Generative AI

Cloud Computing

Data

Digital Intermediation Platforms

STATISTICS

Progress by IMF in measuring the digital economy

Working Group on E-commerce and the digital economy

UNCTAD

30Nov2023

Mr. Patrick Quill

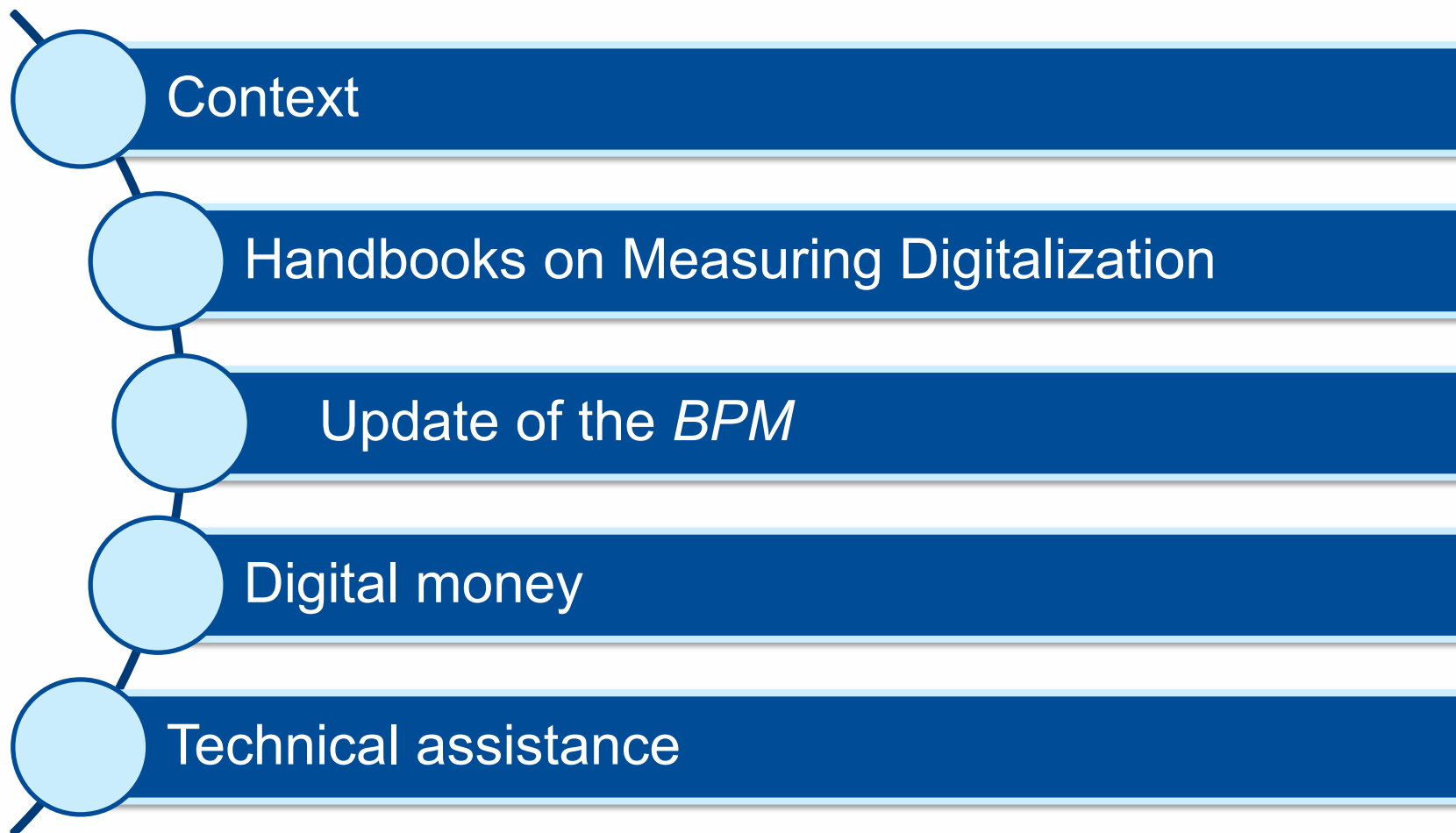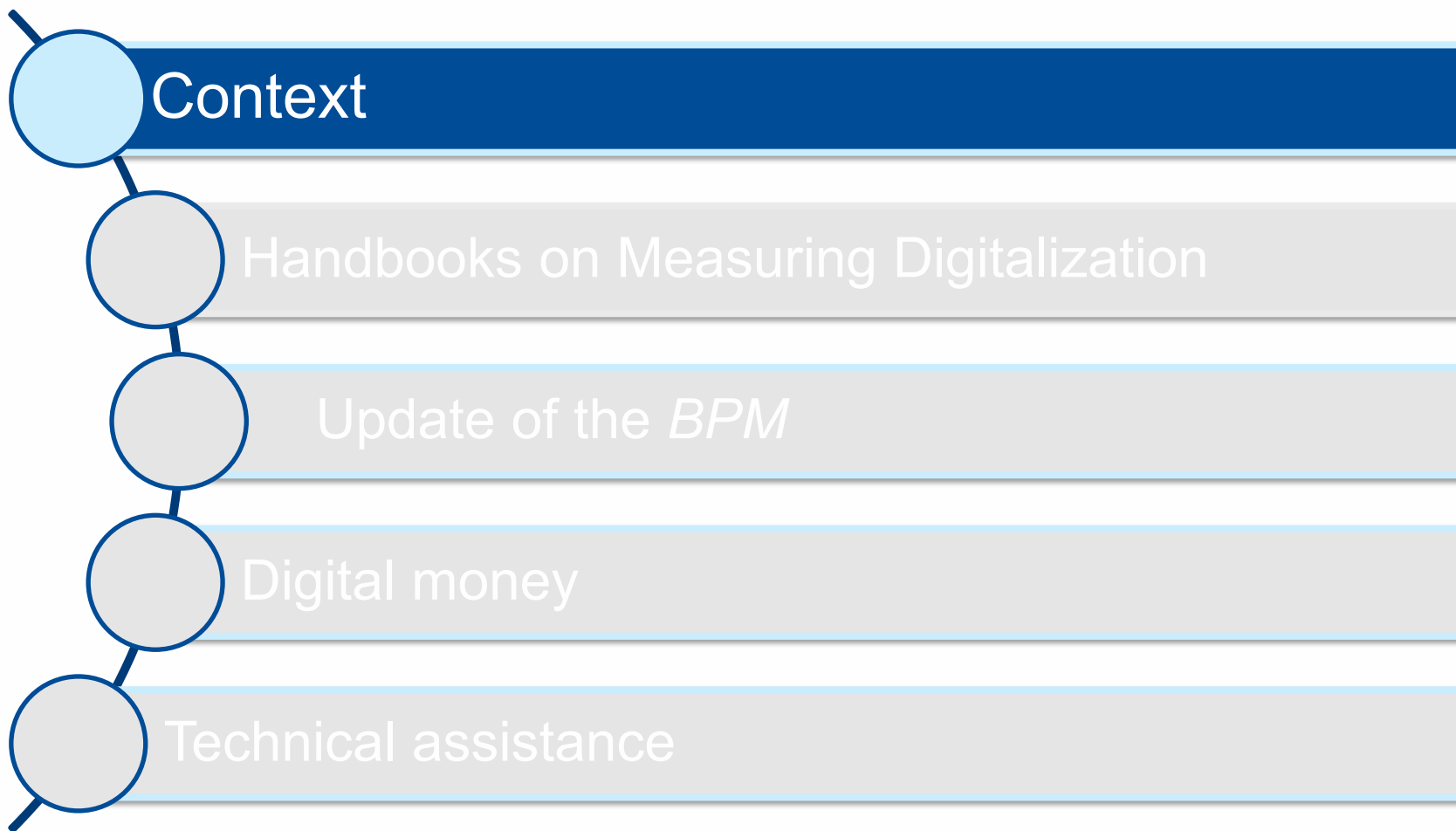Balance of Payments Division
Statistics Department

