



## Summary of the ITU WTI Pilot Questionnaire on Mobile Money indicators

September 2023

### Background

Mobile money services across the world have been a main channel for providing access to financial services for the unbanked. Its importance was recently highlighted in developing countries during the COVID-19 pandemic.

At its 12<sup>th</sup> Meeting taking place from 13 to 15 September 2021, the ITU Expert Group on Telecommunication / ICT Indicators (EGTI), in a joint session with the 8<sup>th</sup> Meeting of the ITU Expert Group on ICT Household Indicators (EGH), based on the report of the joint EGTI-EGH subgroup<sup>1</sup>, agreed on a definition of mobile money (a technology that allows people to receive, store, and transfer money or make payments through a mobile phone) and its scope to facilitate data collection.

From the supply side, EGTI defined four new indicators to potentially use in the ITU World Telecommunication/ICT Indicators (WTI) long questionnaires to measure mobile money services:

- 1) Number of mobile money active customer accounts
- 2) Number of domestic account-to-account (P2P) transfers
- 3) Value of domestic account-to-account transfers
- 4) Number of active agents

The indicators were agreed to be initially collected on a trial basis, after which EGTI would revisit data availability and relevance of the indicators. Initially foreseen for the 2022 WTI Long Questionnaire data collection cycle, due to capacity limitations, the four mobile money indicators were collected in a separate ad-hoc pilot data collection round in May 2023.

This document, prepared by the ITU ICT Data and Analytics division to inform the EGTI meeting, provides a summary of the results of this data collection, to assess whether it can be included for future data collection.

### The ad-hoc mobile money survey

The ad-hoc survey was mentioned in ITU's 2023 Data Collection calendar. The pilot data collection was carried out as an ad-hoc WTI questionnaire using ITU's newly trialed Qualtrics platform. Invitations were sent to 222 country statistical focal points on 5 May 2023 with a response deadline set for 26 May 2023. It requested data for the 4 indicators mentioned above, along with data notes, covering the years 2020, 2021 and 2022. Two additional questions were included, to receive

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<sup>1</sup> [https://www.itu.int/en/ITU-D/Statistics/Documents/events/egti2021/Report\\_of\\_the\\_joint\\_EGTI-EGH\\_mobile\\_money\\_subgroup\\_2021.pdf](https://www.itu.int/en/ITU-D/Statistics/Documents/events/egti2021/Report_of_the_joint_EGTI-EGH_mobile_money_subgroup_2021.pdf)

information on the source of data (e.g., if it is collected by the national telecommunications regulatory authority, central bank, etc.) as well as a free-text field where respondents were invited to provide general comments and observations about data collection and methodology, as well as the market in the country. The questionnaire included a link to the joint EGTI-EGH subgroup report for reference.

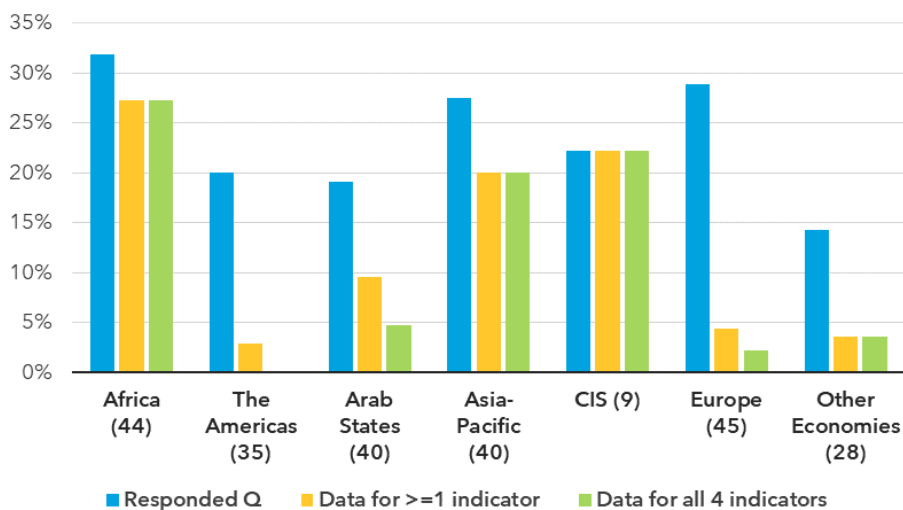
Eventually 55 country responses were received to the questionnaire until 31 July 2023. 28 countries reported non-missing or non-zero values for at least one of the four indicators, while 25 countries reported data for all 4 indicators. The remaining 27 countries indicated that either the service was not available there or had no statistics available. Only 1 country reported that in case the questionnaire is added to the ITU WTI LQ, it will put in place mechanisms for data collection.

