital rupiah would have limited accessibility to parties designated by the BI, and iv) r-digital rupiah could be used by general public just as banknotes and coins.

**Figure 2. Technology Architecture of Digital Rupiah**



*Source: Bank Indonesia (BI)*

Based on the case of Indonesia, lessons learnt include i) the need for a collaborative approach, ii) importance of phased implementation, and iii) the main attributes to the CBDC to be upheld by the central bank. Accordingly, country-specific policy recommendations are:

- **Holistic engagement:** Evolution of Digital Rupiah is a collaborative endeavour that spans beyond BI. This involves legal alignments that necessitate the participation of both government and parliament. Transparent communication tools such as consultative papers and focus group discussions are vital in this engagement.
- **National priority areas:** Project Garuda has a sight set on multifaceted domains. From monetary systems, government transactions, and cyber resilience to integration with the Web 3.0 crypto ecosystem, each area is meticulously addressed
- **Interagency cohesion:** Project Garuda's objectives are met, necessitating seamless cooperation among financial bodies, relevant ministries, and industry stalwarts. Interagency forums are pivotal in enhancing these collaborations.

Meantime, policy recommendations for the OIC members based on the Indonesian experience are summarized as follows:

- **International collaboration:** Collaborating with the international front is indispensable. OIC member countries can derive valuable lessons from Bank Indonesia's strategies, particularly their collaboration with international bodies such as the IMF, BIS, and World Bank, as they navigate their journeys towards CBDC implementation.
- **Cross-border integration:** Robust and sound infrastructure to be integrated across borders is crucial. Cross-border integration is pivotal because it underpins enhanced financial cooperation among OIC nations and serves as a bedrock for secure, transparent, and efficient transactions.
- **Regulatory architecture:** Crafting a regulatory architecture designed specifically for supervising cross-border transactions is a must. OIC should contemplate that COMCEC,

in partnership with the BIS, can play a vital role in improving collaboration, sharing expertise, and facilitating CBDC implementation among OIC member countries.

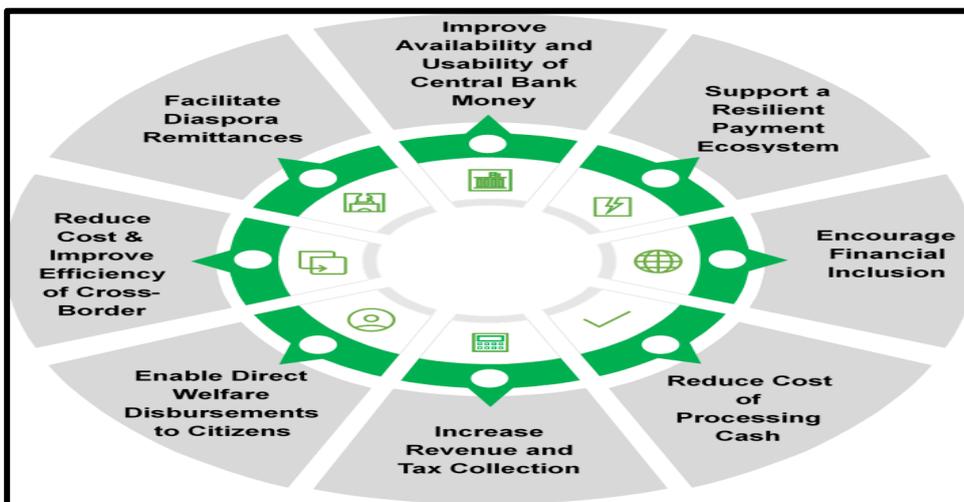
#### 4.2.2. Nigeria

In his second case study, Dr. Adam NAGAYEV elaborated on the case of Nigeria and the eNaira experience as he provided an overview and brief outlook of the Nigerian economy, including the legal and regulatory framework as well as the institutional infrastructure in the country. According to the latest figures; in a country with 214 Mn population, around 80% of the adults owns mobile phones where internet penetration stands at 37% of the total population. Meantime, some 37.3% of the Nigerians are mobile internet users and 70% internet subscribers.

Nigeria is presented as the first country case study where its significance comes from the already implemented CBDC (eNaira), first launched on October, 25th, 2021. The e-Naira is available for public use as it marks the 2nd CBDC in that regard. Dr. NAGAYEV suggested that the Nigerian experience with the CBDC presents compelling case study to analyse its implementation’s key challenges and successes. He then elaborated on the monetary system in Nigeria, providing the following key insights: i) The Central Bank of Nigeria (CBN) has taken measures to mitigate the adverse effects of systemic shocks caused by high volatility in both global and domestic economic conditions, ii) maintaining internal and external balance of payments is a key objective of CBN's monetary policy and iii) that objective is achieved through a variety of policies including monetary instruments.

Whereas the overall payment system in the country was considered, Dr. NAGAYEV stated that significant payment system reforms have been introduced in the country as the payment system was designed to enhance the resilience of the technological infrastructure supporting electronic payment methods. Coming to the background of eNaira, he regarded the project as a part of more comprehensive set of reforms to enhance the CBN’s monetary & fiscal policy along with the overall payment system infrastructure and promote financial inclusion in Nigeria. Within that frame, Dr. NAGAYEV drew attention to several potential benefits of e-Naira (see Figure 3 below).