Main topics

- Context
- Handbooks on Measuring Digitalization
- Update of the *BPM*
- Digital money
- Technical assistance

Main topics

Context

Handbooks on Measuring Digitalization

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Context for measurement of the digital economy

- Size and importance of digital flows – for GDP, but also for trade?
- Opportunities – for small- and medium-sized enterprises, developing countries?
- Barriers to digital trade – data localization, regulations, concerns about privacy?
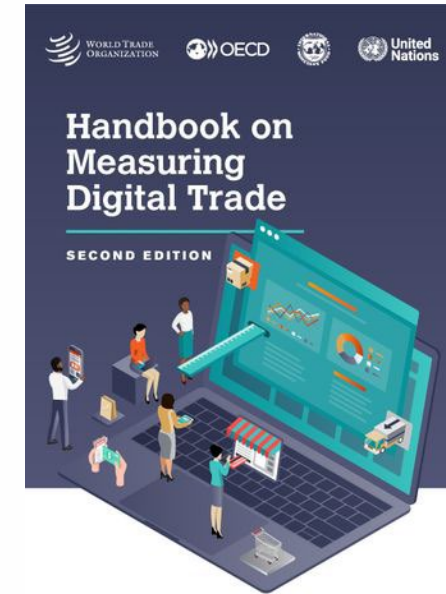- New financial and non-financial digital products and industries

Main topics

- Context
- **Handbooks on Measuring Digital Economy**
- Update of *BPM/SNA*
- Digital money
- Technical assistance
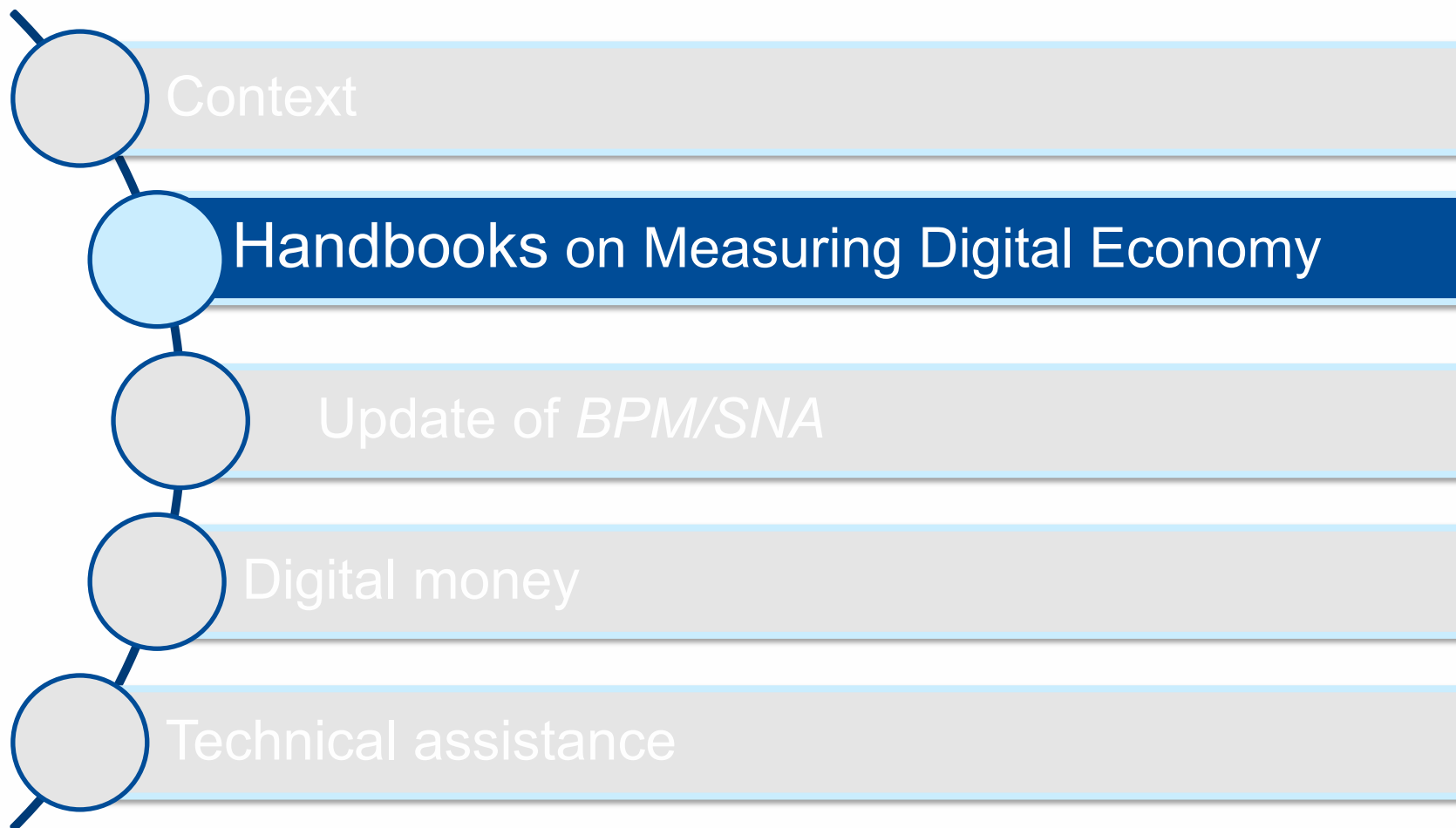
Handbooks on Measuring Digitalization