### Main results

The availability of data as well as the service showed a regional pattern. The service is mostly present in Africa, the Asia-Pacific region and CIS countries (Figure 1).

From among the countries responding with data available for at least 1 indicator, 24 were low- and middle-income economies (it is suspected that 1 high-income probably applied the definition incorrectly). 11 respondents were from least developed countries (LDCs), 9 from landlocked developing countries (LLDCs) and none from Small Island Developing States (SIDS).

Figure 1: Response rate and data availability by ITU-D regions



In at least one case, it appears that the respondent may have confused mobile money services with e-banking services (i.e., money transfers taking place using mobile phones, with applications of banks or financial service providers, that by definition would be outside the scope of the definition applied).

A clear finding is that mobile money services are concentrated to specific parts of the world. While the fact that the service is not globally available does not mean that these statistics which are highly

relevant (this was emphasized by multiple respondents) for a number of countries should not be collected as part of the global WTI questionnaires, it nevertheless calls for a reflection on the way forward.

### Data availability and quality

The resulting statistics are shown in Table 3 at the end of the document. In short, there is a general tendency that if statistics are available for 1 indicator, statistics are also available for all four indicators, and if it was available for one year (2022), it was also available for the 2 previous years as well.

Figure 2: Availability of country data by indicator, 2022

Active customer accounts	27
Nr. of account-to-account transfers	28
Value of account-to-account transfers	28
Nr. of active agents	26

Source: ITU

ITU has not looked into the quality of the submitted data, and it remains an important question to address both for countries as well as for the ITU that in case these statistics are added to the annual data collection, how to assess their reliability. It is important to identify what are reasonable ranges for values, including reasonable averages (i.e., calculated values, such as average number of transactions per active accounts; average value of transactions); and also, the most appropriate measures of penetration and scale-normalization for cross-country comparison (e.g., number of accounts per inhabitant, or per mobile cellular subscription?)

At this stage, the figures are received and shown at “face value” in Table 3. Some countries provided notes to specific data points that may affect cross-country comparability – see e.g. the notes provided by India.

One possible approach for verification would be to compare figures against mobile money statistics published by the IMF – see below.

ITU regularly publishes aggregate statistics for regions and country groups. The data availability (see also Figure 1) does not allow the calculation of regional aggregates at this point.

### Data source

A primary concern for future data collection is the data collection burden on country statistical focal points, which may increase in case inter-institutional arrangements are to be made to access the required statistics on mobile money. Since this is about financial services, it already emerged during the EGTI discussions that both the oversight and the collection or publication of statistical information may be under the responsibility of the financial or monetary regulator, rather than the telecom/ICT regulatory authority.

A specific question of the ad-hoc questionnaire asked respondents to specify the source of data in their country. Where information was available, it was reported that mobile money statistics are available from...

- The telecommunications/ICT regulator or ministry in 14 countries;
- The central bank or financial regulator in 15 countries;
- While the data is sourced from both sources in 2 country cases.

The questionnaire comments provided some indications that accessing statistics from central banks or financial regulators may be challenging for some of the telecom regulators who report other WTI indicators.

### Main challenges for data collection

Based on the comments and feedback provided by countries in the questionnaire, four main types of issues were identified as possible challenges for data collection and for comparability, that may require further reflection or clarification:

