

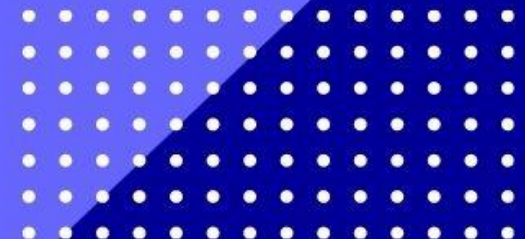
UNCDF Webinar Series
**Migrant Money: Better remittances data
for better decisions**

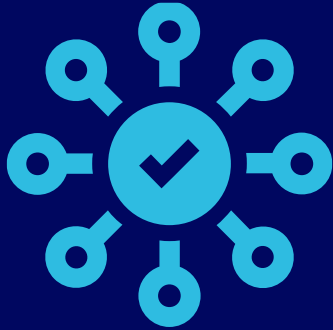


**Unlocking
Public and Private
Finance for
the Poor**

**Leverage technology to capture
the full potential of remittance
system-generated data**

9 June 2022 8 AM EST





Agenda

What we're
going to cover
in this webinar

8:00 Welcome, logistics and introductions

8:10 Presentation – UNCDF toolbox

8:20 Panel

8:50 Questions and answers

9:00 Closing

Logistics

①

Interpretation

②

Chat

③

Presentation and
recording

Speakers



David Taylor
Data Systems
Specialist
Migration and
Remittances
UNCDF



Wilson Kamali
Director of
Statistics
National Bank of
Rwanda



**Marta
Kuczyńska**
Head of Business
Development
Business
Reporting -
Advisory Group



**James Gabriel
Claude**
CEO
Global Voice Group



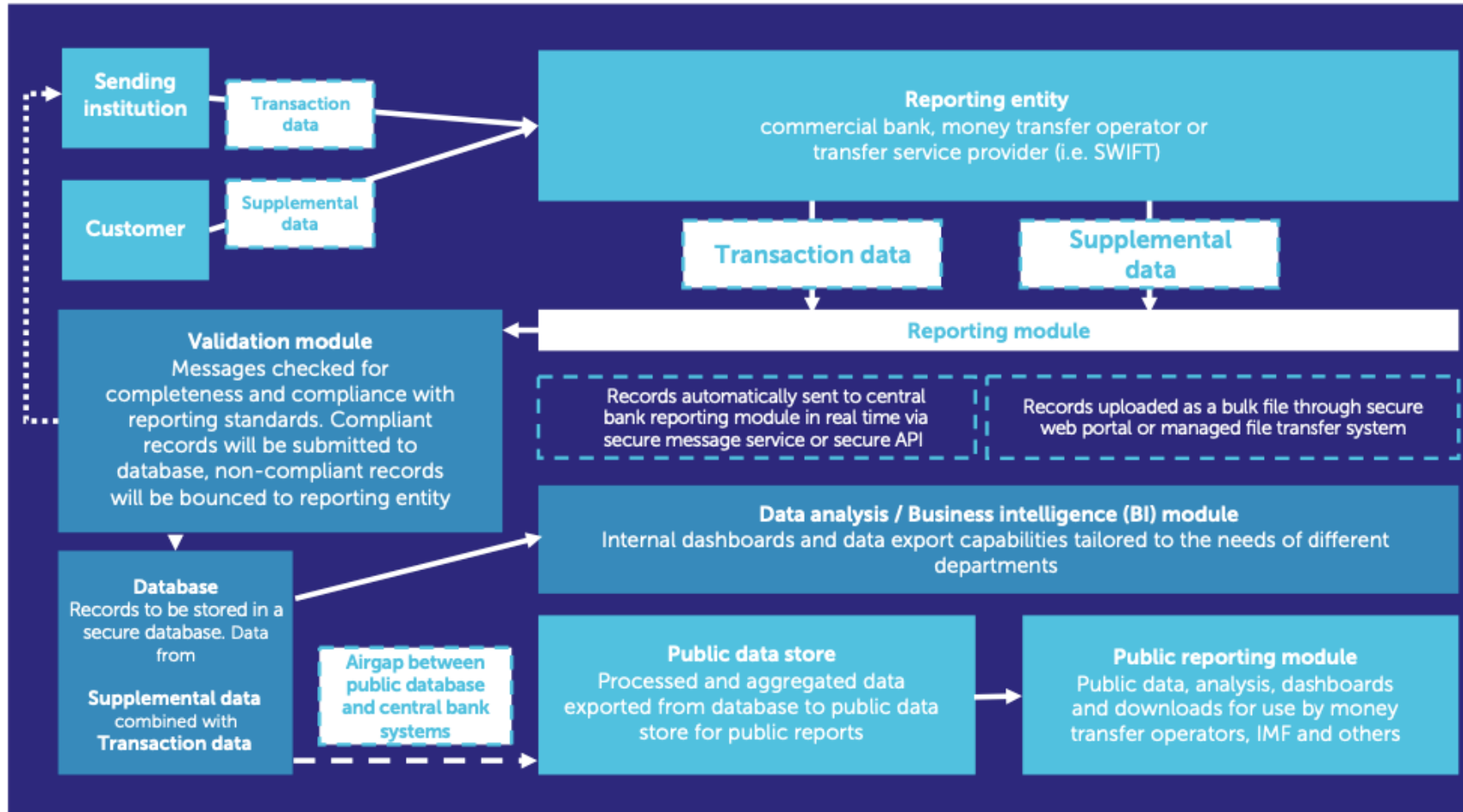
Unlocking Public and Private
Finance for the Poor