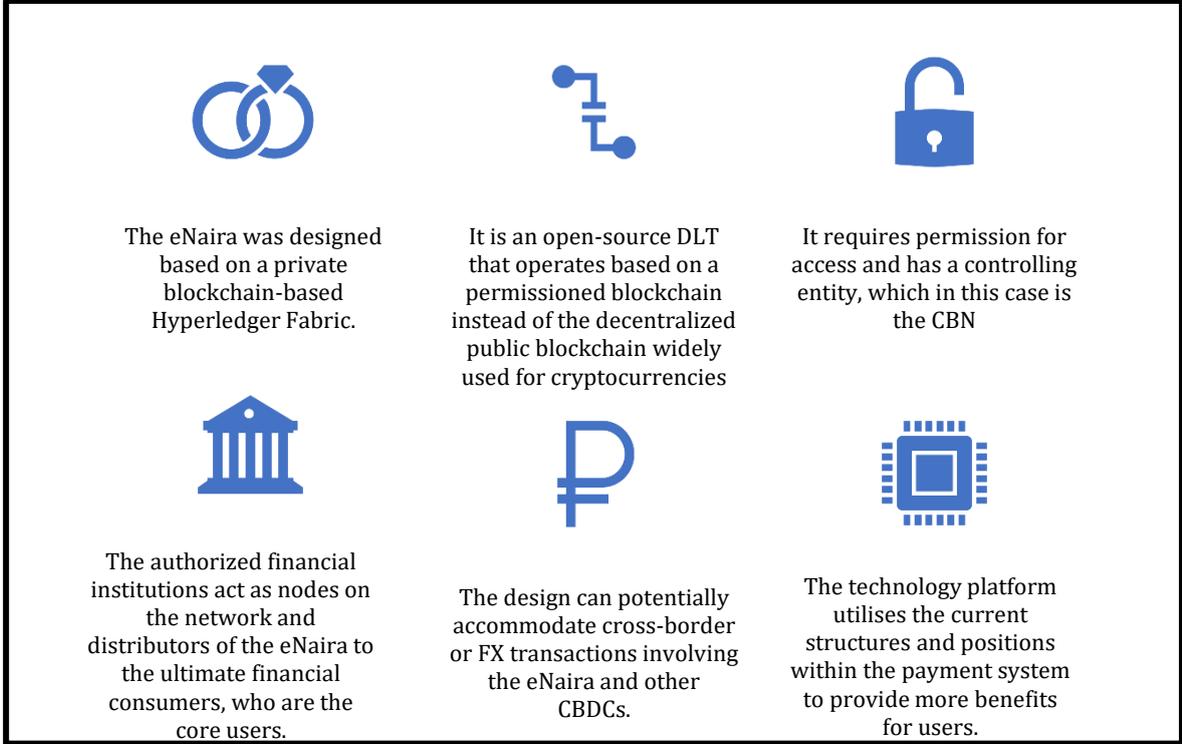
**Figure 3. Benefits of eNaira in the Financial Ecosystem**



Source: Central Bank of Nigeria (CBN)

With regards to the underlying technology for eNaira, Dr. NAGAYEV pointed out several characteristics (see Figure 4 below).

**Figure 4. Technical and Operational Standards of eNaira**



Source: Central Bank of Nigeria (CBN)

On the potential challenges front, Dr. NAGAYEV referred to the key objective of developing the e-Naira which was to contribute to AML/CFT policies and promote transaction traceability. Therefore, he stated that the CBN adopted account-based CBDC for eNaira operations. Accordingly: i) users on the platform are identified using the traditional identity framework implemented by the CBN: The Bank Verification Number (BVN) and the National Identification Number (NIN), ii) all financial institutions are required to conduct AML/CFT checks and iii) the CBN uses the layered platform model to ensure compliance with AML/CFT checks.

In his final remarks, Dr. Adam NAGAYEV assessed the e-Naira project as he confirmed the failure to expand its use and ensure a significant amount of trust among people. He also referred to the potential of e-Naira as he mentioned about the case specific survey results that was revealed under the scope of the project. Accordingly, despite the challenges faced in the implementation of the eNaira, respondents are optimistic about its potential as some 62.5% of respondents expressed a desire for the new government to continue the implementation of the eNaira. Meantime, a significant share of 75% are willing to engage with the eNaira provided that existing technical challenges are effectively resolved while some 70.7% of respondents favor eNaira over unregulated digital currencies such as Ethereum or Bitcoin. Last, over 50% of the survey respondents anticipate its use for cross-border payments.

Based on the case study findings, lessons learnt include i) comprehensive evaluation of institutional frameworks, stakeholders, and the political, social, and economic landscape is a

prerequisite for CBDC implementation; ii) new regulations and legal frameworks are required, which require ample time to develop and implement; iii) financial literacy campaign to create awareness, and iv) a sound and resilient technology architecture as prerequisites for CBDC implementation. Other lessons from the Nigerian case suggest that i) a large population may not necessarily result in the successful adoption of CBDC; ii) CBDCs should be designed to replicate the paper currency and not yield interest; and iii) unlike cryptocurrencies underpinned by fully decentralized ledger technology, CBDCs should be relatively stable in their values and not be subject to high market volatility.

With regards to the country-specific recommendations, Dr. NAGAYEV mentioned:

- **Financial Literacy and Education:** There is a need to embark on massive financial literacy programs and ensure that people are well educated about the benefits of eNaira.
- **Enhancing the resilience of the underlying technology:** There is a need to ensure that the underlying technology is resilient to cater to the large volume of transactions anticipated when more users are onboarded.
- **Incentivizing the usage of eNaira:** The government should consider introducing financial incentives such as pre-funding e-wallets for users who download the wallet during a certain period.
- **Piloting the e-Naira:** CBN should treat the current implementation stage as a pilot to identify and resolve teething issues.
- **Government levies should be paid through eNaira:** In the next phase of implementation, following the resolution of technological and operations issues, the government could channel all government levies and payments through the **eNaira**.

The overall recommendations for the OIC member states, derived from the Nigerian experience are:

- Develop a template framework for implementing CBDCs in OIC member countries to foster trade and cross-border transactions.
- Consider establishing a cross-border regulatory framework to regulate cross-border transactions through a Convention or multilateral treaty framework among member countries.
- Provide a high-level adaptable legal framework in the form of model legislation for member countries' adoption or adaptation.
- The OIC Arbitration Centre could play a role in developing standardized dispute management protocols to address issues emanating from CBDC payments and transactions.
- Learn from the eNaira design to promote Shari'ah-compliant monetary and payment systems and ensure that the CBDCs within member countries are subject to the rules of Ribā and Gharar.

#### 4.2.3. Pakistan

Representing a country at the research stage of developing a CBDC, Pakistan's case was discussed under the lines of digitalization of finance and introduction of the ecosystem by the State Bank of Pakistan (SBP) and the current situation both enabling the potential for the CBDC development and hindering factors. Overall however, he stated that despite ongoing interest and will to do research on the CBDCs, the SBP does not have a clear agenda nor a roadmap to develop and implement one in the near future. Nevertheless, as per the country-specific recommendations considered, following are essential according to Dr. NAGAYEV's presentation:

- **Digital Infrastructure Investment** Prioritize investments in digital infrastructure, including widespread internet access and mobile connectivity, to ensure that a CBDC can be accessed and used by a significant portion of the population.
- **Robust Regulatory Framework** Develop a comprehensive regulatory framework that addresses issues related to CBDC issuance, circulation,
- **Financial Literacy Programs:** Launch financial literacy and awareness campaigns to educate the public about the benefits and responsible use of CBDCs.
- **Collaboration with Financial Institutions:** Work closely with commercial banks and other financial institutions to ensure a smooth integration of CBDC into the existing financial ecosystem.
- **Research and Pilot Programs:** Continue with thorough research and development stages, including pilot programs, to test the CBDC's feasibility, scalability, and usability in Pakistan's unique economic environment.