- The IMF/OECD/UNCTAD/WTO Handbook on Measuring Digital Trade (2nd edition, 2023) sets out key definitions, a measurement framework, and reporting template for digital trade statistics

  - 2nd edition adds important clarifications and explanations and presents extensive new compilation guidance reflecting the rapid progress being made by countries

  - Endorsed by countries through global consultation

  - Spanish edition forthcoming (IMF translation), Arabic and French editions (UNCTAD and OECD translations)

- IMF Statistics also contributed to the OECD handbook-on-compiling-digital-supply-and-use-tables(2023)

  - The Handbook sets out to improve visibility of digitalization in macroeconomic statistics

Main topics

Context

Handbooks on Measuring Digitalization

Update of *BPM/SNA*

Digital money

Technical assistance
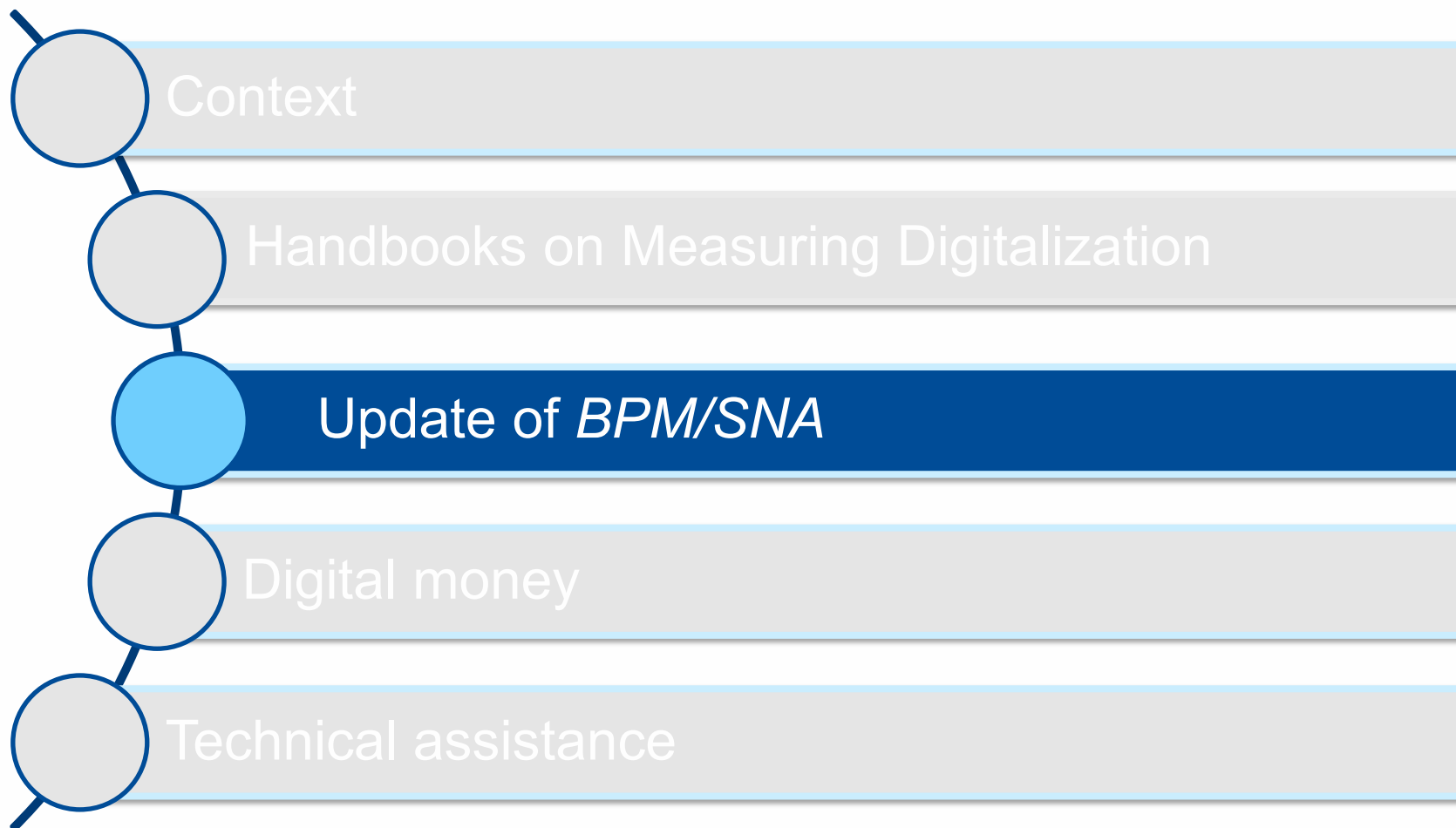
BPM7 Chapter 22 – Joint chapter on Digitalization

This Chapter is a new addition resulting from the update process of the SNA.