Better remittances data for better decisions

Leverage technology to capture the full potential
of remittance system-generated data

High Level System Model

HIGH LEVEL SYSTEM MODEL: FOR THE SYSTEMATIC CAPTURE, MANAGEMENT AND ANALYSIS OF REMITTANCE DATA BY CENTRAL BANKS



Transaction-level Data Capture



	Aggregated Data	Transaction-level Data
Insight Generation	<ul style="list-style-type: none"> • can help answer specific questions around single aspects of remittances • rarely provide insights detailed enough to inform policy, product development or investment 	<ul style="list-style-type: none"> • allows the most detailed analysis of the data possible • allows data to be analysed by any combination of attributes such as country of origin, time, currency, location and sex
Quality	<ul style="list-style-type: none"> • manual processes involved in aggregation often lead to the introduction of errors in the data • aggregation makes detecting data errors difficult if not impossible 	<ul style="list-style-type: none"> • enables the implementation of validation and quality control procedures ensuring data quality to point of submission • enables individual records to be rejected or queried whilst allowing clean data entry for analysis
Ease of Reporting	<ul style="list-style-type: none"> • most central banks and most reporting entities are familiar and comfortable with this process • preparing and submitting aggregated data can take a significant amount of effort on the part of the reporting entity and can be a significant burden 	<ul style="list-style-type: none"> • requires more data to be submitted • removes the requirement for the data to be processed in any way • can require central banks and reporting entities to invest in updating their systems (especially for institutions with heavily siloed or legacy systems)
Flexibility	<ul style="list-style-type: none"> • difficult to vary data requirements as it requires changing data reporting templates and this may require updating legal directives • limited flexibility in analysis 	<ul style="list-style-type: none"> • extremely flexible in terms of the possible combinations of data attributes for analysis and the level of detail for the analysis • allows users to proactively explore the data to find novel insights outside of predefined use cases and requirements • allows analysis by different audiences to meet a diverse range of needs and use cases

Transactional and Supplemental Data



An RRAS system which generates insights to effectively inform policy and product design must source two types of data...

Transactional Data includes

- Transaction ID
- Entity Type (bank, MTO)
- Country of Origin / Destination
- Currency of Transfer
- Value of Transfer
- Time and Date of Transfer

It is expected that this data will be available to the reporting entities from the transfer instructions. These will most likely be SWIFT messages for banks and proprietary messaging services for MTOs.

Supplemental Data includes

- BoP category and code
- Cash out/deposit location
- Date and time of transfer, deposit or cash out
- Gender of receiving individual*
- Date of birth of receiving individual*
- Address of receiving individual*
- Account Type
- Purpose of Transfer

These fields will have to be captured separately to supplement the transaction data. This data will need to be captured from account owners or remittance recipients. Some fields could be automatically generated from existing KYC records, others will need to be captured and recorded by the service provider.

* relevant for inbound remittances only

Data Quality and Easy Transmission



Standardisation and Validation

- Complete
- Properly formatted
- Accurate

Manual data quality processing consumes a disproportionate amount of time and energy.

The time saved by the proper implementation of an automated system can be deployed in investigating and understanding genuine outliers in the data and their implications for policy and service delivery.

Generation and Transmission

- System-generated data
- System-to-system data

More data does not have to imply a higher compliance burden.

Allowing technology to take over from humans increases data quality as well as quantity

Insight Generation and Communication

VISUAL

Numbers rarely make a difference without a narrative.

Data analysis and BI tools allow users to build narratives from data by allowing them to visualise trends, spot outliers and understand context.

ACCESSIBLE

Data analysis and business intelligence tools lower barriers to in depth analysis and remove gatekeepers allowing insights to be generated and shared across departments supporting a more holistic view of the market and economy.

FLEXIBLE

Effective analysis should generate more questions and data analysis and BI tools are flexible and responsive enough to allow new aspects of the data to be explored

INTERACTIVE

Allowing users to interact with the data to apply filters, change the level of detail or change how the data is presented i.e. a chart or a map



National Bank of Rwanda

Wilson Kamali is the Director of Statistics at the National Bank of Rwanda. In the Statistics docket, he oversees the production and analysis of external statistics (mainly balance of payment), monetary and financial statistics, and economic statistics. Additionally, he oversees bank-wide data management, including financial inclusion and consumer protection-related data.

He is also the project lead on the development of the electronic data warehouse at the National Bank of Rwanda, which is a new revolution in electronic data reporting and management.