With respect to the policy recommendations from the case of Pakistan for OIC member countries, Dr. NAGAYEV cited:

- **Collaborative Learning Networks:** Establish collaborative learning networks within the OIC to share knowledge and expertise related to CBDC implementation.
- **Digital Infrastructure Development:** Prioritize investment in digital infrastructure across OIC countries, especially in regions with limited access to technology.
- **Flexible Regulatory Frameworks:** Encourage countries to establish baseline regulatory requirements while providing flexibility for further refinement as their CBDC projects progress.
- **Inclusive Financial Education:** Implement comprehensive financial education programs that target underserved populations, focusing on digital literacy and CBDC awareness.
- **Collaborative Research Initiatives:** Foster collaborative research initiatives among OIC countries to explore innovative use cases and potential benefits of CBDCs in regional contexts.

#### 4.2.4. Qatar

A developed and integrated economy, Qatar has also shown an interest in the CBDCs even though the country seems to be relatively slow in its development process, compared to the neighbouring countries in the Gulf region, such as United Arab Emirates or Saudi Arabia.

Qatar is still at the early stages of CBD development as the country possesses certain strengths and weaknesses in that regards. The potential strengths in CBD development are i) lower transactions cost and high level of accessibility to finance; ii) immediate settlement finality; iii) effective monetary policy; iv) clarity in markets; and v) central bank as the legal tender and its traceability. Meantime, potential challenges are as follows in the context of Qatar: i) high cost of infrastructure required for CBDC implementation; ii) readiness of Qatar's market and learning curve; iii) cybersecurity sensitivity; iv) emerging technology risks; v) required operational resilience; vi) system to handle a large number of users; and vii) increased energy consumption.

Accordingly, opportunities involve i) transactions improvement; ii) creation of a faster payment environment for individual and banking sector; iii) improvement of monetary policy due to real-time data; iv) participation of the unbanked in the economy leading to economic growth; and

v) effective opportunity for new AML/CFT standards while potential threats are i) privacy concerns; ii) cybersecurity threats, and iii) emerging technology risks.

Country-specific policy recommendations from Qatari experience are:

- **Regulatory Review:** Do regulatory review before launching the CBDC
- **Priority:** Start with the wholesale CBDC first
- **Implementation:** Introduce the CBD in a gradual manner
- **Privacy: Consider** privacy in design and implementation
- **Cybersecurity:** Design the CBDC considering cybersecurity threats coming from emerging technologies such as artificial intelligence and quantum computing.

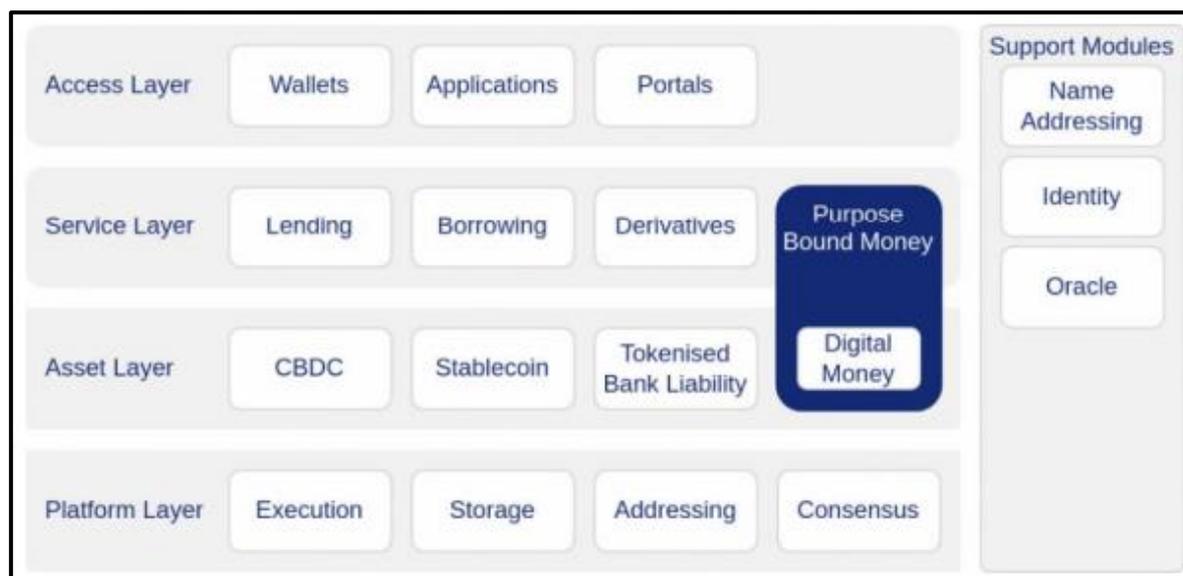
In addition, the policy recommendations for OIC member countries are listed below:

- **Harmonization/standardization** to mitigate cross-border transaction delays and enhance interoperability
- **Sustainable CBDC design** to have a sustainable solution, the design should aim to reduce carbon emissions and energy consumption by utilizing green technology and lowering environmental footprint
- **Sharing experiences on CBDC cybersecurity threats by members** to eliminate possible similar threats to another country
- **OIC currency conversion Project** to allow the exchange of one country's CBDC with another using a real-time digital exchange rate platform
- **OIC CBDC forum** to create a specialized platform for sharing knowledge and lessons learned on CBDC design and development

#### 4.2.5. Singapore

Provided the only non-OIC state among the country case studies, Singapore constitutes an important example both in its geography and across the world as the Monetary Authority of Singapore (MAS) has currently engaged in several multilateral CBDC development efforts, primarily the “project ubin” and “orchid”. Dr. NAGAYEV stated during his presentation that MAS has predominantly directed its experimental efforts towards wholesale cross-border transactions involving financial institutions. On the front of r-CBDC, MAS has conducted a comprehensive initial appraisal of the economic rationale underpinning its potential issuance in Singapore. This preliminary assessment encompasses a deep-seated examination of its implications for financial stability and the tenets of monetary policy. MAS is quick to acknowledge the prospect of future scenarios wherein a r-CBDC might produce benefits, ranging from augmenting financial inclusion and empowering programmable money to mitigating systemic vulnerabilities.

**Figure 5.** System Architecture Overview of the MAS



Source: MAS

Accordingly, after the initial assessment, MAS embarked its journey towards digital SGD by launching a project called “Orchid” at the Singapore Fintech Festival (SFF) 2021. The Purpose Bound Money (PBM) model, which is being investigated in the initial stage of Project Orchid, is to enhance the existing concept and functionalities of programmable payment and programmable money. It denotes a set of guidelines and specifications that outline the criteria under which a digital currency can be utilized.

Dr. NAGAYEV underlined several points considering the Singaporean experience such as CBDC offering the MAS additional monetary policy tools while real-time transaction data can provide insights into economic activity, helping in making more informed policy decisions. In addition, he stated that DeFi (Decentralized Finance) integration with the CBDC is a notable trend as Singapore could easily explore DeFi applications built on the CBDC infrastructure. Furthermore, integrating digital identity with the CBDC is becoming common and Singapore might adopt digital identity solutions to enhance security and user verification, he added. Dr. NAGAYEV also referred sustainability as a growing trend and hence Singapore may explore green CBDC solutions that are more energy-efficient and align with global environmental goals, he told.

