ISPA
INTER AGENCY
SOCIAL PROTECTION ASSESSMENTS

SOCIAL PROTECTION
PAYMENT
DELIVERY MECHANISMS

"WHAT MATTERS" GUIDANCE NOTE

DELIVERY

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Introduction

This "What Matters" Guidance Note looks at how to implement and assess a high-quality payment mechanism for the delivery of cash or near-cash social protection (SP) transfers primarily targeted to poor and vulnerable populations. It is designed for use by SP policy makers and practitioners working in lower- and middle-income countries seeking to improve payment delivery in existing SP programs or to establish a payment mechanism for a new program. This tool does not explore labor and social insurance programs, nor does it go into depth in the use of cash transfers under special circumstances such as emergency relief—though the tool is designed to be flexibly applied to the provision of social cash transfers under a range of circumstances.

This guidance note provides background to carry out or commission a country or program assessment of payment mechanisms used to deliver cash transfers from SP programs. It is suggested that such an exercise have three components: a payment mechanism review, a payment environment review, and an SP system review. These components are discussed, respectively, in sections 1, 2, and 3 of this note. Section 4 provides information to put these reviews together into a coherent assessment framework. More specifically:

- **Section 1, Overview of SP Payment Delivery Mechanisms**, presents the basics of SP payment delivery mechanisms: why they are important, their main methods of delivery, their basic components, the key actors involved in their design and implementation, the key criteria for assessing their effectiveness, the costs they incur, and the key performance indicators against which they should be assessed. Many of these topics are further delineated and discussed in later sections of this guidance note. Wherever possible, major points raised are illustrated with country examples. Of particular importance in this section is the introduction of the assessment criteria: accessibility, robustness, and integration.

- **Section 2, Supporting Environment for SP Payments**, describes the main components of a supportive environment for operating a quality SP payment delivery mechanism. Regulatory certainty, greater choice of providers and products, and larger numbers of financially included people create such an environment. This section looks at each of these key components, touching on various elements of a country's financial sector; its policy, legislation, and regulations; and its national ID system and mobile network coverage. Note that these various national systems are not looked at comprehensively, but only insofar as they affect or address issues related to payment delivery mechanisms.

- **Section 3, Country SP System**, puts the SP payment delivery mechanism into the broader context of a country's entire SP program system. SP payments do not occur in isolation, but in concert with the SP system within which a particular SP program operates. If the payments mechanism is to support SP policy objectives, there must be a clear understanding of this unique context. This section describes aspects of the country's SP system as a whole, including the programs, stakeholders, and mechanisms that offer opportunities for synergy or trade-offs in SP payment delivery mechanism design and implementation.

- **Section 4, Assessing SP Payment Delivery Mechanisms**, provides detailed guidance on assessing payment delivery mechanisms. It can be used to assess the payment performance of an individual SP program or applied from a systems perspective across all of a country's main SP programs. The assessment —as delineated in the SP Payment Delivery Mechanisms Assessment Matrix of this tool—has three components that look at, respectively, (1) the individual SP payment delivery mechanism, (2) the country's supporting environment for SP payments, and (3) the country's overall SP system. The components are assessed using three criteria—accessibility, robustness, and integrity; this assessment provides a baseline against which change can be measured over time. The data for the assessment are collected through the SP Payment Delivery Mechanisms Questionnaire included in this tool.

The guidance note is supplemented by a glossary and bibliography for further reference.

Note that the guidance presented here provides indicative information on the process of undertaking an assessment of SP payment delivery mechanisms using the ISPA tool. Although the guidance note describes the type of activities that need to be undertaken to apply the IPSA tool in the field, it is intended to be neither prescriptive nor restrictive, but suggestive of opportunities and possibilities.

1 Overview of SP Payment Delivery Mechanisms

This section presents the basics of social protection (SP) payment delivery mechanisms: why they are important, their main methods of delivery, their basic components, the key actors involved in their design and implementation, the key criteria for assessing their effectiveness, the costs they incur, and the key performance indicators on which they should be assessed. Many of these topics are further delineated and discussed in later sections of this guidance note.

1.1 Importance of Payment Delivery Mechanisms in SP Programs

The quality of the mechanism used to deliver payments to beneficiaries in an SP program has a direct bearing on that program's success or failure.[1] The entire program can be undermined if payments do not reach the right people at the right time, in the right place and in the right form, in an efficient manner, and in the correct amount. A well-designed and -implemented SP payment delivery mechanism can deliver cash or near cash transfers and serve as an entry point for financial inclusion and access to a range of financial services. It can also have positive—and negative—impacts on program funders, beneficiaries, and the wider community of nonbeneficiaries. Careful design, implementation, and monitoring will help capture the positive impacts and avoid or mitigate the negative. This tool aims to provide criteria to assess the quality of payment delivery in SP programs; see 1.5.

A few examples illustrate the importance of payment delivery mechanisms to program success (box 1.1) and to the broader marketplace (box 1.2), and its potential for positive and negative impact. The payment delivery mechanism represents a significant element of the administrative budget of most SP programs. Its cost needs to be monitored and controlled to ensure that it does not undermine program sustainability. A program with very high administrative costs relative to the value of transfers disbursed is unlikely to continue to attract funding. Further, the value of program payments may be eroded if the cost of access for beneficiaries is too high. For example, if there are very few locations where payments can be collected—even though this is cheaper for funders—beneficiaries may incur high travel costs; in this way, a well-conceived SP program can be undermined by its payment delivery mechanism.