National Bank of Rwanda (NBR)- Electronic Data Warehouse (SupTech Solution)

REMITTANCE DATA REPORTING

Wilson Kamali
Director Statistics
National Bank of Rwanda

OUTLINE

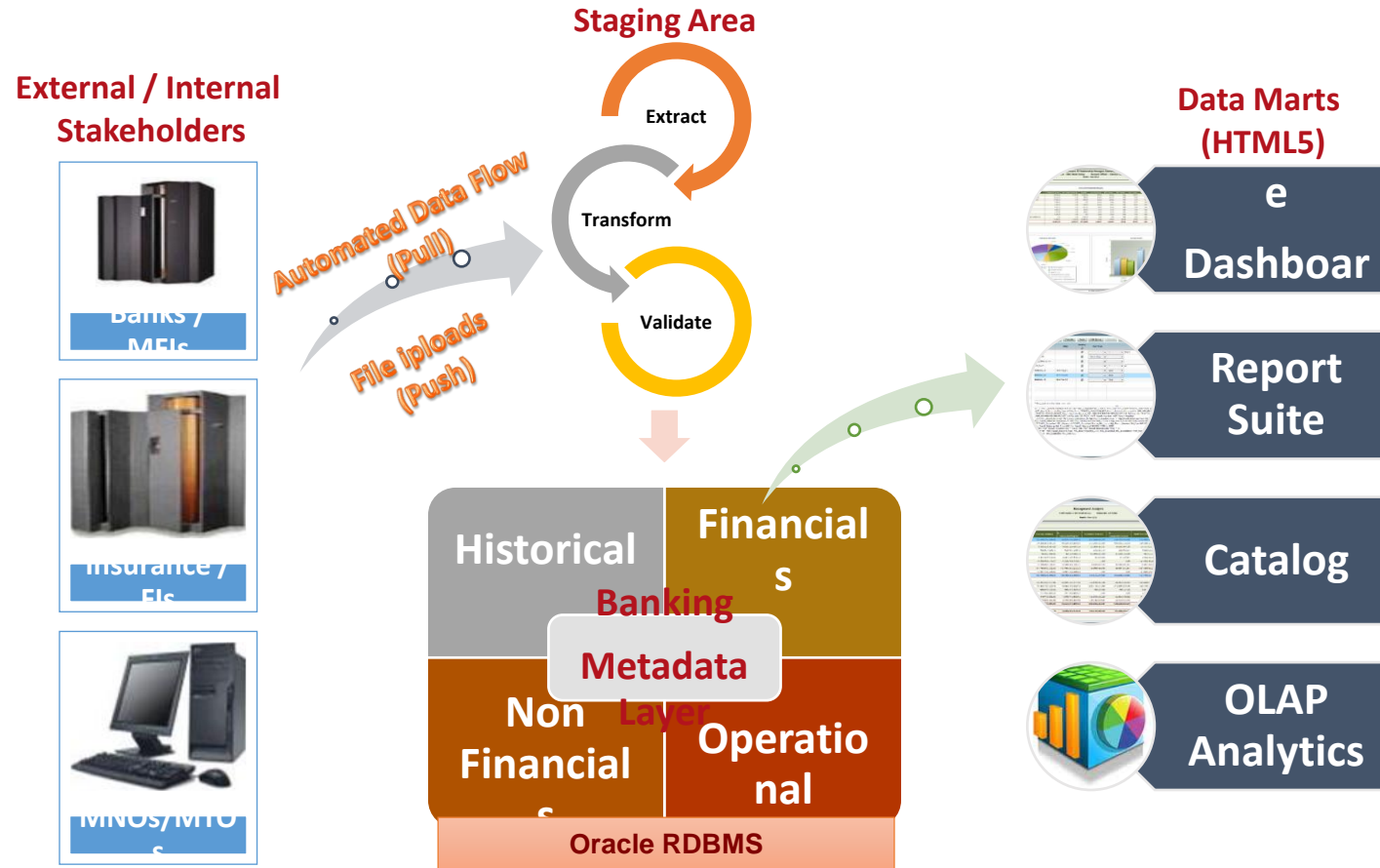
1. Why Electronic Data Warehouse (EDWH)?
2. EDWH Architecture
3. Data Type Sample (Data Standardization)
4. Outcomes/Dashboard Monitoring Tools
5. Challenges

WHY AUTOMATE REPORTING PROCESS?

- ✓ Improve timeliness
- ✓ Improve scope (data coverage)
- ✓ Improve granularity of collected data
- ✓ Reduce reliance on manual process
- ✓ Relieve FSPs of the burden of data aggregation
- ✓ Relieve FSPs the burden of compliance costs

SUPTECH SOLUTION ARCHITECTURE @NBR

- Referred to as Electronic Data Warehouse (EDW)
- Has inbuilt Business Intelligence (BI) platform