1. Source of statistics: the WTI questionnaires are sent to ICT regulators and ministries, however, the requested statistics on mobile money are often not available in house. The need to involve other organizations (i.e., Central Banks) increases the coordination burden and may cause delays; from adjusting the data collection calendars to aligning the definitions.
2. Clarity of definition and scope: Several respondents indicated that at a time when mobile device-based applications allow financial transactions, the distinction between financial transactions over the mobile phone that depend on a bank account and those that do not require bank accounts (which is the main logic of mobile money) are not always clear. The difference between users of mobile apps for classical financial services and mobile money causes confusion for data collection and limits international comparability.
3. Clarity on the definition of specific indicators:
  - a. Some respondents indicated that there are distinctions between peer-to-peer (P2P) and peer-to-merchant (P2M) transactions. These may be collected separately, or data is collected for only one of them, rather than for both, causing comparability issues.
  - b. It emerged that counting P2P transactions may involve double-counting in cases where it takes place between operators, and data is reported by operators separately. In such cases, it is incorrect to merely sum transactions reported by operator1 and operator2, but corrections would be needed based on destination- or source-tabulated transaction statistics.
  - c. Application of the 90-days activity criteria: some respondents flagged that different mobile money *agents* within a country may apply a different time period for activity criteria.
  - d. Definition of agents: in some countries, some agents may be bank branches, which are, based on their primary activity, not counted among statistics on MM agents.

4. Mobile money service is not available in the country: if it is clear for respondents that these statistics are not relevant, the answer can be omitted. However, problems arise where the lack of familiarity with the service makes it easy to confuse with statistics related to e-banking services, leading to unnecessary collection of out-of-scope data.

### Alternative data sources: IMF FAS

It is important to add that as part of the Financial Access Surveys (FAS), the International Monetary Fund (IMF) have been regularly collecting statistics on mobile money.<sup>2</sup>

The IMF Financial Access Survey (FAS) is an annual survey conducted by the International Monetary Fund, aimed at collecting and disseminating comprehensive information on financial access, usage and inclusion across countries. Among other indicators, indicators cover financial services such as bank accounts, credit, and insurance products, provided by financial institutions like banks, credit unions, and microfinance institutions, as well as mobile money.

Statistics are freely accessible at the IMF FAS website<sup>3</sup> along with methodology documents<sup>4</sup> defining indicators and describing data collection available in English, French and Spanish. Based on the Survey Guideline and Manual, the differences can be summarized as shown in Table 1.

**Table 1: Comparison of the ITU and IMF mobile money indicators**

	ITU Mobile Money Indicators	IMF Mobile Money indicators
<b>Source:</b>	ITU Pilot Questionnaire, sent to WTI Statistical focal points (admin data from operators/central banks)	Financial Access Survey (FAS) (Admin data collected by Central Banks and other financial regulators)
<b>Same/Similar indicators</b>	<p>Mobile money active customer accounts (90 days criterion)</p> <p>Nr. of <b>domestic</b> account-to-account transfers</p> <p>Value of <b>domestic</b> account-to-account transfers</p> <p>Number of active mobile money agents</p>	<p>Number of active mobile money accounts (90 days criterion)</p> <p>Number of mobile money transactions (during the ref. year)</p> <p>Value of mobile money transactions (during the ref. year)</p> <p>Number of active mobile money agent outlets</p>
<b>Other indicators</b>		<ul style="list-style-type: none"> <li>• Number of <b>registered</b> mobile money accounts</li> <li>• <b>Outstanding balances</b> on active mobile money accounts</li> <li>• <b>Average</b> number of mobile money transactions per active mobile money account</li> <li>• Number of <b>registered</b> mobile money agent outlets</li> </ul>

<sup>2</sup> The GSMA has also been regularly publishing statistics and estimates on the size of the global mobile money industry, the latest report *State of the Industry Report on Mobile Money, 2023* is available at <https://www.gsma.com/mobilefordevelopment/resources/state-of-the-industry-report-on-mobile-money-2023-2/>. GSMA experts participated in the work of the EGTI-EGH joint subgroup to develop the mobile money indicators piloted here; and the definitions applied by the GSMA are compatible with the EGTI indicators' definitions.

<sup>3</sup> URL: <https://data.imf.org/fas>

<sup>4</sup> IMF (2019) *Financial Access Survey Guidelines and Manual*, March 2019 ed. Henceforth IMF (2019).

<b>Main differences</b>	Domestic transfers only Active agent: 90 days	All transfers: international remittances included [to be confirmed] Active agent: 30 days
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Source: ITU and IMF FAS (2019).