In terms of lessons learnt from the case of Singapore, these are the main lines:

- **Contextualization:** Rather than simply emulating models from other countries, nations should conduct a thorough assessment of their own strengths, weaknesses, and economic context. Singapore's decision to create a purpose-bound CBDC aligned with its specific requirements and financial ecosystem.
- **Leverage Existing Infrastructure:** Singapore wisely leveraged its advanced financial infrastructure to build a CBDC that seamlessly integrates with its existing systems.
- **Flexibility for Innovation:** Singapore's approach allows for flexibility in the use of the digital SGD for various purposes, such as business transactions or cross-border trade.

- **Avoid One-Size-Fits-All Approach:** Singapore's choice to develop a purpose-bound CBDC model underscores the importance of tailoring the digital currency's features and capabilities to align with a nation's economic goals and financial ecosystem.
- **Iterative Development:** The development of purpose-bound CBDCs should be an iterative process that allows for adjustments based on feedback and changing economic conditions.

Country-specific policy recommendations are outlined as follows:

- **Continue to promote fintech innovation:** Singapore has a strong track record of promoting fintech innovation, and this should continue to be a priority as the country explores the potential of CBDCs.
- **Develop a clear regulatory framework for CBDCs:** It is important to develop a clear regulatory framework for CBDCs before they are launched. This will help to ensure that CBDCs are used in a safe and responsible manner, and it will also help to protect consumers.
- **Partnerships and agreements with neighbouring countries:** To maximize the benefits of a CBDC, Singapore should actively seek cross-border partnerships and agreements with neighbouring countries and 20 major trading partners.
- **Digital Identity Ecosystem Integration:** Seamlessly integrate CBDC with a comprehensive digital identity ecosystem. This integration can enhance security, reduce fraud, and enable efficient customer onboarding and authentication, improving the overall user experience.
- **Carbon-Neutral CBDC:** Explore the development of a carbon-neutral CBDC to align with global sustainability goals. Implementing blockchain technologies with lower energy consumption and promoting green practices in CBDC operations can contribute to Singapore's commitment to environmental responsibility.

Finally, key policy advises considering the OIC member countries include:

- **Investing in Digital Infrastructure:** Prioritize investments in digital infrastructure, including high-speed internet access and reliable mobile networks, to ensure that citizens have the necessary digital tools to access and use CBDCs.
- **Fintech Ecosystem Development:** Encourage the growth of fintech ecosystems by supporting startups, innovation hubs, and accelerators. This can help build local expertise in digital technologies, including blockchain and DLT, which underpin CBDCs.
- **Enhancing Cybersecurity Measures:** Prioritize investments in cybersecurity to safeguard CBDC systems against cyber threats and ensure the trust and security of digital currencies.
- **Cross-Border Collaboration:** Collaborating with neighbouring OIC member countries and international partners can facilitate cross-border payments and trade.
- **Supporting Digital Literacy:** Implement educational initiatives to raise digital literacy levels among their populations, ensuring that citizens understand the benefits and risks associated with digital currencies.
- **Monetary Policy Considerations:** Consider carefully the implications of CBDCs on their monetary policies, exchange rate regimes, and financial stability, considering lessons learned from Singapore's experience.

## Questions and Answers Section (Q&A)

**Question-1:** Representative of Brunei Darussalam questioned how the confidentiality and security of CBDCs would be ensured in the event of any power outage or disruption.

**Answer-1:** Dr. NAGAYEV explained that there are other alternatives in case of any problems, that not only online but also offline transactions are taken into account.

**Question-2:** Representative of Senegal enquired firstly, why Nigeria is considering the current phase as a pilot phase and not as a launch phase, secondly,

**Answer-2:** Dr. NAGAYEV expressed that e-Naira is currently suspended for some reasons and is considered a pilot phase. These reasons are briefly listed as the E-Naira's competition with the cryptocurrency that provides investment return, the public's adoption rate, low literacy and awareness, and mobile technology.

## 5. Experiences/Perspectives of the Member States, International Institutions, and Private Sector

### 5.1. Experiences/Perspectives of the Member States

#### 5.1.1. Iran

Mr. Mohammad Javad MOTEVALLI, Consultant from the Central Bank of the Islamic Republic of Iran delivered a presentation on the experiences and opinions on the CBDCs. At the outset, Mr. MOTEVALLI in the first part of his presentation briefed the participants about the definition of CBDCs and the current situation. In this context, he stated that there are two types of CBDCs, retail and wholesale, retail CBDCs are designed to be held and exchanged between individuals and businesses, while wholesale CBDCs are for financial institutions. Additionally, he highlighted that countries representing over 95% of global GDP have recently begun to work on CBDC. While most countries are years away from implementation, central banks in Asia, Africa and the Caribbean have already paved the way.

Then, in the second part of his presentation, he mentioned Digital Rial, like many CBDC systems, Digital Riyal consists of three Participants, central banks, commercial banks and customers. Moreover, he noted that the Digital Rial was issued by the central bank and implemented as a pilot phase, adding that some limited users can install and use the valid one on their mobile phones, and that about \$250 million has been issued.

Next, he noted that in 2020, global companies moved approximately USD 23.5 trillion across borders, predominantly using the cross-border payment processes of correspondent banking networks, which cost approximately USD 120 billion in transaction costs and took approximately two to three days for settlement. All these problems have led countries to develop new solutions. One of these solutions is the use of CBDCs and cross-border payments. With the use of CBDCs in cross-border transactions, many advantages such as lower fees, faster process, lower risk, lower reporting burden and higher transparency will emerge. He also added that with regard to how to use CBDCs in cross-border transactions, there are three models of CBDC connectivity based on international studies and experiments.

In this context, he explained the three models. The first model, which is known as a compatible CBDC system, recommends that central banks develop their own internal CBDC infrastructure using common standards to provide a seamless connection between their platforms. In this

model, there is no intermediary solution institution to help connect countries and countries interact with each other bilaterally. In the second model, referred to as interconnected CBDC systems, linking two CBDC systems is done using intermediate institutions such as a clearing system. Finally, Model 3 proposes a link between the CBDCs of two central banks. In other words, Model 3 provides a single platform serving as a common platform where the CBDCs of the central banks would be issued on a single network and the legal structure and rules of conduct would be the same.