Developed with support from SUNOIDA Company

REGULATORY REPORTING FRAMEWORK

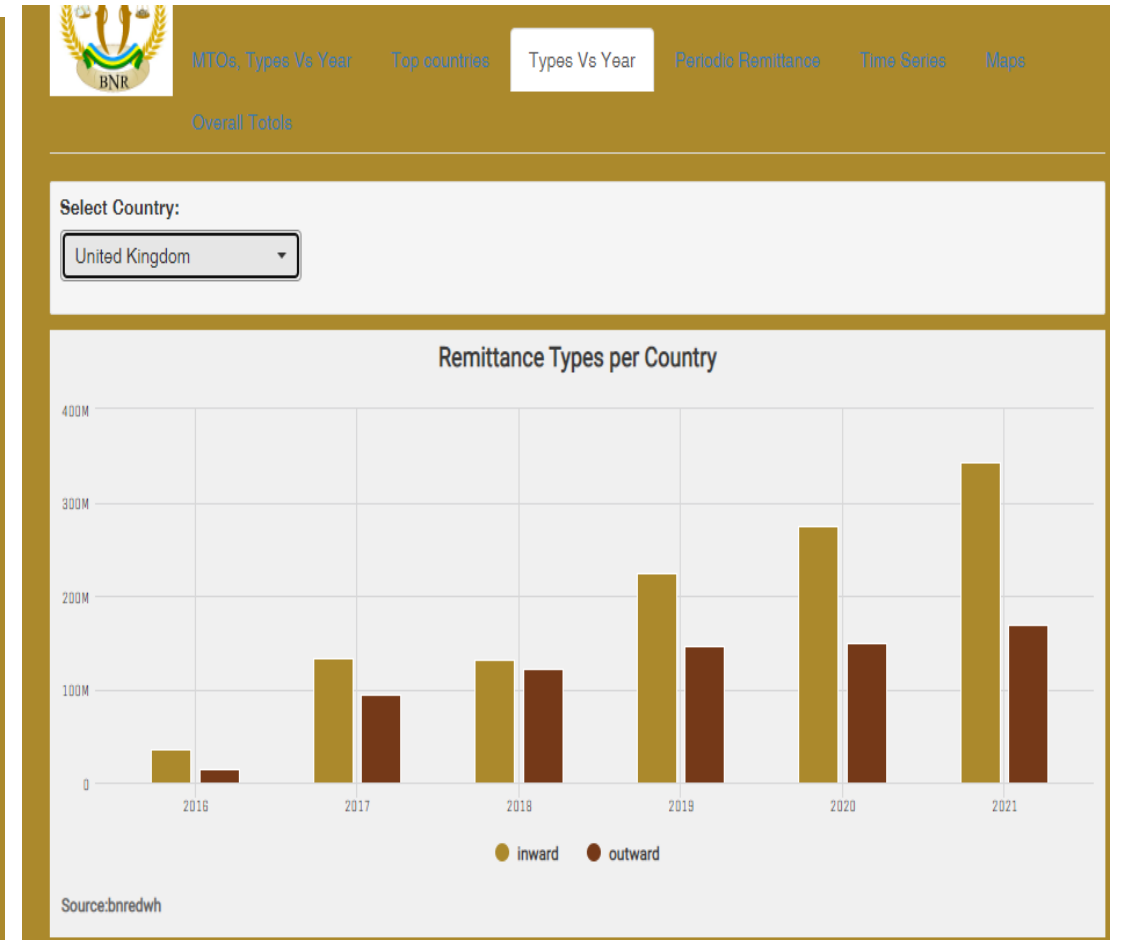
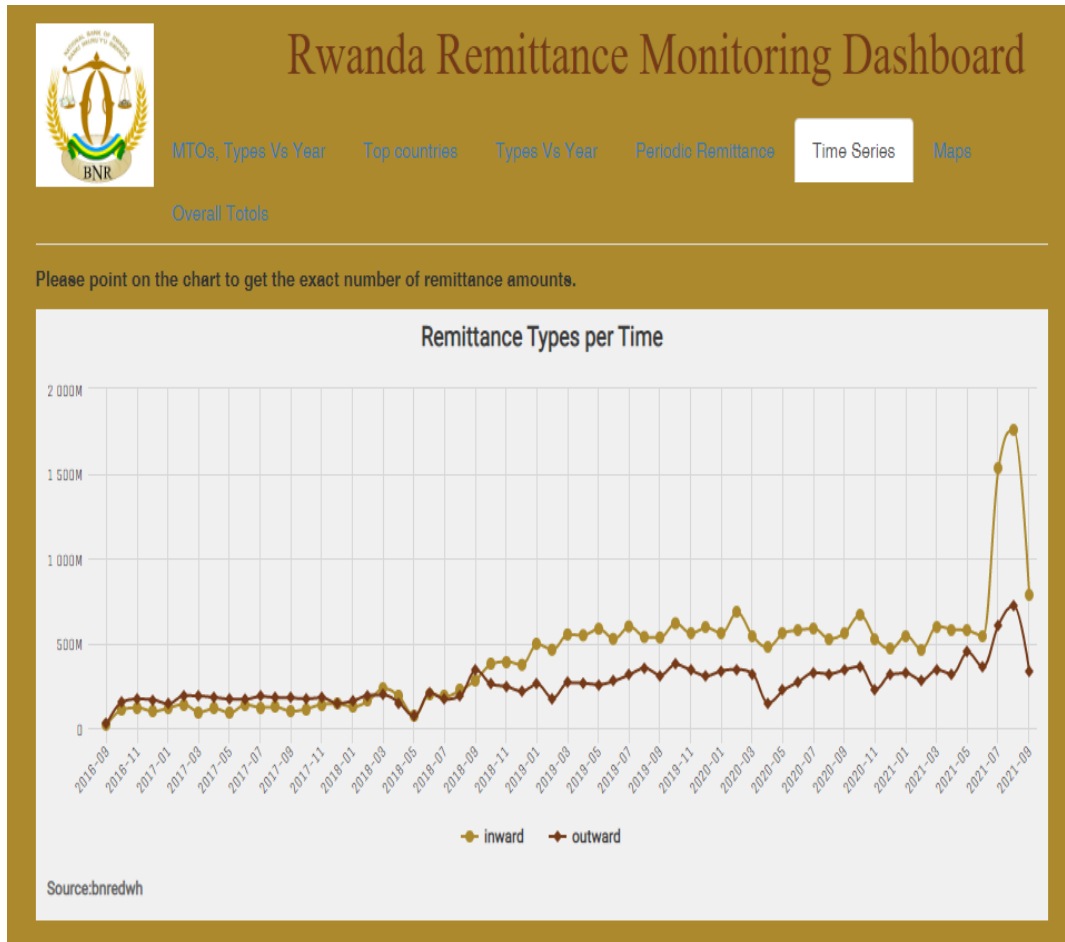
- Banks, Money Transfer Operators and Telecoms are allowed to pay international remittances.
- With the new reporting requirements (EDW), each transaction indicates:
 - Date
 - pay slip number
 - currency used
 - amount in foreign currency sent/received,
 - Country of origin/destination
 - beneficiary name,
 - Transaction purpose (e.g., for education, etc.)
 - identification of beneficiary,
 - other party name,
 - identification of other party names (optional)