Motivation:

- Give visibility of the impact of digitalization on production, consumption, investment, trade, finance, communication, and other aspects of the economy and relevant cross-border transactions.

- Provide guidelines to measure digital products in accordance with the broad conceptual framework of the SNA/BPM.

- Explain the measurement of products and assets that have emerged as part of digitalization and provide a consolidated view of measuring and reporting on key aspects of digitalization.

Content of Chapter 16. Digitalization

A. **Digital Products**
1. Cloud computing
2. Data assets
3. Artificial intelligence
4. Nonfungible tokens

B. **Digital platforms**
1. Nonfinancial digital intermediary platforms (DIPs)
2. Free digital platforms and free digital products
   - Free products supplied by non-platforms firms
   - Free Digital Platforms
   - User-generated content
   - Free Software
   - Increasing visibility of Free Digital Platforms and Products

C. **Digitalization and the Financial System**
1. New Financial Services and Means of Payment Enabled by Digitalization
2. Financial Digital Intermediation Platforms
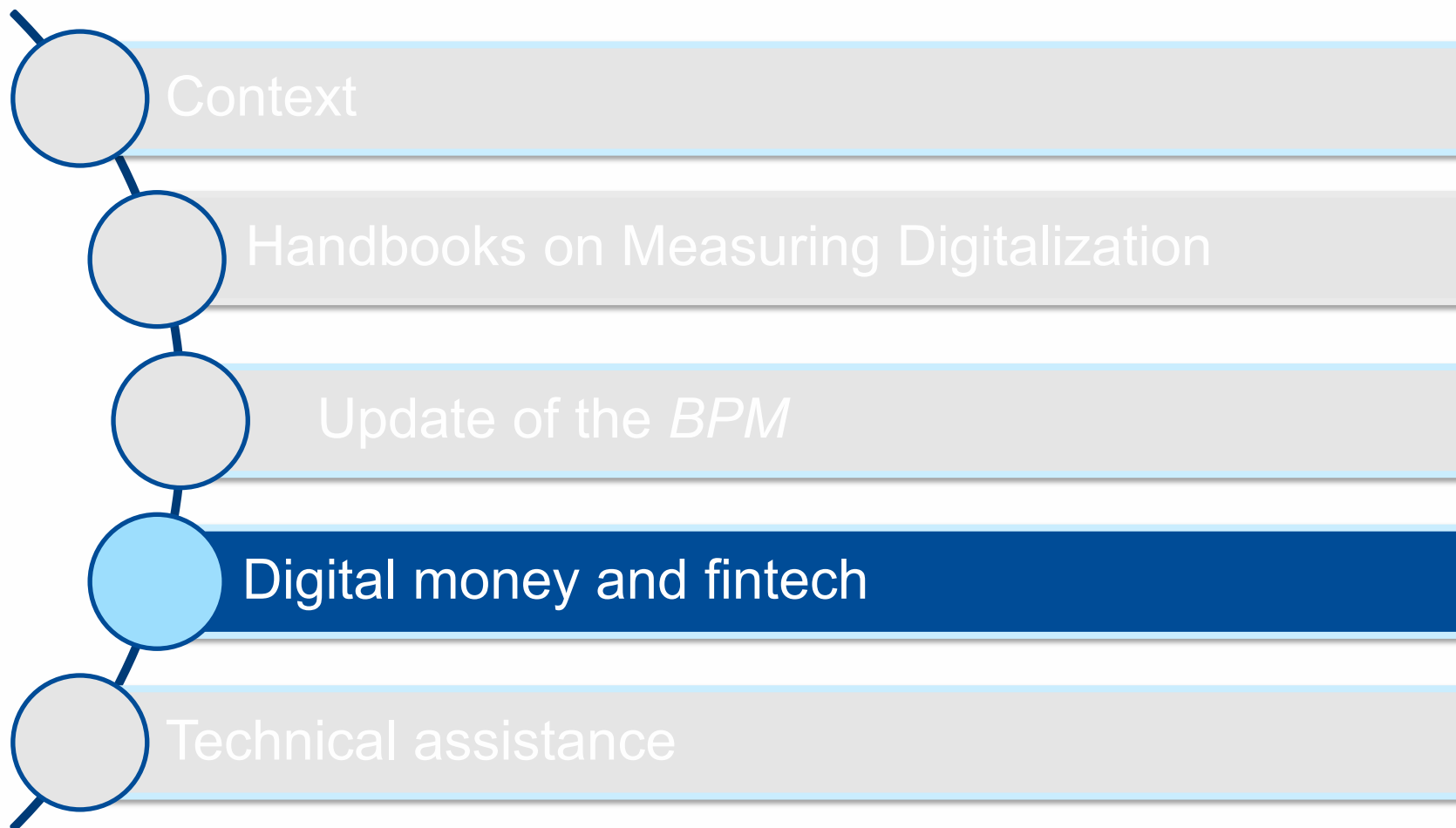3. Digital Assets, including Fungible Crypto Assets