Next, he continued his presentation by informing the participants about the platform called OIC CBDC Joint Platform. He stated that this platform includes a single infrastructure, a single set of participation requirements and a single rulebook for all members, just like the Model 3. He added that in the platform, which uses a private and permissioned blockchain, the central banks of the member countries will act as the main nodes in the network, and each central bank will be the issuer of its own CBDC on the platform. However, in the second layer, selected commercial banks will interact with their central banks and will be responsible for generating transactions. Finally, he concluded his presentation by emphasizing that commercial companies and other financial institutions that intend to make cross-border payments may refer to these commercial banks and that lower transaction costs, higher speed and greater transparency for Members are the potential benefits of this scheme.

### Questions and Answers Section (Q&A)

**Question-1:** Representative of Pakistan asked whether central banks on both sides should have CBDCs.

**Answer-1:** Mr. MOTEVALLI stated that this proposal is a multilateral CBDC proposal and is for countries that have initiated their own CBDC work. He also noted that this proposal is a draft conceptual framework and that some questions are still being worked on.

**Question-2:** Representative of Jordan enquired who would be the administrator of this system.

**Answer-2:** He explained that a committee consisting of countries participating in this system could be a solution and perhaps other solutions could be proposed.

#### 5.1.2. Saudi Arabia

Mr. Wael MERZA, Islamic Finance Expert from Central Bank of Saudi Arabia made a presentation on experiences and views on the CBDCs. He started his presentation by explaining that there are four types of digital currencies: digital, token-based, central bank issued and widely accessible. Within this scope, he noted that firstly, CBDC is a central bank-issued, digital version of a fiat currency available to legal and or natural persons. Secondly, Tokenized Deposits are a type of backed virtual asset issued by a licensed bank that can be used for payment or investment purposes as a liability of the issuer. Thirdly, Stablecoins are a type of backed virtual asset issued by licensed banks and non-bank legal entities that aim to maintain a stable value. Finally, Virtual Currency is a digital representation of value that is not issued or guaranteed by a central bank or a public authority, is not attached to a legally established currency, it does not possess a legal status of currency or money, is accepted by natural or legal persons as a means of exchange.

Afterward, Mr. MERZA in the second part of his presentation mentioned potential benefits and risks of CBDCs. Within this scope, he expressed that there are mainly three benefits of CBDCs:

efficiency and speed, innovation and competition and data and analytics. Digital currencies can offer faster transaction speeds compared to traditional banking systems, especially for cross-border transactions in terms of efficiency and speed. The rise of virtual assets can drive innovation in the financial sector, leading to the development of new products, services, and technologies. Finally, with the proper infrastructure, central banks could gain access to real-time data on economic activities, which can be invaluable for decision-making and forecasting. When it comes to risks of CBDCs, he highlighted that the widespread adoption of digital currencies could lead to additional volatility in financial markets with the potential to spill over into the traditional financial system and interfere with a Central Bank's ability to implement or transmit monetary policy. He also stated that there are operational and cyber security risks. Moreover, he expressed that some digital currencies pose a liquidity risk, especially in times of financial crisis, as they may not be easily convertible into fiat money.

Furthermore, he talked about the experiences of Saudi Arabia on CBDCs. He started by mentioning that they have developed two main projects so far. The first one is a cross-border wholesale called Project Aber, which offers a customised platform and only banks in Saudi Arabia and the United Arab Emirates participate in it. However, he stated that they finished the project and this experience was very useful to move on to other steps.

Afterward, he indicated that the second experiment is domestic wholesale and that they tested it in 2022 with the aim of understanding how the system works, what the risks are, and how it can work properly by involving selected local banks and fintech companies. Thirdly, SAMA participates in the BIS innovation hub project m-bridge, multiple-central bank digital currency (multi-CBDC) common platform for wholesale cross-border payments, as observer in order to understand how cross and complex transactions are carried out.

The presentation was completed with some recommendations for the OIC Member Countries to enhance the CBDC activities. Within this framework, he emphasised that establishing forums and networks to share information and expertise on CBDCs, conducting joint research and experimentation on CBDCs, providing technical assistance and training to central banks in the early stages of developing CBDCs, and collaborating to develop common standards and guidelines for CBDCs would be highly beneficial.

## **5.2. Experiences/Perspectives of the International Institutions**

### **5.2.1. Islamic Development Bank Institute (IsDBI)**

Dr. Hilal HOUSSAIN, associate manager, Knowledge Solutions Team of the Islamic Development Bank Institute (IsDBI) delivered a presentation on digital vouchers solution; a patented solution by the IsDBI that is sustainable, smart, and stable digital system for financial inclusion. He highlighted that financial exclusion and poverty are major issues in developing countries, and these countries have difficulty monitoring and verifying the tracing of government/institutional aid, the potential existence of black market, and the existing solutions are not effective in supporting disadvantaged groups in achieving financial inclusion.

Dr. HOUSSAIN briefed the participants about the background of the digital voucher solution whose aim is to solve these problems, and it will be used as a restricted complementary digital currency which will aim to support a) targeted groups and enhance their financial inclusion in the domestic economy, and b) domestic small and medium enterprises (SMEs) that provide the services to the beneficiaries in local market.

Dr. HOUSSAIN informed the participants that the digital vouchers solution applies advanced algorithms and technologies to ensure the effectiveness of financial inclusion as well as the stability of the formal currency.

Next, he continued his presentation with the basic structure of the digital voucher solution, which consists of three parties: a) the government authority issuing the digital voucher, b) the beneficiaries, and c) the service providers.

The presentation was completed by emphasizing the digital vouchers solution can be very helpful for financial inclusion and social development. It has the potential to support public services and enhance impact financing at the economy's level. Advanced technologies are essential for the successful implementation of the system. The IsDBI is currently exploring different opportunities with technology partners to implement the digital vouchers solution in IsDB member countries.

### Questions and Answers Section (Q&A)

**Question-1:** Mr. Chair asked if the project has begun implementation or if they need support to start implementation.

**Answer-1:** Dr. HOUSSAIN explained that they are still at a conceptual level, in other words, a kind of minimum prototype. He stated that they are now developing a higher-level version that can be used to see the impact of economic analysis and they are licensing it to vendors in member countries to try it in the field because they have patented it.

**Question-2:** The representative of Saudi Arabia asked whether there are any project initiatives that could tokenize foundation or endowment assets for distribution to users.

**Answer-2:** Dr. HOUSSAIN expressed that they are currently conducting a very serious discussion on the Cash Waqf Fund, in other words, on the issue of tokenisation of assets, and that they are also consulting with other departments on this issue.

**Question-3:** The representative of Senegal asked whether, within countries, they consider that this applies to all types and sizes of enterprises, formal and informal.

**Answer-3:** He noted that in order to include these enterprises in the system, a strong infrastructure and a favourable incentive mechanism should be developed.