- Not standardized and/or optional in most used platforms (e.g., Western Union, MoneyGram, etc.)
- Hence a challenge for local entities to provide such data

Frequency of reporting is DAILY

OUTCOME / DATA ANALYTICS (DASHBOARDS)

Able to track flows (by country, channels, purpose, etc.) on a daily basis



CHALLENGES AND NEXT STEPS

Challenges

- Data heterogeneity – addressed by “data standardization & developed data dictionary”
- Data accuracy issues – addressed by adding data validation rules (e.g., system rejects missing /incomplete values)
- Gaps in platforms used – missing some important fields (e.g., gender) for KYC
- Data quality gaps at source – this requires FSPs to streamline their business processes

Work in Progress

- Data validation in progress
 - Created a new division within Statistics Dept “Data Science Division” in July 2020 to champion data analytics to complement other existing techniques
- Stakeholders to update core systems or MIS to capture KYC requirements
- Stakeholders to automate business processes

Thank you



Business Reporting - Advisory Group (BRAG)

Marta Kuczyńska is the Head of Business Development at Business Reporting - Advisory Group.

Marta leads the Business Development department, developing new projects for regulators, central banks and the financial industry on a path to digital transformation and alignment with international standards in financial and non-financial data flows

**Suptech
powered by
Standards**



WE BUILD **FAIR ECONOMY**
BY ESTABLISHING

TRUST

technology

policies

data



Shared stories

As a central bank I want to ...

- ✓ Have an accurate picture of the market and its participants
- ✓ Develop data-driven policies that meet changing needs
- ✓ Foster innovation and inclusion for new entrants
- ✓ Reduce burdens and costs

Suptech?

Where to start ...