A preliminary analysis of the data availability for the IMF indicators shows that statistics available from IMF FAS cover more countries but may be less timely. Focusing on overlaps and differences in coverage, Table 2 shows that depending on the year, there are around 15-16 countries for which IMF data are not available, but ITU data is – highlighting an added value of the ITU data collection. One may expect that in these cases statistics originate from the ICT regulatory authorities rather than central banks, but this is not always the case, in fact this group of countries also includes those where data is available from the central bank (that is the main respondent for the IMF FAS questionnaire). What is more of a concern is that the preliminary comparison of figures available from both the ITU and the IMF FAS data collection reveals significant differences. These cases require further analysis but are likely resulting from the application of different units and definitions.

**Table 2: Number of countries with available mobile money statistics for the IMF and ITU indicators**

<b>Active accounts statistics available from...</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
IMF only	35	34	25
ITU only	15	15	16
Both ITU and IMF	9	11	12

Source: ITU and IMF FAS (retrieved: Aug 2023)

Notwithstanding the differences, the fact that statistics have been collected and disseminated for a longer period by the IMF than ITU, and the fact that most of the data is sourced as part of financial statistics (where both the data collection and analysis naturally belongs) from central banks or financial regulators, raises important questions. Most importantly, whether the separate data collection of the ITU would be redundant, or even, entering a domain that is already established at an international level, thus creating confusion? Second, what is the added value of a separate data collection from operators, in light of the use of mobile money statistics as part of gaining a broader understanding of the state and trends of financial inclusion in countries? Reducing respondent burden and avoiding duplication of efforts have already been indicated as important considerations for future revisions of ITU questionnaires.

## Way forward

EGTI is invited to decide on the future of mobile money indicators as part of the WTI data collection. In light of the data availability and responses, as well as the fact that mobile money statistics are also collected by the IMF, EGTI members are invited to reflect on the following two questions:

1. Should these four mobile money indicators be collected in the WTI long questionnaires?
2. If so, should any of the definitions be revised / refined?

Furthermore, it is also important to reflect on the future uses of statistics on mobile money for international comparison and benchmarking digital development, for which it is essential to clarify how to interpret the results. In this context, it is not necessarily intuitive what the desired level of mobile money usage in a country, and how to interpret comparatively higher or lower levels of penetration rates. Context for these measures are probably found more outside the domain of telecommunications/ICT indicators, such as in the domain of other measures of financial development, including access to finance.