1 The terms "beneficiary" and "recipient" have specific meanings when discussing payments. The **beneficiary** is the individual or household intended to benefit from an SP program payment, and the **recipient** is the individual authorized to collect payment on behalf of a beneficiary. This note uses "beneficiary" throughout, except in cases where it is important to distinguish the recipient from the beneficiary.

Box 1.1 Mexico Program Reduces Cost of Access for Beneficiaries

In 2008, Mexico's Oportunidades program (now known as Prospera) launched a pilot to test electronic delivery of payments through agents. Beneficiaries were issued payment cards to be used in point of sale devices in 230 retail stores of the chain Diconsa.

Compared with the manual delivery of cash used previously in the program, this electronic payment mechanism reduced transaction costs and opportunity costs for beneficiaries from Mex$30.1 to Mex$0.49 and from Mex$16.9 to Mex$2.22, respectively. Ninety-nine percent of the beneficiaries interviewed said they preferred the electronic method to the previous cash and signature method.

A budget decree of 2010 mandated all government agencies to plan to digitize and centralize their payments. In response, the Ministry for Social Development (SEDESOL), responsible for two cash transfer programs including Oportunidades, created a working group to develop a strategy to make as many payments electronic as possible. By 2012, 19 percent of beneficiaries were paid through a Bansefi bank account and 81 percent were paid through a Bansefi nontraditional account. By digitizing and centralizing payments, the Mexican government is saving US$1.27 billion every year, or 3.3 percent of total expenditure on wages, pensions, and social transfers. The largest portion of savings came from centralization of payments in the Treasury single account.

Sources: Babatz 2012; Seira 2010.

A financially inclusive payment delivery mechanism can provide recipients with access to a transaction account and may link them to other financial services such as savings, credit, remittances, and insurance. There is evidence that this type of approach can support graduation and/or productive inclusion in some cases.

A payment delivery mechanism can be designed to provide the poor with a safe way to store or save money to manage cash flow between payments, smooth consumption, and plan expenditures while protecting their financial assets. The mechanism's provision of an accessible, affordable, and secure account or other store of value can thus help maximize the impact of an SP program.[2]

2 Frequently, SP programs want payments to be used for consumption and hence may consider that saving behavior undermines this objective. This is based on a misunderstanding of how the poor use financial services for consumption smoothing. For further information on the financial lives of the poor, see Collins et al. (2009).

Box 1.2 Payments in Remote Areas: Hunger Safety Net Programme, Kenya

SP programs are frequently established in marginal areas with limited access to financial services. Where a mainstream financial service provider is used as a program's payment service provider (PSP), it may strengthen a bank's internal case for delivering mainstream financial services to the broader community. An example of this is the Hunger Safety Net Programme in northern Kenya, which in its first phase selected Equity Bank to act as PSP. Previously, the program area was served by only one bank, the Kenya Commercial Bank, which had five branches across the entire program area of 222,500 square kilometers. Equity Bank opened an additional five branches and provided 150 agents as it moved into the area, bringing financial services to a traditionally very poorly served community. This payment approach stimulated local markets to benefit whole communities. Bringing such benefits to the wider community can increase support for a program from individuals who are not direct beneficiaries.

Source: Pulver 2012.

1.2 Main Methods of SP Payment Delivery

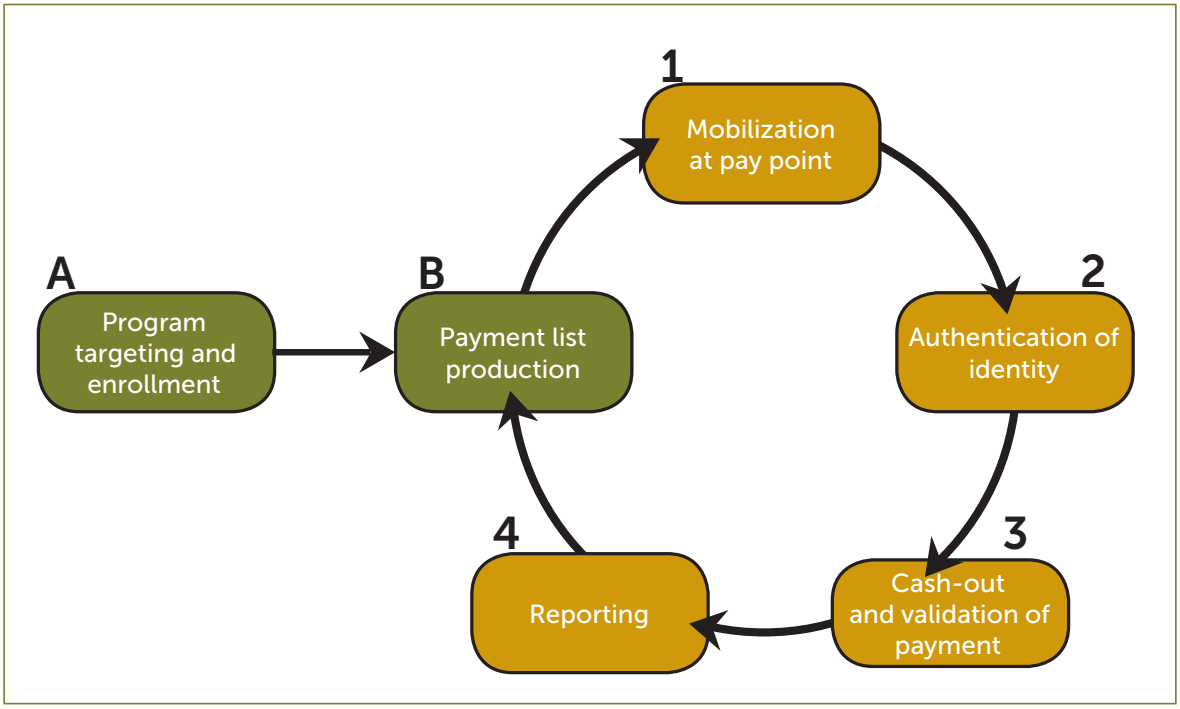
Payment delivery mechanisms can be characterized as either **manual** or **electronic**, depending on how the individual payments are delivered to beneficiaries in the last mile. Figure 1.1 shows the typical steps in an SP payment process, regardless of whether payments are delivered manually or electronically.