More granular data collections

Automated reporting

Interoperability

Machine-readable regulations

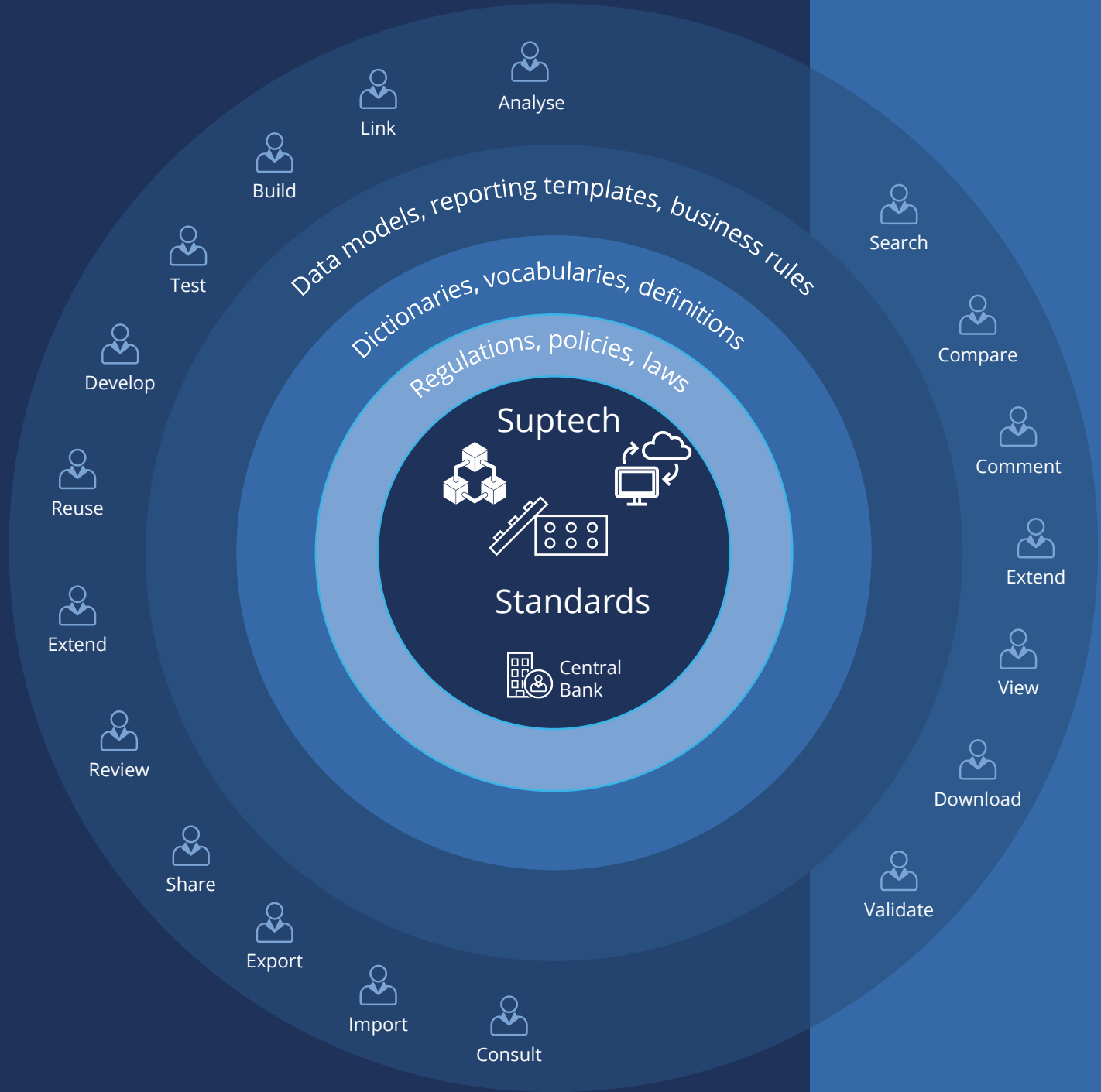
ML Algorithms

DLT & blockchain APIs Cloud

Standards

XBRL ISO20022 SDMX

- Regional Central Banks
- Standard Setters
- IOSCO
- BCBS
- FSB
- BIS



- Market participants
- Industry associations
- Software vendors
- Analysts
- Investors
- Consumers

Payments: Domestic & cross-border

Common language for enhanced analytics of payments and behaviours, compatibility and compliance across technology platforms, fraud prevention measures and more opportunities for collaboration

UK Purpose Codes Example



298 marked as relevant for the country
10 New Codes requested to add

ISO20022 standard
as a common
language with 731
messages to reuse

Distil information
layer from policies
and regulatory
frameworks for
accurate picture of
data collection
needs

Enrich data carried
in payment
messages according
to data needs

Agree on minimum
common data
elements to
communicate
across platforms,
providers & cross-
border

Establish regulatory
and technological
ecosystem inclusive
for new platforms,
scalable and future-
proof

Payments is Data



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Global Voice Group

James Gabriel Claude is the Chief Executive Officer at Global Voice Group, a global provider of ICT and RegTech solutions for governments and regulatory agencies.

Before he was nominated to this post in October 2018, he had worked for the company for 13 years, actively contributing to its international expansion and diversification strategy. He has been one of the key members of GVG's management team since 2009.

DATA TECHNOLOGIES AT THE SERVICE OF TRANSPARENCY:

Data for Improved Remittances' oversight

James Claude, CEO at Global Voice Group

June 2022



REMITTANCES: A VITAL SOURCE TO PROMOTE AND PROTECT

Remittances stand for
over **20%**
of Emerging countries
GDP

SUB-SAHARAN REGION:
In 2022, remittance
inflows are projected to
grow by 5.5 percent

GLOBALLY: Remittances
registered strong growth
in most regions and are
projected to continue to
grow by 2.6 percent in
2022 in line with global
macroeconomic forecasts



A GROWING MARKET WITH INCREASING RISKS

As remittances markets continue to grow, so do the risks associated with these transactions, such as:



Illicit money flows



A general lack of regulatory compliance



Money laundering



Security issues

IN ORDER TO TACKLE THESE THREATS...

DATA TECHNOLOGIES CAN ASSIST GOVERNMENT INSTITUTIONS

With...



Full reporting on transactions volumes, fraud, revenue, cumulative amount of taxes due, etc.



Anti-Money Laundering (AML) capabilities with automated detection of suspicious transactions



