Agenda

- **Welcome** – Introductions and opening
- **Context** – Feasibility Project objective
- **Scope and definition** – what is CBDC?
- **Drivers, principles and attributes** – why issue it, and what should be considered in the design?
- **Project execution** – approach, scope and objectives
- **Procurement matters** – process and governance
- **Questions and Answers**
To practically investigate the feasibility, desirability and appropriateness of Central Bank issued Digital Currency to be used as Electronic Legal Tender, complimentary to cash.
SCOPE AND DEFINITION
The Cash Value Chain (Physical)

- **PRODUCT DESIGN AND DEVELOPMENT**
- **CASH PRODUCTION**
- **SARB OPERATIONS**
- **CASH CENTRE**
- **COMMERCIAL BANK**
- **RETAILERS AND OTHER CASH NODES**
- **CASH CONSUMERS (PUBLIC)**
- **ATM**
- **RETAILERS AND OTHER CASH NODES**
- **COMMERCIAL BANK**
- **CASH CENTRE**

**Reverse Logistics Flow**
Scope and Definition – What is CBDC?

- Three key characteristics of Digital Currencies\(^1\):
  - In electronic form;
  - Not the liability of anyone; and
  - Feature peer-to-peer exchange.

- Central Bank Digital Currency (CBDC) means money which is\(^2\):
  - Denominated in fiat currency (central bank money);
  - In electronic form; and
  - A liability on the central bank balance sheet similar to cash and central bank deposits.

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1: BIS CPMI Report on Digital Currencies 2015
Scope and Definition – What is CBDC?

- What appears to be emerging in practice and distinguishes between two potential types of CBDC, both of which are electronic central bank-issued and peer-to-peer:
  - Wholesale CBDC available only to financial institutions; and
  - Retail CBDC accessible to the general public.

- The focus of this initiative is limited to Retail CBDC, accessible to the general public, as *Electronic Legal Tender* (ELT)
CBDC can be an electronic version of cash

CBDC can be a universally accessible version of central bank reserve money

CBDC can be a central bank issued version of commercial bank account money

Scope and Definition – Types of Money

DRIVERS, PRINCIPLES, ATTRIBUTES….
Drivers, benefits & risks of CBDC

**Policy Drivers**
- Emerging Technologies
- Underserved or unserved markets
- Competition from private crypto Currencies (FOMO)/payment systems
- Industry need/s e.g. bonds

**Issuing CBDC**
- Pressure to reduce overall social cost of cash
- Modernising /optimising of issuance of legal tender
- Stimulating competition of money forms & network benefits
- Improving transparency
- Enabling innovation
- Deepening of financial inclusion

**Risks**
- Lack of adoption
- Lack of buy-in
- Operational risks
- Reputational risk
- Potential disintermediation
- Security

**Benefits**
- Maintain and enhance price and financial stability
- Improving transparency
- Enabling innovation
- Deepening of financial inclusion
- Stimulating competition of money forms & network benefits
- Improving transparency
Design Principles of CBDC

- Its value must be guaranteed and undisputable
- It must be a generally accepted medium of exchange / means of transacting, accepted and trusted as legal tender, complementary to cash
- It must be available and usable at all levels of the SA financial system and demographic/social fabric
- Its value must be pegged at one-to-one parity with the Rand
- It will be a liability on the balance sheet of the SARB and will remain so through the distribution chain (similar to cash)
- In terms of the attributes of a generally accepted medium of exchange, it must be divisible, durable, fungible, portable and the supply limited
- Value must be transferable immediately and irrevocably ISFTOV (Irrevocable, Simultaneous, Final Transfer of Value)
Additional Attributes of CBDC

- It must be stored securely on an electronic device.
- It must be operationally sound in terms of:
  - Availability 24 x 7;
  - Persistent storage and transactional integrity;
  - Performance of supporting systems;
  - Security; and
  - Robustness of counterfeiting measures and cybersecurity.
- Interoperability between banks and service providers must be assured, based on a common set of industry standards and APIs.
- There must be a balance between privacy / anonymity and auditability.
- Proof of issue, proof of ownership and transactional history must be auditable.
Feasibility Project Scope and Objective

- The primary business objective of the project is to develop a SARB position on the feasibility, desirability and appropriateness of issuing a central bank issued digital currency to be used as **electronic legal tender**, complimentary to cash.

- In doing so, explore potential use cases and deployment models in an Innovation Lab (sandpit) environment, considering:
  - legal and regulatory aspects;
  - monetary policy implications;
  - financial stability impacts;
  - practical implementation approaches and implications; and
  - technical and security aspects.
Probable Use Case Themes

**Theme 1**
Issue CBDC
- SARB designs, creates and stores CBDC

**Theme 2**
Distribute CBDC
- SARB distributes CBDC to Commercial Banks and Licensed Service Providers
- Commercial Banks and Licensed Service Providers provide CBDC to Businesses and Consumers

**Theme 3**
Transact with CBDC
- Consumers and Businesses transfer value in real time via existing and future online payment channels including mobile
- Consumers transfer value in real time while offline, to other Consumers and Businesses

**Theme 4**
Monitor and Maintain CBDC
- SARB monitors and reconciles issued CBDC
- SARB issues new CBDC with modernised technical and security attributes
Feasibility Project Approach

- SARB intends to execute the feasibility project in two stages:
  - **Stage 1**: Internal to the SARB environment in order to test principles, validate proposed technical solution(s) and enhance the body of knowledge.
  - **Stage 2**: Extend participation to selected banks, mobile network operators, and potentially to service providers and niche technology suppliers in order to address the full value chain.

- The SARB desires an agile approach with the ability to rapidly respond to concepts and ideas that are expected to emerge as part of a typical innovation lab environment.
Feasibility Project Responsibilities

- The SARB core project team will be responsible for:
  - managing the project;
  - obtaining and articulating business requirements and considerations related to policy matters;
  - compilation of the ultimate deliverable, which is the feasibility report and recommendations.

- The solution provider(s) will provide:
  - solution architecture input and guidance;
  - technical skills and technology capacity to design, develop, host and execute selected use cases in an innovation lab (sandpit) environment.
  - value-adding input regarding the business cases/business solution requirements.
The purpose of this EOI is to identify solution providers willing and able to participate in the CBDC feasibility project.

The SARB reserves the right to shortlist potential suppliers from this EOI process to be invited to respond to a request for proposal (RFP) for the CBDC feasibility project. The SARB may cancel the process at any time should the SARB deem it necessary to do so. In such an event, the potential vendors will be advised accordingly.

Shortlisting criteria (Section 4 of the EOI):
- Company profile including commercial requirements as may be applicable
- Illustrated ability in the subject matter
- Approach and methodology proposed

SARB expects to make a decision on successful shortlisted participants for the RFP within 2 months of the closing date of the EOI.
Procurement Matters

▪ SARB invites potential suppliers to express their interest by completing the EOI attached questionnaire and returning the required documentation to: maggy.ratshefola@resbank.co.za

▪ The response must be in electronic MS Word and PDF format

▪ The closing date and time for this EOI and submission of the documents is 06 June 2019 at 11:30am

▪ Any clarification questions or queries must be addressed to Ms Maggy Ratshefola at maggy.ratshefola@resbank.co.za or 012 399 7443
Questions and Answers