1.2.1 Manual Payment Delivery Mechanisms

Manual payments are typical of an in-house approach, with SP program staff delivering physical cash to beneficiaries. This system may include the electronic transfer of funds to a series of accounts at the district (or other local implementing area) level. If benefits are paid in cash, program staff or other types of payment point managers need to visit a bank or government treasury office to withdraw funds. This cash is then transported to recipient locations for final distribution. In some cases, a manual system is used in outsourced approaches; typically, national post offices are the payment service provider that delivers manual payments to beneficiaries.

A manual payment process is overseen by the SP program administrator. Payrolls (payment lists) are generated from program enrollment data, using either a

Figure 1.1 Typical SP Payment Delivery Process



Source: Pulver 2013.

Note: In manual processes, the program administrator is in charge of all steps; in electronic processes, A and B are handled by the program administrator, and 1–4 are outsourced to a PSP.

management information system (MIS) or a simple spreadsheet. The payment lists are sent to the field either electronically or by mail.

Payment recipients report to local payment points, where payment point administrators—who may be community members, program staff, and/or local government officials—authenticate and match recipients against the payroll and disburse funds in the form of cash payments, checks, or vouchers. The paper records are then returned to the central office along with any uncollected funds, checks, or vouchers. This process may be slow; in practice, records and unused funds might not be returned until the next payment cycle begins. And frequently, only summary data are available from the SP program head office.

Manual payment delivery has strengths and weaknesses. Initial start-up costs are low, because it relies on existing program staff to deliver payments. It also lets staff provide training and awareness raising regarding program and payment considerations when beneficiaries gather to receive their payments. While manual delivery may be

seen as low cost, this perception does not take into account the fact that it diverts program staff from their primary functions: payments may take up to half of their time compared to other program tasks. Manual delivery also exposes staff—and recipients—to the risk of robbery. There is also evidence that manual payment processes suffer from higher rates of leakage: 4–15 percent of the value of transfers versus 1–4 percent for electronic delivery (DFID 2009), significantly increasing the actual cost of delivery for manual systems. Further, manual payment processes are usually time-consuming, requiring recipients to wait many hours—or an entire day—to receive their payment.

Despite its limitations, manual delivery might be the most appropriate approach for beneficiaries in particularly remote contexts with very limited economic activity and little mobile network coverage.

1.2.2 Electronic Payment Delivery Mechanisms

Electronic payments (or e-payments) are usually outsourced to a third-party PSP, such as a bank, a mobile network operator (MNO), or a payment aggregator. The process usually entails electronic transfer of the total value of all beneficiary transfers for a particular payment period to the PSP. The PSP then makes electronic credits to the individual beneficiary accounts. While normally a single PSP handles all aspects of payment delivery, a consortium of providers may be responsible for different aspects in some cases.

Electronic delivery mechanisms rely on technology to facilitate and automate various payment functions and are usually outsourced to a third-party PSP versed in such technology. At the heart of these mechanisms is an automated MIS or central registry to store and manage information about beneficiaries and their entitlements (box 1.3). This MIS may be linked to a national social protection registry or a national identification (ID) authority registry. The MIS produces a payment list which includes relevant details on all individuals entitled to receive a payment—e.g., unique ID number and/or national ID number, name, location, entitlement amount, and account. The number, if one is used, payment instruction file, and requisite funds are then sent electronically to the PSP. There need to be sufficient checks to ensure the quality and accuracy of the data transmitted. If names or IDs are incorrect or mismatched, a payment cannot be completed. These types of checks can be automated within an MIS; if available, a national ID database may be queried by the SP program MIS or the PSP. The PSP then notifies beneficiaries that their SP payments have been mobilized for delivery at the payment points.

Box 1.3 Turkey's Integrated Social Assistance System

Social assistance as a percentage of gross domestic product has grown in Turkey from 0.50 percent in 2002 to 1.46 percent in 2015. Its main social assistance programs include conditional cash transfers and unconditional cash transfers to the elderly, disabled, and other vulnerable groups; and family and education assistance. Turkey's Integrated Social Assistance System (ISAS) is an MIS that enables all social assistance processes to be carried out electronically—this includes applications, investigations, payments, monitoring, accounting, auditing, and other processes—through 17 modules.

ISAS is integrated with 22 public institutions and the e-Government Gateway, handling 9,000 citizen service queries daily. Citizens enter the system using their national ID cards. Thirty-four million citizens are registered in the database, representing 9.7 million households. Beneficiaries have a choice of payment delivery mechanisms—payments at home for the elderly and/or disabled or though transfers to bank accounts. Payments amounting to the US$10 billion are made through the system. This integrated approach has seen a simplification of the application process (from 30 application forms to 1) and a drop in application time from days to a matter of minutes.

Source: Presentation by Turkish Ministry of Family and Social Policy, April 2016.