## 6. COMCEC Project Support Programs

Mr. Mustafa Adil SAYAR, Program Coordinator at the COMCEC Coordination Office, made a presentation on COMCEC Project Support Programs. He started his presentation by providing general information on the COMCEC Project Support Programs, namely COMCEC Project Funding, COMCEC COVID Response and COMCEC Al-Quds Program.

After that, he explained objectives and main characteristics of CPF. Accordingly, he informed the participants that more than 130 projects have been implemented by 29 countries and 6 OIC Institutions. He emphasized that more than fifty countries benefited from the output of the project activities. Considering moderate number of projects implemented in the financial cooperation area, Mr. SAYAR encouraged the participants to submit projects in this area.

Mr. SAYAR also provided details about the supported themes under the financial cooperation area. He stated that the CCO supports the projects which are formulated in line with the sectoral themes that are formulated in accordance with the COMCEC policy recommendations.

Reminding that the project submission period is still open, he recommended the participants to review the application documents particularly the Project Preparation and Submission Guidelines as well as supported sectoral themes before designing and submitting their project proposals. Moreover, he informed the participants about online project submission and highlighted the critical steps for this process. He concluded his presentation with providing brief information about finance project under CPF conducted in 2023.

## **7. Closing Remarks**

In his closing remarks, Mr. Can AYGÜL, Head of the Department at COMCEC Coordination Office (CCO), underlined the importance of fruitful discussion regarding improving cooperation among central banks in terms of digital currencies for OIC Member countries.

He ended his closing remarks by expressing his sincere thanks to the participants of the Member Countries for their active involvement in and contributions to the discussions and deliberations. He also conveyed his thanks to the representatives of international and OIC Institutions for their valuable contributions and CCO for the excellent preparations made for the meeting.

## 8. ANNEXES

### Annex-I



**20<sup>th</sup> MEETING OF THE COMCEC**  
**FINANCIAL COOPERATION WORKING GROUP**  
**(October 9-10, 2023)**

***“Improving Cooperation among Central Banks In Terms Of Digital Currencies: Challenges and Prospects for OIC Member Countries”***

**DRAFT AGENDA**

Opening

1. “Improving Cooperation among Central Banks In Terms Of Digital Currencies: Challenges and Prospects for OIC Member Countries” (Scope, Conceptual Framework and Methodology)
2. Lessons Learnt from the Selected Case Studies
3. Experiences/Perspectives of the Member States and International Institutions on the Subject
4. COMCEC Project Support Programs
5. Policy Debate Session: Formulation of Policy Recommendations for the 39<sup>th</sup> COMCEC Ministerial Session

Closing

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## Annex-II



### DRAFT PROGRAMME

#### 20th MEETING OF THE COMCEC FINANCIAL COOPERATION WORKING GROUP

(October 9 -10, 2023, Ankara)

*“Improving Cooperation among Central Banks In Terms Of Digital Currencies: Challenges  
and Prospects for OIC Member Countries”*

*(2nd Session - Final Draft of Research Report and Policy Recommendations)*

#### October 9<sup>th</sup>, 2023

- 09.00-09.30**      **Registration**
- 09.30-09.35**      **Recitation from Holy Qur’an**
- 09.35-09.45**      **Opening Remarks**
- 09.45-10.05**      **COMCEC Financial Outlook 2023**
- *Presentation by Can AYGÜL*  
*Head of Department*  
*COMCEC Coordination Office (CCO)*
- 10.05-10.15**      **Discussion**
- 10.15-10.55**      **Presentation of the Draft Research Report**
- *Presentation by Prof. Dr. Mehmet BABACAN*  
*Consultant*  
*COMCEC Coordination Office*
- 10.55-11.05**      **Discussion**
- 11.05-11.20**      **Coffee Break**

- 11.20-12.00**    **Lessons Learnt from the Selected Case Studies and the Policy Options**
- *Presentation by Dr. Ruslan NAGAYEV  
Consultant  
COMCEC Coordination Office*
- 12.00-12.30**    Discussion
- 12.30-14.00**    **Lunch**
- 14.00-15.00**    **Experiences/Perspectives of the Member States**
- *Sharing Experiences and Good Practices in Cooperation Among Central Banks in terms of Digital Currencies*
  - *Discussion*
- 15.00-15.15**    **Coffee Break**
- 15.15-15.45**    **Experiences/Perspectives of International Institutions**
- *Presentation by IsDB Group  
Dr. Hilal Hussain  
Associate Manager*
  - *Discussion*
- 15.45-16.30**    **Utilizing the COMCEC Project Support Programs**
- *Presentation by Ramazan GÖRGEÇ  
Assistant Expert  
COMCEC Coordination Office*
  - *Discussion*

October 10<sup>th</sup>, 2023

**11.00-13.00 Policy Debate Session: Formulation of Policy Recommendations for the 39th COMCEC Ministerial Session on Improving Cooperation Among Central Banks in terms of Digital Currencies: Challenges and Prospects for OIC Member Countries**

There will be a policy debate session to come up with a set of policy recommendations to improve the cooperation among Central Banks of the Member Countries in the field of Digital Currencies.

Discussion

**13.00-13.15 Closing Remarks and Family Photo**

**13.15-14.00 Lunch**

**14.00-19.00 Social Program**

## Annex- III

### LIST OF PARTICIPANTS

#### 20<sup>th</sup> Meeting of the Financial Cooperation Working Group

(9-10 October 2023, Ankara- TÜRKİYE)

#### A. MEMBER COUNTRIES OF THE OIC

##### REPUBLIC OF AZERBAIJAN

- Ms. ZIBA MURGUZOVA YUSIFOVA

Head of the Division, Ministry of Finance of the Republic of Azerbaijan

##### REPUBLIC OF BENIN

- Mr. HYACINTHE MONTCHO

Director of Studies and Aid Development Coordination, Ministry of Economy and Finances

##### BRUNEI DARUSSALAM

- Ms. ARINA AMINLIEW

Manager, Brunei Darussalam Central Bank (BDCB)

- Ms. PG MASLINA PGHAJIMAHMUD

Executive Director, Brunei Darussalam Central Bank (BDCB)

##### ISLAMIC REPUBLIC OF IRAN

- Ms. NASRIN GHASSEMIMOGHADAM

Expert, Ministry of Economic Affairs & Finance

- Mr. MOHAMMADJAVAD MOTEVALLI

Consultant, Central Bank of Iran

- Mr. HOSEIN FEKRI

Consultant, Central Bank of Iran

##### REPUBLIC OF IRAQ

- Mr. AHMED AODHAÏB

Manager, Central Bank of Iraq

- Mr. WALEED KHLEEF JBARA

Director, Department of the International Economic Relations

- Mr. GHAITH ALSAEDI

Manager, Central Bank of Iraq

**HASHEMITE KINGDOM OF JORDAN**

- Mr. MOHAMMAD ZIADEH

Executive Manager Assistant - Information Technology Department, Central Bank of Jordan