Automated measurement of inbound and outbound remittances

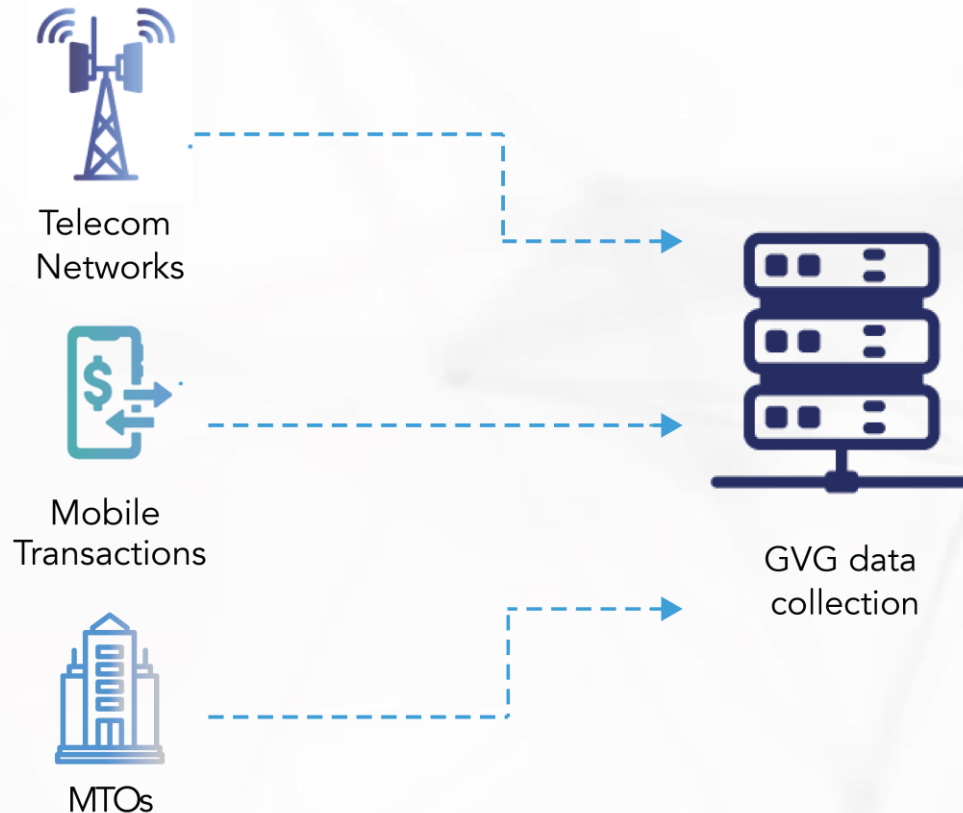


Data analytics for financial intelligence purposes



Background checks using the biggest international criminal and financial databases

HOW GVG' s TECHNOLOGIES SUPPORT REGULATORY BODIES, GOVERNMENT AGENCIES & CENTRAL BANKS



The data comes directly from telecom networks and relevant mobile transaction streams.

We ensure a **reliable data aggregation** and have pioneered the mining of telecom data for critical purposes.

WE NOT ONLY SUPPORT AUTHORITIES in mining data **BUT ALSO...**

CAPTURING THE FULL POTENTIAL OF REMITTANCES GENERATED DATA

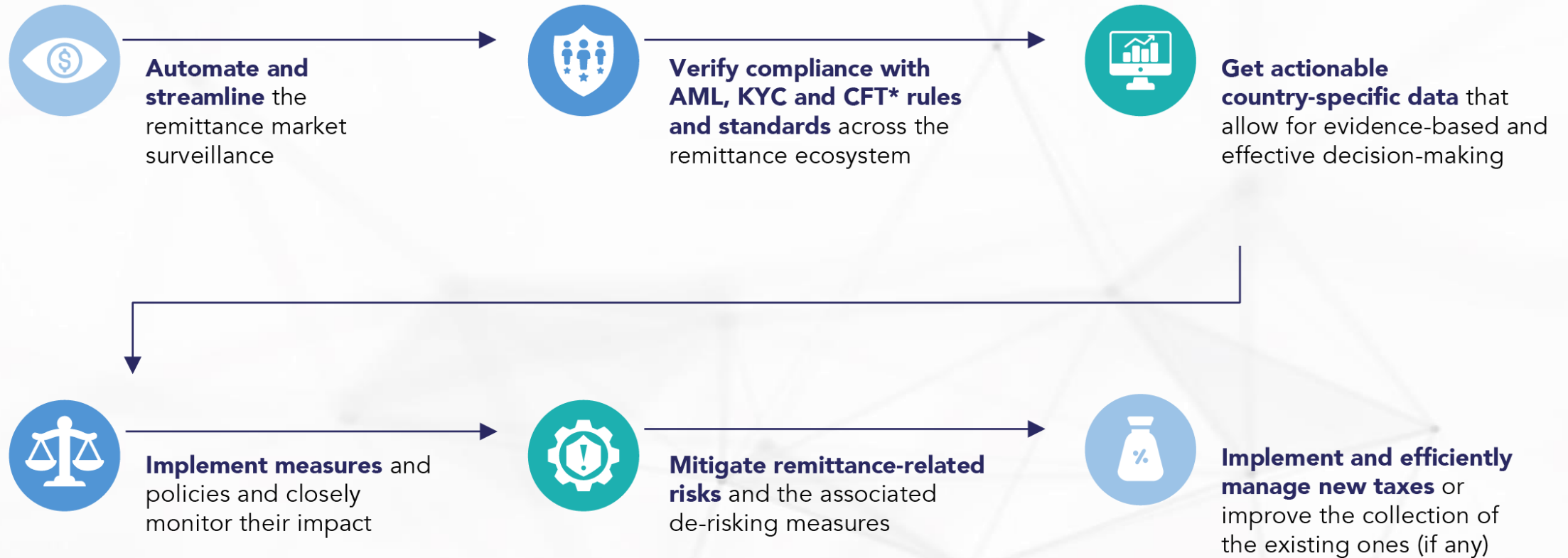
**CAPTURING THE FULL POTENTIAL OF
REMITTANCES GENERATED DATA AND
HAVING ACTIONABLE INFORMATION ON
EACH TRANSACTION ENCOURAGE
INFORMED DECISION-MAKING AND
PROTECT THE MARKET AND ITS USERS**

HOW WE CAN HELP CENTRAL BANKS TO OVERSEE THE REMITTANCE ECOSYSTEM?