E-payment delivery mechanisms can be further divided into those using a **transaction account** (either a bank account or a nontraditional account, such as an e-money wallet) and those that do not use a transaction account. Nontraditional accounts may be issued by a bank or nonbank and may have restrictions regarding transaction types (e.g., e-money account or virtual account). The norm is for a physical cash-out of a transfer at a payment point, but there are alternatives that do not require cash-out and therefore promote a more "cash-lite" economy. For example, a local merchant with a point of sale (POS) device can offer electronic purchases to beneficiary customers with payment cards, public and private service providers can offer electronic bill payments, and schools can accept e-payment of school fees.

1.2.3 Shift toward Electronic Payment Delivery

International trends in cash transfer SP programs reveal a move away from manual cash-based systems disbursed through government offices and program staff toward outsourced e-payments and financially inclusive mechanisms. This shift to e-payments rests on the promise of improved transparency, decreased costs, and reduced leakage on the one hand; and facilitating access to value-added financial services to the

poorest and most vulnerable segments on the other (box 1.4). A 2012 study tracking 84 SP programs in 43 countries covering 174 million beneficiaries found that the number of beneficiaries receiving their payments electronically had grown from 25 percent in 2009 to 62 percent by 2012 (Zimmerman, Ravi, and Tosh 2012).

Further, a 2012 review by the Consultative Group to Assist the Poor (CGAP) of large, well-established SP payment schemes in four middle-income countries found a move toward both e-payments and financially inclusive delivery mechanisms, as programs shifted from manual delivery and then to electronic delivery—usually with initial forays into electronic delivery through nontraditional accounts and finally through bank accounts (figure 1.2). In 2009, Colombia's Familias en Accion program delivered 76 percent of transfers (to 2.4 million households) in physical cash. This number dropped to just 9 percent of households in 2011. Brazil's Bolsa Familia program used electronic delivery for 99 percent of its transfers (12.9 million households) in 2009, of

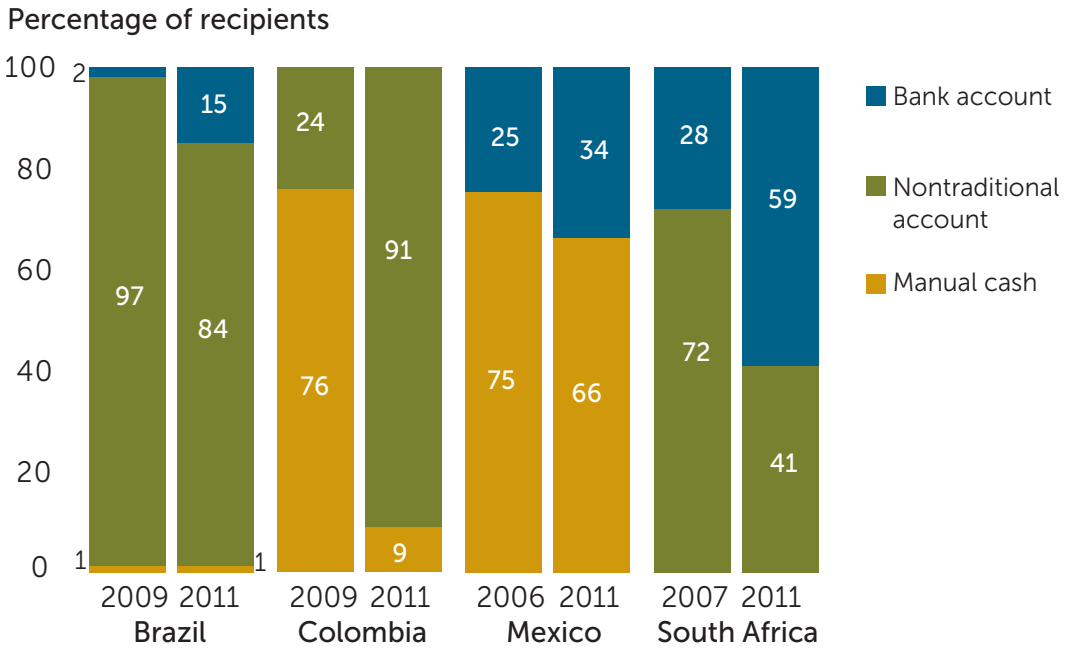
Box 1.4 India: The Case for Introducing E-Payments

A 2010 study by McKinsey and Company of government payments in India concluded that the benefits of an e-payment system far outweigh the costs. An electronic platform for government payments to and from individual households could save an estimated Rs 100,000 crore a year—almost 10 percent of the total payment flows between the government and households. Top-down analysis suggests that the one-time cost of setting up a national e-payment infrastructure is Rs 60,000 crore to Rs 70,000 crore, which means the direct financial return from e-payments could cover the cost of building the infrastructure within a year. An e-payment platform would enable the formal financial sector to reach disadvantaged Indian households more easily and efficiently and offer modern financial products. It may well ensure that every poor household in India—approximately 80 to 100 million—will have unparalleled access to secure and convenient benefits directly from the government, and without the interference of intermediaries. The main benefits cited for such a switch include the following:

- Direct monetary benefits from e-payments
- A potential reduction in the cost of payment delivery (three- to five-fold from international examples)
- A potential increase of 20–30 percent in utilization of government services
- Improved delivery of government services
- Reduced corruption
- Greater financial inclusion

Source: Ehrbeck et al. 2010.

Figure 1.2 Transition from Manual to E-Payments



Source: Bold, Porteous, and Rotman 2012.

