

Presentation delivered by a
country representative



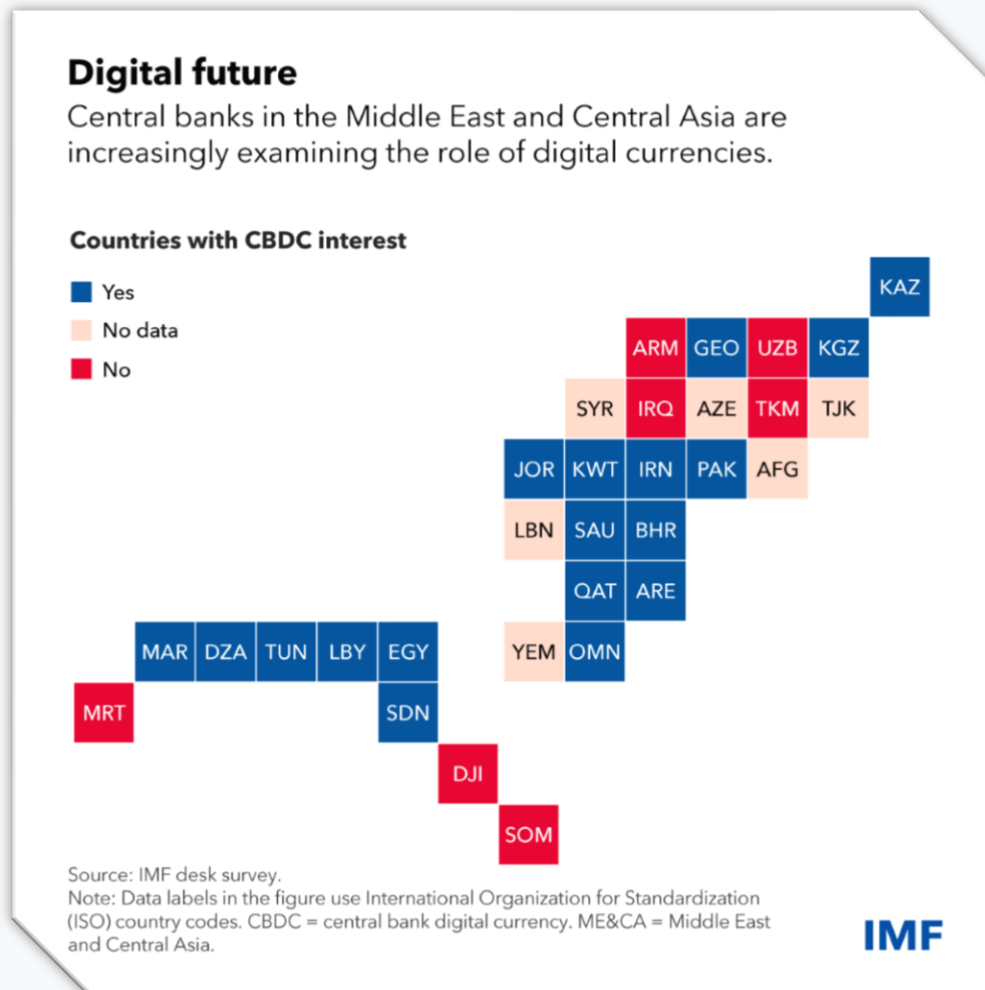
NATIONAL BANK OF KAZAKHSTAN

Overview

CENTRAL BANK DIGITAL CURRENCY (CBDC) EXPLORATION IN KAZAKHSTAN: DIGITAL TENGE PROJECT



KAZAKHSTAN IS ONE OF THE LEADERS IN THE CBDC EXPLORATION IN ASIA AND THE MIDDLE EAST



- ✓ Two years of R&D led to the **Digital Tenge platform being launched in limited production mode in 2023**
- ✓ «Many ... countries currently exploring a CBDC are at the research stage. **Kazakhstan is the most advanced after two pilot programs for the Digital Tenge» (IMF, 2024).**
- ✓ In 2024, the Digital Tenge project **won the award** of the international organization Currency Research in the “**Leadership in Digital Currencies Adoption**” category.

WHAT IS **DIGITAL TENGE?**



Third digital form of national currency based on a hybrid-decentralized platform



Token-based model



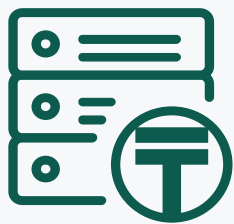
Two-tier architecture

(services for end users are provided by commercial banks)



Implemented **token-level programmability**

IN 2023, DIGITAL TENGE WAS LAUNCHED IN LIMITED PRODUCTION MODE



INDUSTRIAL ENVIRONMENT

✓ CBDC CARD
SCENARIO



✓ DIGITAL VOUCHERS SCENARIO
FOR FREE SCHOOL MEALS



R&D ENVIRONMENT

✓ CROSS-BORDER PAYMENTS
via SWIFT's CBDC Connector

✓ ISSUING STABLECOINS BACKED BY DT
in collaboration with Binance and KASE

✓ INNOVATIVE SCENARIOS PROVIDED BY MARKET
PARTICIPANTS
*Pedometer, Acceptance of payments in DT with instant
and automated VAT deduction*

✓ OFFLINE PAYMENTS
*R&D 2022 - conducted up to 15 transactions in a chain in
offline mode*

IN 2024, TWO MAIN ARCHETYPES OF USE CASES WERE IMPLEMENTED

Marked Tokens

Condition-based payment

«Programmable rules»:

If the recipient meets criteria A, B and C, the funds can be transferred

▪ NATIONAL FUND

- ✓ reducing inflationary pressure
- ✓ ensuring transparency across the supply chain
- ✓ eliminating unproductive intermediaries

...via marking with specific parameters

▪ ROAD REPAIR PROJECTS THROUGH GOVERNMENT PROCUREMENT

- ✓ ensuring transparency across the supply chain
- ✓ eliminating unproductive intermediaries

...via marking with specific parameters

▪ DT-ENABLED VALUE ADDED TAX REFUND

- ✓ simplifies verification for tax authorities
- ✓ accelerates VAT refunds for exporters
- ✓ enhances efficiency of tax collection

...via marking the VAT amount during to conduct transaction

Holding (Encumbrance)

Payment triggered by an event

«Programmable rules»:

If the event programmed in the smart contract occurs, transfer the funds

▪ SUBSIDIES FOR THE PURCHASE OF AGRICULTURAL MACHINERY AND LIVESTOCK

- ✓ enhancing control over public spending
- ✓ increasing operational efficiency

... via using the “payment versus delivery” principle

TRIGGEREVENT #1 - State system confirmation of machinery transfer to the agricultural producer

TRIGGEREVENT #2 - State system confirmation of livestock ownership transfer to the farmer

✓ *The archetype is technologically ready for industrial-scale deployment*

The value of the programmability of the digital tenge can only be realized if there are **trusted reference data sources and an adapted business processes** in place

WHAT'S FOR 2025?

- ❖ New participants (banks and legal entities) will be connected to the platform
- ❖ B2G/G2B scenarios will be scaled up: digital VAT expansion, transparent public spending
- ❖ New retail scenarios will be implemented, e.g. digital financial assets
- ❖ Development of a regulatory framework
- ❖ **Decision on production release of the Digital Tenge platform will be made in 2025**

WE ARE OPEN FOR COLLABORATION



kisc.kz



@npck.kz

Digital Tenge
Hub