D. **Measuring Prices and Volumes of Products affected by Digitalization**
- Measuring quality change in ICT goods and goods with ICT components
- Software and data
- Cloud computing
- Internet and telecommunications services
- E-commerce and digital intermediation platforms
- Expanded access to variety and customization
- Free digital products

E. **Analytical Tools to Increase the Visibility of Digitalization**
1. Thematic Account on the Digital Economy
2. Digital Supply and Use Tables
3. Extended Account to Increase the Visibility of the Free Services of Digital Platforms Consumed by Households

Main topics

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- Technical assistance

FinTech: An overview and examples

- Technology-enabled innovation in financial services that could result in new business models, applications, processes, or products with an associated material effect on the provision of financial services.

- Fintech products/services can be classified, according to the functions they serve in the financial sector like:
  - payments;
  - savings;
  - borrowing/lending;
  - insurance; and
  - others: investment advice and market support

Financial Services	Fintech Innovations Examples
Payments	Electronic Money including mobile money, Central Bank Digital Currencies (CBDCs), Stable coins, Digital wallets
Deposits and Lending	Peer-to-peer lending companies, marketplace lending platforms, De-Fi, Neo banks
Insurance	Insurtech
Others	Smart contracts, Robo-advising (automated wealth management)

Sectorization of Fintech Companies and classification of financial assets
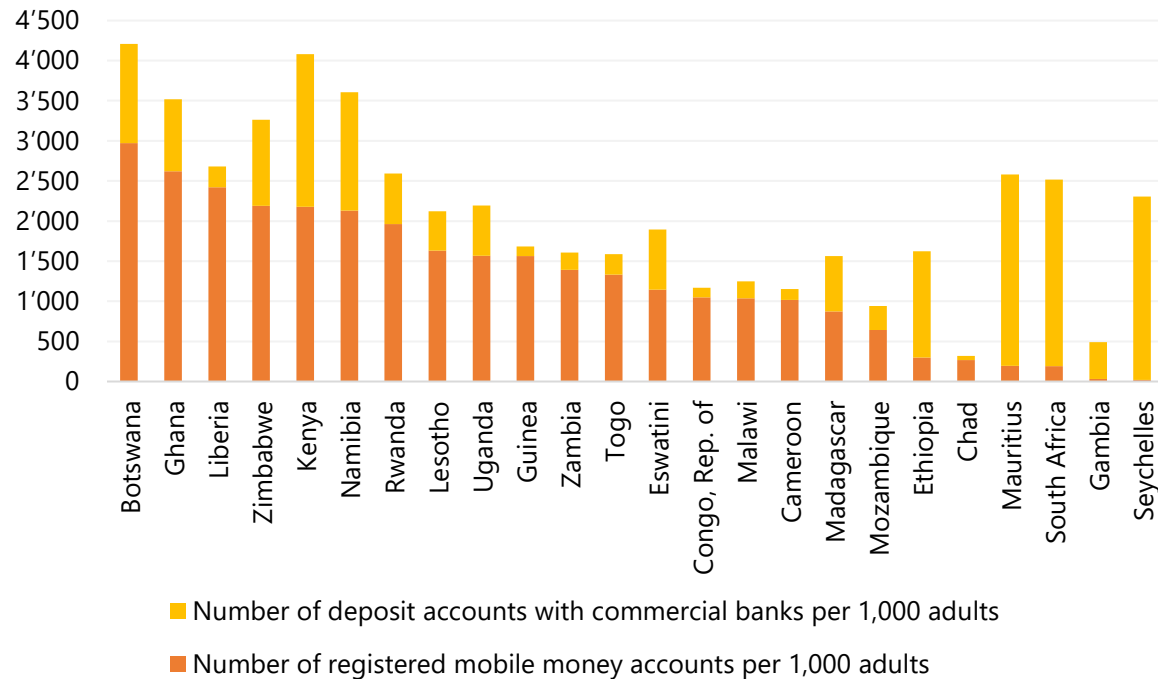
Fintech Companies / Providers