Note: A "mainstream financial account" is referred to in this tool as a "transaction account." Data show percentage of recipients paid by each payment mechanism.

which 2 percent were delivered into a mainstream financial account (i.e., a transaction account). By 2011, 15 percent of transfers were directed into mainstream accounts. In South Africa, SP transfers to 9 million recipients were all delivered electronically in 2007, but only 28 percent of them were made into a mainstream account; this increased to nearly 60 percent in 2011 (Bold, Porteous, and Rotman 2012).

These trends are expected to continue. According to Global Findex, the world's most comprehensive database on financial inclusion, 64 percent of government payment recipients received their transfers into a financial account or mobile wallet in 2014.[3] MasterCard estimates that the value of electronic transfers into transaction accounts will more than triple between 2010 and 2017, totaling over US$194 billion (Riecke 2014). E-payments will become an increasingly attractive option for SP programs, especially in lower-income countries. The World Bank estimates that

3 Global Findex 2014; http://www.worldbank.org/en/programs/globalfindex.

developing countries could reach more than 167 million unbanked adults by digitizing government-to-person (G2P) payments.[4]

Note that the switch to electronic delivery of SP payments depends on the existence of a supportive payments environment; the components of such an environment are discussed in section 2.

1.3 Main Components of an SP Payment Delivery Mechanism

Whether manual or electronic, an SP payment delivery mechanism has a number of different components (table 1.1 and figure 1.3). An inventory exercise carried out by the World Bank in 2016 categorized the basic components of the main SP programs in 40 countries. The following briefly describes these common elements.

1.3.1 Payment Approach

Service may be delivered through in-house or outsourced arrangements or a combination of the two.

1.3.2 Payment Service Provider

The PSP is a public or private sector organization tasked with delivering payments to beneficiaries. A program can contract with one or more PSPs, depending on its needs. PSPs include commercial and state banks, post offices, MNOs, microfinance institutions, savings and credit cooperative organizations (SACCOs), credit unions, and nongovernmental organizations (NGOs). For more information about the role of PSPs in designing and implementing an SP program's payment delivery mechanism, see 3.3.4; for a description of individual PSPs, see 2.1.1.

1.3.3 Payment Instrument

A payment instrument enables funds transfer (cash or near cash), allowing beneficiaries to receive funds or purchase goods or services.

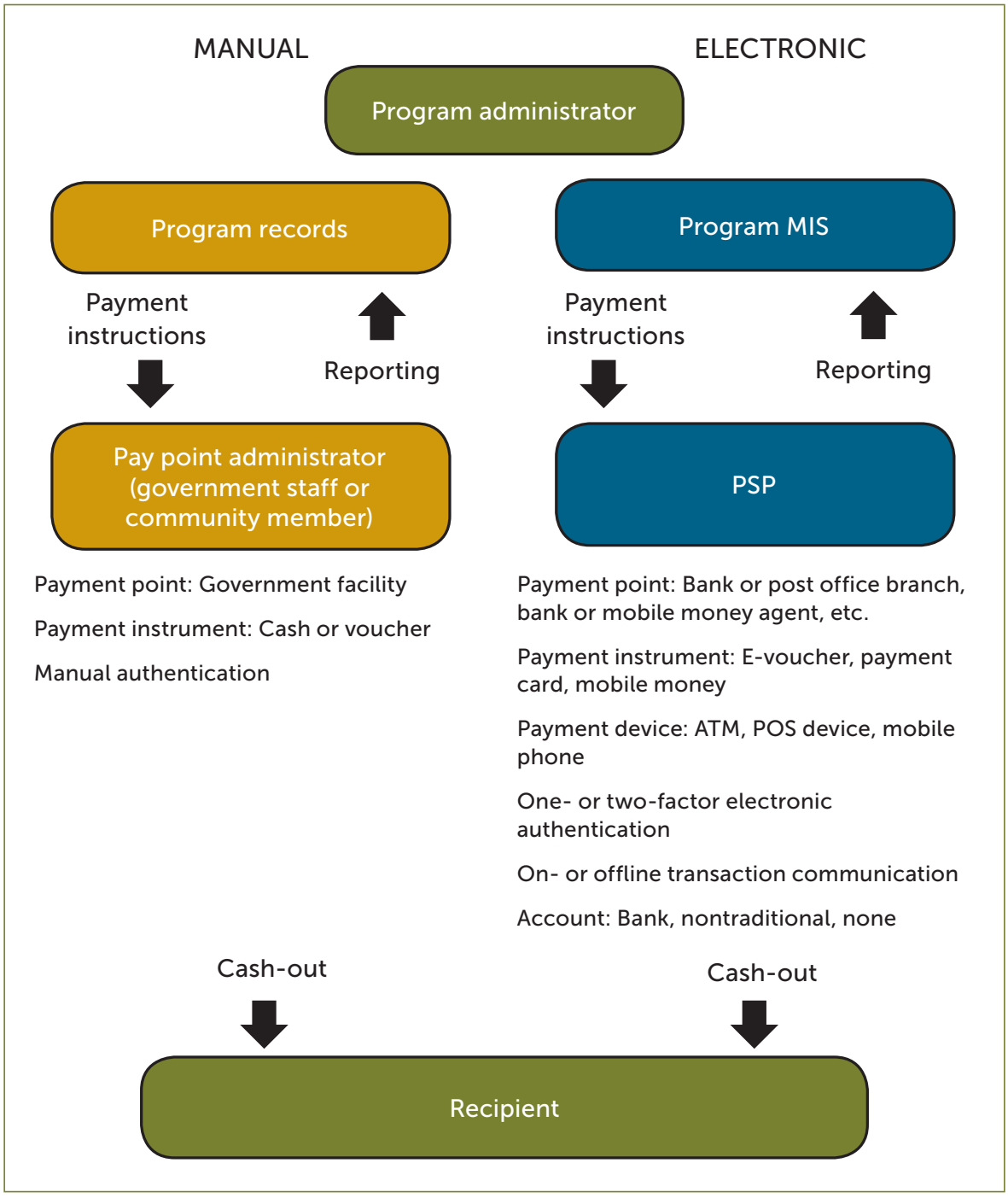
Two instruments are used in **manual SP payments**.