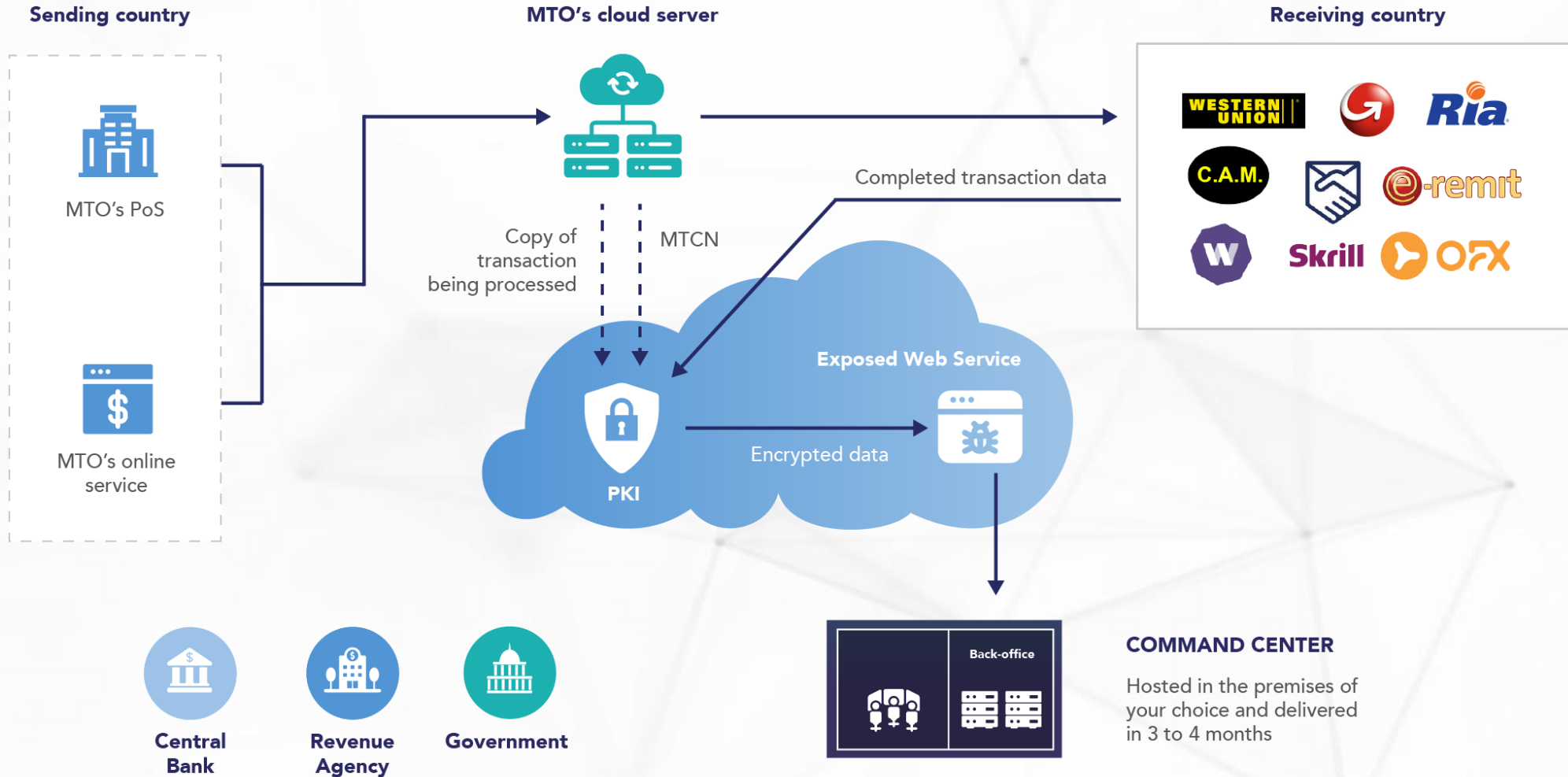
- **Through continuously updated lists** of originating countries for inbound remittances with total transaction volumes.
- **With detailed transaction history** for each remitter.
- **Through data** that can be turned into actionable information for investigations, analysis, decisions and policies.
- **It enables** Central Banks to encourage Data-driven policies, oversight and decision-making.
- **It enables** comprehensive collection of taxes and levies.
- **Providing data Intelligence tools** to improve the monitoring of the remittance sector.

WHAT CAN BE ACHIEVED?



* Anti-Money Laundering, Know-Your-Customer, Combat-the-Financing-of-Terrorism

A TECHNICAL OVERVIEW ON DATA ACCESS



THANK YOU

Questions & Answers



Unlocking Public and Private
Finance for the Poor

Thank You!

If you have more questions, please don't hesitate to contact
us migrantmoney@uncdf.org