**THE STATE OF KUWAIT**

- Mr. SOUD ALRASHIDI

Foreign Relation Researcher, Ministry of Finance

**FEDERAL REPUBLIC OF NIGERIA**

- Mr. MUKHTAR AMASA

Principal Admin Officer/Economist, Federal Ministry of Finance

**ISLAMIC REPUBLIC OF PAKISTAN**

- Mr. SHAROON RASHEED

Joint Director, State Bank of Pakistan

**KINGDOM OF SAUDI ARABIA**

- Mr. MASHARY ALSHEEHA

Senior Economist, Ministry of Finance of Saudi Arabia

- Mr. WAEL MERZA

Islamic Finance Consultant, Saudi Central Bank

**REPUBLIC OF SENEGAL**

- H.E. Prof. Dr. SEYDINA OUSMANE SENE

Lead Technical Advisor, Ministry of Economy

**REPUBLIC OF SIERRA LEONE**

- Mr. MUSA SESAY

Senior Economist, Ministry of Finance

**REPUBLIC OF SUDAN**

- Mr. MOHAMED ELMUBARAK

Third Secretary, Sudan Embassy Ankara

## **TÜRKİYE CUMHURİYETİ**

- Dr. MAHMUT AYDOGMUS

Director of International Relations, Borsa İstanbul

- Mr. BİLGEHAN KÜRŞAD ÖZ

Director, Central Bank of the Republic of Türkiye

- Mr. NECMETTİN METE SAKALLIOĞLU

Head of Department, DG of Financial Markets and Exchange

- Ms. SELCAN OLCA

Senior Expert, Capital Markets Board/COMCEC CMR Forum

- Mr. İBRAHİM KÜÇÜKİKİZ

Specialist, OIC COMCEC Central Banks Forum

- Mr. YAKUP KAYATAŞ

Asst. IT Specialist, Central Bank of the Republic of Türkiye

- Ms. EMİNE HARMANKAYA

Assistant Specialist, OIC COMCEC Central Banks Forum

- Ms. EZGİ ASLAN

Assistant Specialist, OIC COMCEC Central Banks Forum

- Mr. YUNUS EMRE ÖNEMLİ

Assistant Expert, Ministry of Treasury and Finance

### **B. THE OIC SUBSIDIARY ORGANS**

#### **STATISTICAL, ECONOMIC, SOCIAL RESEARCH AND TRAINING CENTER FOR ISLAMIC COUNTRIES (SESRIC)**

- Dr. AHMET OZTURK

Senior Researcher, Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

- Ms. SEMİHA ABDULLAH

Expert, SESRIC

**C. SPECIALIZED ORGANS OF THE OIC**

**ISLAMIC DEVELOPMENT BANK (IsDB)**

- Dr. HİLAL HOUSSAİN

Associate Manager, Knowledge Solutions Team, Islamic Development Bank Institute

**D. AFFILIATED ORGANS OF THE OIC**

**STANDARDS AND METROLOGY INSTITUTE FOR ISLAMIC COUNTRIES (SMIIC)**

- Mr. YASİN ZÜLFİKAROĞLU

Specialist, SMIIC

**E. CONSULTANTS**

- Prof. Dr. MEHMET BABACAN

Professor of Economics, Marmara University

**F. COMCEC COORDINATION OFFICE**

- Mr. SELÇUK KOÇ

Acting Director General, COMCEC Coordination Office

- Mr. CAN AYGÜL

Head of Department, COMCEC Coordination Office

- Mr. MEHMET ASLAN

Head of Department, COMCEC Coordination Office

- Mr. MEHMET CELALETİN AKTAŞ

Head of Department, COMCEC Coordination Office

- Ms. ÖZGÜL YÜKSEL

Coordinator

- Ms. SEYYİDE RAVZA ÇOKSÖYLER

Assistant Expert

- Mr. OZAN LİF

Coordinator

- Mr. HAKAN USLU

Coordinator

- Mr. Selim UYAR

Registration and Accommodation Coordinator

## Annex-IV

### **POLICY RECOMMENDATIONS OF THE 20<sup>th</sup> MEETING OF THE COMCEC FINANCIAL COOPERATION WORKING GROUP**

There will be a moderation session during the Working Group Meeting under the title of *“Formulation of Policy Recommendations for the 39<sup>th</sup> COMCEC Ministerial Session on Improving Cooperation Among Central Banks in Terms of Digital Currencies: Challenges and Prospects for OIC Member Countries”* on October 10<sup>th</sup>, 2023. This document was prepared to enrich the discussions during the said session to come up with concrete policy recommendations for policy approximation among the Member Countries. It was drafted in accordance with the main findings of the research report conducted for this meeting.

**POLICY ADVICE 1: Establishing a project management/steering committee and identifying the objectives and use cases for CBDCs in consultation with a wide range of relevant stakeholders (government bodies, financial institutions, universities, think tanks, civil society organizations etc.) to build a digital ecosystem that is interoperable with existing payment system(s), increase financial inclusion and improve monetary policy transmission**

***Rationale / Explanation:***

It is crucial to have a robust Project Management/Steering Committee comprising of members with diverse expertise that will continuously provide executive support and to ensure the project meets its goals and objectives. The Committee will provide and develop Central Bank digital Currencies (CBDCs) with a clear vision and objectives adapted to meet the needs, which is what to be achieved with CBDC, e.g. improving financial inclusion or making it easier for businesses to pay. Clearly defining objectives and use cases (such as retail payments, wholesale settlements, cross-border transactions, or government disbursements) is critical because it lays the foundation for the entire CBDC projects. Without a clear understanding of what the CBDC aims to achieve and how it will be used, it is challenging to make informed decisions about its design, technical requirements, and supporting infrastructure. Additionally, having well-defined objectives helps communicate the benefits of CBDC adoption to the public and relevant stakeholders, fostering support and collaboration.

**POLICY ADVICE 2: Developing legal framework and regulatory compliance/regulatory approval and oversight for ensuring legal clarity, risk management, consumer protection and Central Bank’s role**

***Rationale / Explanation:***

It is crucial to develop a comprehensive and robust legal and regulatory framework that addresses legal, financial, and security aspects and the specific characteristics of CBDCs, ensuring compliance with existing laws and regulations. The legal framework and regulatory compliance steps are essential in terms of legal clarity, risk mitigation, consumer protection and Central Bank's role. Seeking regulatory approval within a well-defined framework ensures that the CBDC operates within the legal framework, preventing potential regulatory hurdles or legal challenges after launch. Regulatory compliance however is an ongoing responsibility. Financial and legal standards can change due to evolving technologies and emerging risks. Maintaining regulatory oversight ensures that the CBDC operates within the boundaries of the law and remains secure for users. Such a perspective should meet shari’ah compliance criteria and promote the role of Islamic finance hubs/centers among the OIC member states as well.