4 World Bank, "Universal Financial Access 2020," http://ufa.worldbank.org/global-progress#lac.

Table 1.1 Summary of Payment Delivery Mechanism Components

Component	Typical options	
	Manual	Electronic
Payment approach	• In-house • Outsourced (to a PSP)	• Outsourced (to a PSP)
Programme administrator	• Responsible for enrollment of recipients, maintaining records, issuing payment instructions, and managing PSP (if applicable)	
MIS	• Optional	• Essential
PSP	• None • Post office (in some cases) • Microfinance institution • SACCO/credit union • NGO	• Commercial bank • State bank • Post office • MNO • Microfinance institution
Payment instrument	• Cash • Voucher	• E-voucher • Payment card (prepaid, magstripe debit, or smart) • Mobile money
Transaction device	• Barcode reader	• ATM • POS • Mobile phone
Authentication approach	• Community verification • National ID card manually checked • Program ID manually checked	• One-factor authentication • Two-factor authentication
Payment point (more than one is possible)	• Government administrative office, health center, or school	• Bank branch • Bank agent • Mobile money agent • ATM • Mobile phone • Online banking
Payment point administrator (more than one is possible)	• SP program official • Local government official • Teacher • Community representative • PSP staff	• PSP agent • PSP staff • Self-service (e.g., ATM, mobile phone, or online banking)
Transaction communication	• None	• Online—mobile network • Online—very small aperture terminal (VSAT) • Offline—batch settlement
Account	• None	• None provided • Bank account • Nontraditional account (e.g., e-money products including prepaid card, mobile money account)
Recipient	• Individual eligible to receive payment	

Figure 1.3 Typical Components of SP Payment Delivery Mechanisms



Source: Adapted from Pulver 2012.

- **Cash.** Cash refers to physical money in the form of notes and coins. The delivery of actual cash requires beneficiaries to appear at a particular payment point at a particular time to receive their payments. The full amount is disbursed with no option to leave some cash for later use.

- **Voucher.** A paper-based voucher can be redeemed at a participating merchant in exchange for a specified value of cash or goods.

The instruments used in **electronic SP payments** typically allow beneficiaries to cash out all or part of the value of the transfer.

- **E-voucher.** An e-voucher is a unique serialized voucher recorded in a database. The voucher can be redeemed electronically, normally with the use of a mobile phone as the transaction device, in exchange for cash or goods. Vouchers are usually used for one-off or short-term payments. Voucher schemes typically rely on a network of participating merchants that will accept the voucher from beneficiaries in exchange for goods such as agricultural inputs, fertilizer, and grain. Program managers recruit the merchants and train them on the use of the voucher. The merchant needs to operate in an area with mobile network coverage in order to verify that the voucher is valid.

- **Payment card.** There are a number of different types of payment cards. **Prepaid cards** are either charged with a fixed amount at purchase and then disposed of; or may be reloadable, with the stored amount reduced by each purchase or transaction. **Magstripe debit cards** are linked to a bank account and allow the account holder to withdraw cash at an automated teller machine (ATM) and to pay for goods and services at retail outlets using a POS device. Amounts spent are debited instantly from the holder's account in an online transaction. This transaction requires a personal identification number (PIN). **Smart cards** have either a microprocessor or memory chip embedded in them. They have greater functionality than magstripe cards but are more expensive. A smart card can perform calculations and record transaction history. It can be personalized with the holder's biometric information such as a fingerprint or photo, and can be used to conduct offline transactions when there is no communication network available for authentication. Smart cards can either be inserted into a POS device or tapped using near field communication, thus saving wear and tear on the card.

- **Mobile money.** An e-money account or regular bank account, is linked to the beneficiary's mobile number, which then serves as the primary means of accessing funds stored in the account.

- **No physical payment instrument.** In some cases, there is no physical payment instrument used to complete a transaction. For example, a person may withdraw funds through a POS device which reads their fingerprint electronically. Another example would be a cardless withdrawal from a mobile money account at an ATM using a one-time PIN.

1.3.4 Transaction Device

The transaction device is used to facilitate or accept an e-payment transaction, such as an ATM, POS device, or mobile phone.

1.3.5 Authentication Approach

Authentication refers to the verification of the identity of the person claiming to be the rightful recipient of a payment. It may be carried out manually—e.g., with a national ID card—or electronically; the latter is more secure. Authentication occurs at the payment point and ensures that monies are paid to the intended recipient. There are three approaches to authentication involving provision of something you know (PIN, password), something you are (biometric fingerprint, voice, iris), or something you have (payment card, national ID). Strong systems use two factors of authentication to verify identity—e.g., a card used with a PIN or a card used with a form of biometric identification. See 4.2.2.3 for more detail.

1.3.6 Payment Point

In manual delivery, the payment point is the physical location where beneficiaries receive their payment. For e-payments, this may be a physical location where a transaction is completed—e.g., the place where a payment card and POS device are used to make a withdrawal (the point of connection between the payment instrument and the transaction device).