❑ Fintech companies are a diverse group of entities whose activities cut across the different sectors/subsectors of the economy. E.g., Peer-to-Peer (P2P) lending companies, marketplace lending platforms (including DeFi) are facilitating lending of money from individuals and other lenders.

❑ To sector them, an "of which" category could be introduced as subsector classifications from an institutional perspective
  ▸ General Government
  ▸ Central Bank
  ▸ Other Depository Corporations
  ▸ Other Financial Corporations
  ▸ Nonfinancial Corporations
  ▸ Households
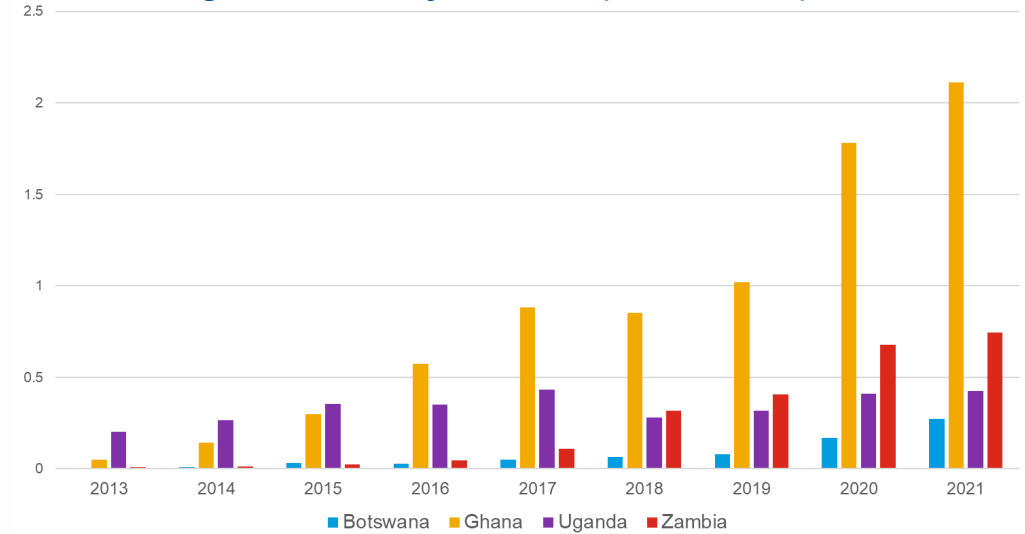 ▸ Rest of the World (ROW)

Fintech financial asset classification

❑ Electronic money – Transferable deposits

❑ CBDCs – Currency

❑ Stablecoins (with corresponding liability) – a separate financial asset category unless issued by a monetary authority

❑ Other crypto-assets -varied depending on their nature. Some are debt securities, nonfinancial assets, etc.

Mobile money in several African countries has overtaken bank accounts, with increasing balances.