**POLICY ADVICE 3: Setting-up a dedicated task force including Central Bank specialists to identify the right technology stack for the CBDCs (i.e. for providing security, efficiency, scalability, interoperability etc.)**

***Rationale / Explanation:***

It is necessary to implement emerging technologies such as the AI, which ensure the integrity, confidentiality, interoperability, scalability and efficiency of CBDC transactions. The choice of the appropriate Technology stack for the CBDC, considering factors such as distributed ledger technology (DLT), distributed databases or centralized databases, is crucial as it affects the CBDC's technical capabilities, security, and efficiency. Whether to use block chain or another technology depends on factors like the desired level of decentralization and/or distributedness along with specific use cases of the CBDC. Therefore, it might be pertinent to establish a dedicated task force consisting of qualified experts to elaborate on the subject.

**POLICY ADVICE 4: Designing and developing of CBDCs with extensive testing and pilot studies by Central Banks in consultation with technology experts and relevant stakeholders**

***Rationale / Explanation:***

It is important to create CBDC systems that are adaptable to future technological developments and changing economic conditions. Collaboration with technology experts ensures that the CBDC infrastructure is robust, user-friendly, secure, and resilient. Furthermore, creating intuitive and friendly interfaces for CBDC wallets and applications will encourage adoption among a wide range of users. Rigorous testing is essential to identify and resolve any technical issues before the CBDC's launch. Comprehensive testing and pilot programs help identify and address any technical or operational issues early in the development process. This proactive approach improves the overall functionality and reliability of the CBDC system.

**POLICY ADVICE 5: Developing policies/strategies/programs for ensuring security and privacy in order to protect user data and transactions, and to balance privacy and legal requirements**

***Rationale / Explanation:***

It is crucial to implement strong security measures to protect user data and transactions, and to balance privacy and legal requirements. Security is paramount in the world of digital currencies. Robust security measures protect the CBDC system from threats such as cyber threats and hacking attempts, bolster user confidence, and prevent unauthorized access to funds. Compliance with data protection regulations is essential to respect user privacy.

**POLICY ADVICE 6: Facilitating the access of the public to the CBDCs through user-friendly distribution channels in collaboration with financial institutions**

***Rationale / Explanation:***

Establishing necessary distribution channels and user-friendly wallets ensures that CBDCs are accessible to the public. Collaboration with financial institutions where is needed and/or relevant, can extend the reach of CBDC services, making them widely available.

**POLICY ADVICE 7: Enhancing monetary transmission mechanism, and improving monetary policy effectiveness and financial stability through the CBDCs**

*Rationale / Explanation:*

Integrating CBDCs with monetary policy is fundamental for central banks. It allows them to achieve their economic objectives such as price stability while leveraging the benefits of digital currency. Certain governance rules are necessary to maintain trust and stability in the CBDCs as many of the ongoing projects consider the CBDCs as complementary to cash. Digitalization of goods and services and the related economic activity may enable monitoring prices instantly, thus lead to better assessment of the impacts of monetary policies.

**POLICY ADVICE 8: Developing a comprehensive public relations and communication strategy (i.e. mobile applications) to enhance user capacities and raise awareness about CBDC usage, benefits, and security**

*Rationale / Explanation:*

CBDCs are a new and unfamiliar technology for many people. It is important to communicate effectively with the public about CBDCs and how they will work. Increasing financial literacy on the CBDCs is therefore a must, given the potentially widespread usage such digital platforms and interfaces. Awareness campaigns and educational programs are vital to inform the public, businesses, universities and financial institutions etc. about the benefits of CBDCs, how to use them safely, best security practices and what precautions to take. These campaigns aim to raise awareness and build trust in the CBDC system, contributing to the successful adoption of CBDCs.

**POLICY ADVICE 9: Developing/improving sound monitoring and maintenance mechanisms for gathering insights about the CBDC's performance**

*Rationale / Explanation:*

The official launch of the CBDC marks a critical milestone, but it should be executed seamlessly to build trust among users and stakeholders. Ensuring that all necessary infrastructure and support systems are in place minimizes disruptions during the transition. On the other hand, continuous monitoring and regular maintenance are essential to uphold the CBDC's performance and security standards. **In this context, gathering feedback and iteratively improving CBDC based on user experiences are crucial to its long-term success. By adapting to changing needs and addressing user concerns, in addition to increasing the adoption and utility of CBDC in the financial ecosystem, CBDC remains reliable and secure for users.**

**POLICY ADVICE 10: Promoting cross-border CBDC utilization by enhancing international cooperation between central banks and international organizations through standards and protocols**

*Rationale / Explanation:*

Exploring cross-border opportunities and interoperability by entering into agreements with other countries to facilitate international use is crucial for enhancing the utility of CBDCs on a global scale. It facilitates international trade, remittances, and financial transactions, promoting economic cooperation between countries. International standards and protocols promote trust and interoperability, allowing CBDCs to function seamlessly across borders. Cross-border CBDC integration should also be weighed against the potential destabilizing effects of

increased volume of cross border capital flows as well as the potential for a CBDC of home country to displace another one if used extensively in a host country.

Collaboration with other central banks and international organizations is essential to create a standardized and interconnected ecosystem for CBDCs. The OIC-COMCEC Central Banks Forum provides a regular platform for the relevant authorities of the Member Countries. Therefore, this forum in cooperation with relevant OIC institutions such as SESRIC or SMIIC when needed, might be utilized for the realization of this recommendation. SESRIC's training programs on central banking to enhance capacity building in terms of human resources with respect to CBCDs should also be utilized effectively.

#### **Instruments to Realize the Policy Advices:**

**COMCEC Financial Cooperation Working Group:** In its subsequent meetings, the Working Group may elaborate on the above-mentioned policy areas in a more detailed manner.

**OIC-COMCEC Central Banks Forum:** This special platform provides an interactive and open environment to discuss monetary, banking and financial issues, along with strengthening efforts aimed at deepening the cooperation and coordination by bringing Central Banks and Monetary Authorities of the OIC countries together.

**COMCEC Project Funding:** Under the COMCEC Project Support Programs, the COMCEC Coordination Office issues a call for project proposals each year. With the COMCEC Project Support Programs, the member countries participating in the Working Groups can submit multilateral cooperation projects to be financed through grants by the COMCEC Coordination Office. To realize the above-mentioned policy recommendations, the member countries can utilize the COMCEC Project Support Programs facility. These projects may include the organization of seminars, training programs, study visits, exchange of experts, workshops and preparation of analytical studies, needs assessments, and training materials/documents, etc.