**Table 3: Mobile money statistics based on responses to the ad-hoc questionnaire**

ITU-D Region	Nr. of active customer accounts (in thousands)			Nr. of account-to-account transfers (in thousands)			Value of account-to-account transfers (in millions of local currency)			Nr. of active agents			Data Source (Abbreviation indicates ICT regulatory authority)
	Country	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
<i>Africa</i>													
Benin	5'253	6'370	8'463	62'893	89'144	130'441	808'011	1'249'108	1'752'071	41'205	100'982	165'497	ARCEP
Botswana	724	734	1'543	69'460	74'323	96'932	11'907	20'486	26'524	2'886	4'215	6'928	CRA
Eswatini	891	936	914	11'823	13'540	14'494	1'733	2'186	2'976	5'886	8'691	11'236	Licensees or MNOs & Central Bank
Kenya	32'460	35'209	38'646	2'144'396	3'548'439	4'661'514	2'650'806	4'190'649	4'632'561	264'390	292'301	318'607	CA Kenya
Lesotho	882	1'101	1'174	1'366	1'572	1'909	426	602	837	8'766	12'691	15'206	Central Bank of Lesotho
Malawi	5'479	6'022	7'060	41'662	61'550	83'510	263'739	387'179	587'913	75'224	138'108	198'696	MNOs
Mali	3'927	4'227	4'565	36'087	47'147	61'762	942	1'287	1'763	202'255	232'807	263'359	Banque Centrale; AMRTP
Mozambique	10'834	11'495	11'975	263'808	324'106	338'534	221'125	295'364	322'578	69'548	94'697	147'519	Central Bank
Rwanda	5'068	5'474	5'988	145'634	190'987	308'774	1'669'849	1'882'206	3'281'043	61'256	76'093	114'661	RUAA
Tanzania	32'269	35'286	40'953	112'225	236'793	267'150	1'234'724	1'405'834	1'100'970	579'355	589'757	600'346	NTRA
Togo	2'439	2'608	3'005	141'086	180'501	240'426	1'446'357	1'948'400	2'865'735	24'289	33'924	38'019	ARCEP
Uganda	22'522	22'669	25'193	225'730	262'756	314'124	13'871'666	18'523'672	25'103'474	235'790	475'755	429'779	Central Bank (as of 2021)
<i>Arab States</i>													
Comoros	30	67	89	20	171	585	418	2'026	2'835	292	680	1'891	ANRTIC
Egypt	0	0	23'007	0	0	30'684	0	0	46'191	0	0	250'305	NTRA
Palestine	80	236	433	123	699	2'223	6	55	191	2'414	3'419	4'029	Palestine Monetary Authority
Somalia	0	5'961	7'191	0	707'143	8'883'029	0	546	659	0	0	0	NCA Somalia
<i>Asia-Pacific</i>													
Bhutan	141	393	626	65'070	118'540	145'160	144'710 m	343'030 m	454'680 m	452	1'924	343	Royal Monetary Auth.
India	3'948'900 <sup>1</sup>	5'032'000 <sup>1</sup>	5'829'000 <sup>1</sup>	45'147'000 <sup>2</sup>	67'290'900 <sup>2</sup>	105'036'400 <sup>2</sup>	3'372 t <sup>3</sup>	3'654 t <sup>3</sup>	3'964 t <sup>3</sup>	1'333m <sup>4</sup>	1'221m <sup>4</sup>	1'205m <sup>4</sup>	Nat'l Payment Corp. (NPCI), Dep't of Fin. Serv.
Indonesia	432	575	731	244'604	469'908	1'848'318	18'336	38'717	177'055	603'855	851'174	905'505	Bank Indonesia
Mongolia	55	138	150	35	17	25	0.3	1.2	1.8	160	161	170	Mongol Bank
Myanmar	9'811	24'042	17'206	677'995	865'705	1'287'848	99	112	163	73'989	126'031	341'629	Central Bank
Philippines	34'699	N/A	N/A	269'700	523'600	633'500	4'027'700	7'240'000	9'941'500	84'299	0	0	Central Bank, Fin. Inclusion Office
Sri Lanka	0	0	87	0	0	1'700'067	0	0	2'410'999'339	0	0	34'204	TRC
Thailand	593'726	834'226	965'191	276'644	540'475	781'771	64'590	118'278	165'840	19	24	27	Bank of Thailand
<i>CIS</i>													
Armenia	535	898	1'006	1'456	5'112	8'372	0.02	0.08	0.12	6'415	8'046	10'012	Central Bank
Belarus	1'291	1'334	1'413	435	387	444	1.4	1.4	1.9	554	599	535	N/A
<i>Europe</i>													
Turkey	0	0	0	0	0	0	0	0	0	7'619	9'721	10'870	Central Bank
<i>The Americas</i>													
Venezuela	18'543	20'509	23'052	852'304	1'047'009	1'167'048	1'868'676'714	29'778	124'577	0	0	0	Superintendencia de las instituciones del sector bancario;&Banco Central de Venezuela

Notes: <sup>1</sup>) India: Money customer account has been treated as Mobile phone initiated digital payment transactions (excluding balance enquiries) and excluding Account to Account transfer as 2<sup>nd</sup> Question ie ' Number of domestic account-to-account P2P transfers is seeking details of Account to Account transfer. Hence, Mobile initiated Wallet based (PPI) transactions data (volume ie number of transactions) is furnished under this parameter including P2P and P2M ie person to person and person to merchant transactions.; <sup>2</sup>) India: Here all type of customer-initiated account to account transactions have been included. The data comprises of



UPI, IMPS, NEFT & RTGS.; <sup>3)</sup> Figures in trillions (“lakh crore”). Here all type of customer-initiated account to account transactions have been included. The data comprises of UPI, IMPS, NEFT & RTGS. <sup>4)</sup> Figures converted to millions. Focus of this indicator is cash-in and cash out that too without bank branches. In India, such transactions are called AePS (Aadhaar Enabled Payment System) wherein Banking correspondent who is authorised agent of the bank visits to the far-flung areas/difficult terrain and assist customers in enabling transactions, primarily cash-in, cash-out, balance enquiry etc. Hence, AePS transactions volume is furnished under this indicator.