1.3.7 Payment Point Administrator

Most payment points used by SP program beneficiaries have a payment point administrator to facilitate the payment. In the case of manual payments, this administrator is usually a member of the program staff or a civil servant but could also be a community member. In e-payments, the administrator is usually a PSP or agent staff member (bank teller, bank agent, or mobile money agent), There are also self-

service points, without a payment point administrator; these include ATMs, mobile phones, and Internet banking.

1.3.8 Transaction Communication

E-payment transaction information is communicated between the transaction device and the PSP either on- or offline. Online systems settle in near real time, as opposed to offline systems which require batch settlement.

1.3.9 Account

A transaction account holds funds and allows transfers to be made to and from it. Transaction accounts include **bank accounts** and **nontraditional accounts** such as prepaid cards provided by banks and mobile money accounts offered by MNOs.[5] Having a transaction account simplifies payment receipt and can help increase an SP program's level of integration and financial inclusion potential. Nontraditional accounts may have restrictions on available transactions, such as the transfers made to and from it, and usually do not offer the full flexibility of a bank account. For more on the use and benefits of transferring SP payments into a transaction account, see 2.2.5.

1.4 Key Actors in SP Payment Delivery Design and Implementation

The SP system is characterized by multiple and diverse actors, which poses challenges for harmonization within the country and across different SP schemes; this is discussed in further detail in 3.3. Following is a very brief description of the main actors in payment delivery mechanisms. Depending on the country's levels of decentralization, there may also be significant regional or federal administrative bodies to be considered as well.

- **SP policy makers.** As SP experts, these policy makers may set guiding principles for program implementation—e.g., inclusiveness, dignity, and equality—but are unlikely to set specific policies regarding payment delivery. The payment delivery

5 The definition of "account" has changed over time, reflecting the growing use of mobile money in the financial sector, and may differ in a particular country or agency from that used here. For example, the 2011 Global Findex database defined account ownership as having an account at a financial institution, while the 2014 Global Findex database defines account ownership as having an account either at a financial institution or through a mobile money provider.

mechanism should support and reflect the priorities and principles defined by SP policy.

- **Program implementers.** Program implementers are typically responsible for the identification and enrollment of beneficiaries using the parameters defined by policy makers and for the delivery of transfers. Program implementers maintain a program registry or MIS of beneficiary details and, if outsourced arrangements are used, issue payment instructions to a specialized PSP. Program implementers receive payment reports from the PSP and are responsible for follow-up and monitoring to determine whether payments are carried out in line with the payment instructions. The capacity and human resources available to SP program implementers will inevitably drive the approach to the payment delivery.

- **Program funders.** Programs can be funded by the government (e.g., the ministry of finance), or one or more bilateral or international donors.

- **Program beneficiaries.** A program beneficiary is the individual or household identified to benefit from a transfer; this is distinct from a recipient, who is the individual authorized to receive a payment (e.g., for a dependent).

- **PSPs.** As noted 1.3.2, the PSP is a public or private sector organization tasked with delivering payments to beneficiaries. For a description of individual PSPs, see 2.1.1.

- **Financial services regulator and overseer.** Financial sector and payment system regulation and supervision can be entrusted to different entities depending on the host government's specific structures. In most countries, the central bank is in charge of regulating and supervising financial service providers, including PSPs; while financial inclusion is often handled by the ministry of finance.

1.5 Criteria for Assessing SP Payment Delivery Mechanisms

This tool proposes three criteria to use in assessing the quality of SP payment delivery mechanisms: **accessibility**, **robustness**, and **integration**. These criteria can also be applied when designing a new payment delivery mechanism—e.g., in defining the technical conditions to choose a PSP in a procurement process. Using these criteria supports a deliberative decision-making process by helping identify and consider

trade-offs between the sometimes competing objectives and agendas of the various stakeholders; these are presented in some detail in 3.3. Table 1.2 presents the three criteria proposed for use by this tool.

Table 1.2 Criteria for Assessing Payment Delivery Mechanisms

Criterion	Description
Accessibility	Cost of access
	Appropriateness
	Rights and dignity
Robustness	Reliability
	Governance
	Security
Integration	Financial inclusion
	Coordination

The first criterion, **accessibility**, refers to the accessibility of SP payments from the point of view of the beneficiary of the payment. It is important to consider this point of view because of the often vulnerable nature of beneficiaries and the typical purpose of SP programs, which is preventing or protecting all people (particularly vulnerable groups) against poverty, vulnerability, and social exclusion. The requirement for accessibility is described in three parts: **cost of access**, **reliability**, and **rights and dignity**. There should be a process in place to define, monitor, and enforce beneficiaries' rights in relation to payments and the quality of service delivery.

The second criterion, **robustness**, refers to the importance of designing and implementing a payment mechanism that can be depended on to **reliably** deliver transfers on a regular basis to the correct recipient. The active monitoring of the PSP by the SP program is a proactive process of communication and coordination (**governance**) between the SP program and its PSP. The **security** of the delivery mechanism and the risks that it may expose beneficiaries to should also be considered.

The **integration** criterion is broader than the other two as it looks at an individual SP program's relationship to the broader SP system. It looks at the extent to which the program is taking advantage of economies of scale by **coordinating** across the sector. This includes integrating the beneficiary into the financial system (**financial inclusion**)

and, for policy makers, ensuring ease of payment across a variety of SP programs seeking to deliver cash transfers.