Mobile money accounts vs. Bank accounts

- ■ Number of deposit accounts with commercial banks per 1,000 adults
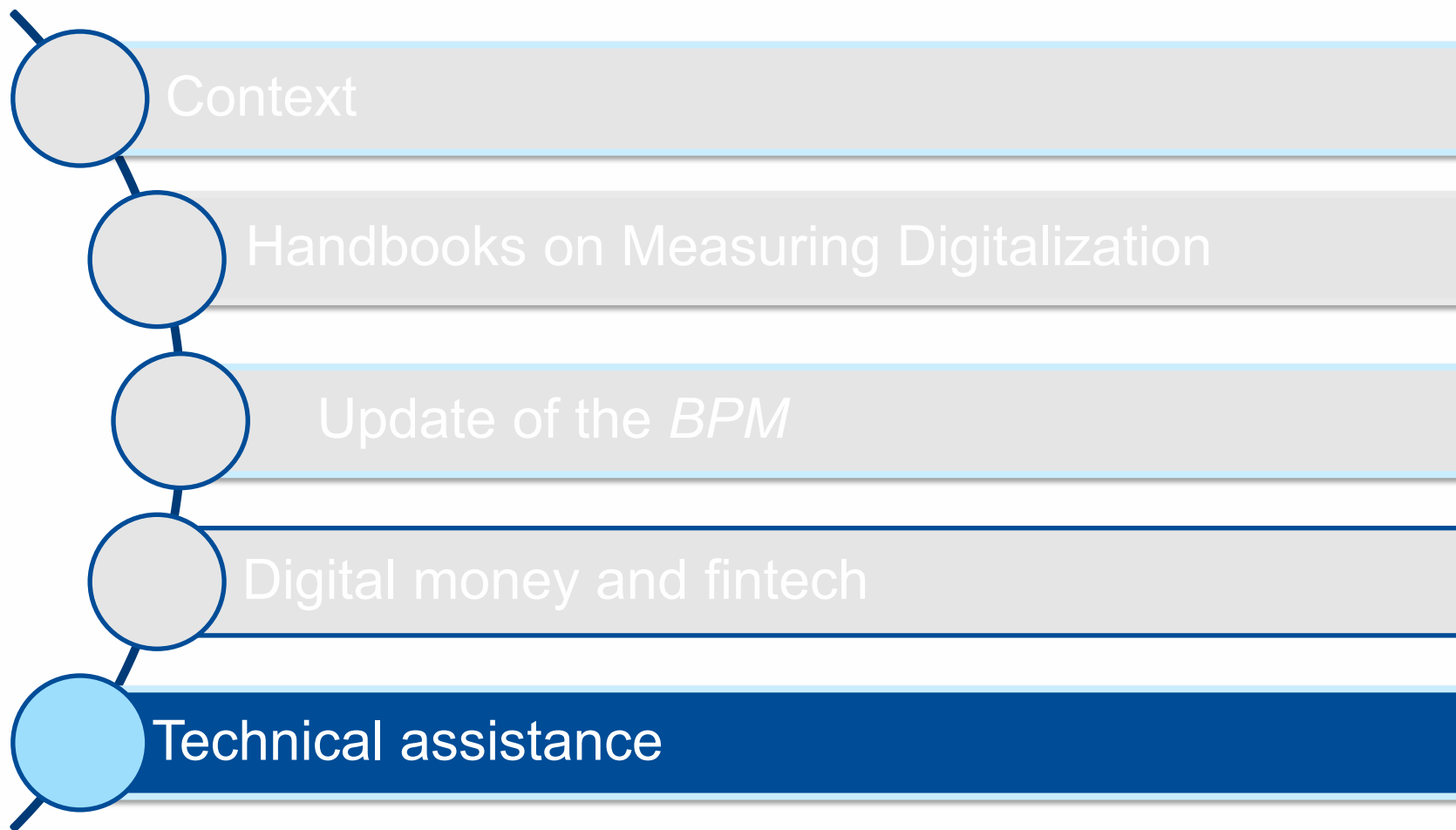- ■ Number of registered mobile money accounts per 1,000 adults

Note: This figure shows the number of registered mobile money accounts and deposit accounts with commercial banks (both per 1,000 adults in 2022 or the latest year available).

Source: IMF staff calculations and IMF FAS (The FAS is a supply-side annual database on access to and use of basic financial services. It aims at supporting policymakers to measure and monitor financial access with internationally comparable data.)

Outstanding mobile money balances (as % of GDP)

■ Botswana ■ Ghana ■ Uganda ■ Zambia

Source: IMF staff calculations and IMF FAS.

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Recent and planned technical assistance on the digital economy

2023

- **IMF (STABP AND STARE)** Workshop on Measuring the Digital Economy (D4D funding)
  - In-person in Gaborone, Botswana June 5-9, 2023
  - In cooperation with UNCTAD
  - Rich with country examples and experiences

- **WTO/UNCTAD/IMF** Regional Workshop on Measuring Digital Trade
  - Abu Dhabi, November 20-23, 2023 (including Arabic translation)

2024

- **IMF STABP**'s workplan under D4D includes Capacity Development with the aim to support beneficiary countries (LLMICs) in the implementation of the updated standards, including *Handbook on Measuring Digital Trade*

- Three workshops are planned to take place during February to April 2024:
  - for English-speaking countries
  - for Russian-speaking countries
  - for Francophone countries

Questions

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