1.6 Costs Entailed in Delivering Payments

As noted earlier, the direct cost of the payment mechanism represents a significant element of program administration costs; sometimes as much as half of the administrative budget is spent on payment delivery. International examples show that a payment delivery mechanism may cost up to 15 percent of the value of transfers in small-scale programs and those operating in particularly remote areas (table 1.3).

Table 1.3 Indicative Benchmarks on Payments

Item	Manual	Electronic	Change from manual to electronic
Time to implement	3–12 months	12–18+ months	Increase[a]
Beneficiary time to collect	2–4 hours	<0.5 hours	Reduction
Leakage	4–15%	1–4%	Large reduction
Reconciliation	≥ Weeks	≤ Days	Large reduction
Cost per payment	2–15% of transfer; US$1–US$4	2–10%of transfer; US$1–US$2	None to small reduction

Source: Adapted from DFID 2009.

a. E-payments usually rely on outsourced arrangements that require compliance with national/donor procurement rules, necessitating a time-consuming process.

Costs may fall to 2–4 percent of the value of transfers in large-scale national programs (table 1.4). Experience shows that while high initial set-up costs may be unavoidable for new large-scale payment solutions, effective design and management can reduce running costs to a relatively low marginal level. However, if this cost is not carefully controlled, it can undermine the sustainability of the entire program. E-payment delivery mechanisms potentially offer very significant economies of scale and are thus often the most appropriate approach for large long-term programs.

The cost of delivering payments should be measured. Activity-based costing is a typically approach, including some estimate of leakage rates. The level of leakage in an SP payment delivery mechanism may be estimated through beneficiary surveys and

Table 1.4 International Cost Benchmarks for E-Payments

Item	Brazil	Colombia	Haiti	Kenya	Mexico	Philip-pines	South Africa	Uganda
Program name	Bolsa Familia	Familias en Accion	TMC	WFP-CFA	Oportu-nidades	4Ps	Sassa[a]	SAGE
# of households/ recipients	12.9 mil.	2.4 mil.	75,000	62,500	5.8 mil.	3.7 mil.	9 mil.	95,000
Grant/recipient (US$)	7.10	55.10	15.00	34.12	118.20	63.01	144.70	19.34
Weighted avg fee/ payment (US$)	0.84	6.24	1.36	0.53	2.52	0.75	3.50	0.68
Fee as % of avg grant	1.2	11.3	9.1	2.0	2.1	1.2	2.4	3.5
Date of data	May 2011	Dec. 2010	May 2013	Jul. 2013	Dec. 2010	Aug. 2013	Apr. 2010	Jul. 2013
Source	CGAP FN 77	CGAP FN 77	CGAP FN 93	CGAP FN 93	CGAP FN 77	CGAP FN 93	CGAP FN 77	CGAP FN 93

Sources: Bold, Porteous, and Rotman 2012; and Zimmerman, Bohling, and Parker 2014.

Note: Fees have changed in recent years from those listed here with the introduction of new PSPs. 4Ps = Pantawid Pamilyang Pilipino Program; SAGE = Social Assistance Grants for Empowerment; TMC = Ti Manman Cheri; WFP-CFA = World Food Programme Cash for Assets.

a. The South African Social Security Agency (Sassa) is the government agency responsible for implementing multiple cash transfer programs.

mystery shopper exercises. Thorough analysis of costs is particularly important when a program is considering outsourcing payments to a third-party provider. Without a clear understanding of the cost of the existing in-house payment process, it will be difficult to assess the cost-effectiveness of any new delivery mechanism. Note too that inevitably there is a relationship between the amount of money spent on a payment mechanism and its quality.

In outsourced arrangements, it may be easier to identify costs. There is a direct fee for service charged by PSPs. Fees may be charged for enrolling new beneficiaries to cover the cost of opening and maintaining an account; there are also typically fees charged for the delivery of each payment. Outsourced payment arrangements do not remove the burden of responsibility for payments from an SP program: the program must oversee outsourced payment arrangements to ensure agreed quality standards are met. These supervisory or management responsibilities also have a cost.

Significant indirect costs can be associated with leakage. Leakage includes the fraudulent diversion of funds, informal payments, and thefts. This cost is frequently

not known within individual programs. Estimates from programs that measure leakage range from 4 percent in South Africa to 15 percent in India (table 1.3). The cheapest payment mechanisms may be associated with very considerable leakage rates, making the overall cost of delivery higher than for a mechanism with greater direct payment costs. High leakage rates can also pose reputational problems for a program and its funders, which go beyond the immediate cash cost. E-payment mechanisms with strong procedures and controls are usually less vulnerable to leakage than manual cash-based systems.

International benchmarks on payments show that an e-payment mechanism can be accessed more quickly by beneficiaries and may also cost slightly less than a manual payment process (table 1.3). Significant savings can be realized in reconciliation times in an e-payment mechanism. The greatest cost saving of e-payments over manual payments is the significant reduction in leakage that can be captured. However, using this justification to make the switch from manual to e-payments would need to be supported by a full costing of the existing manual payment mechanism. There may well be a strong conflict of interest and resistance to change if those implementing a manual process are directly benefiting from leakage.

Cost considerations should support the drive to use existing payment access points, wherever possible, as there are huge efficiency gains from leveraging this infrastructure. Additional access points may need to be created for remote and rural areas, however. Special-purpose or closed-loop proprietary infrastructure is very costly, since by definition the investment cannot be amortized through other financial service activities.[6]

If there is a coordinating agency involved in payments, there may be scope to make some cost savings. For example, in South Africa the creation of the South African Social Security Agency meant that it was possible to negotiate a per beneficiary charge from PSPs to cover the payment of multiple transfers such as for child care, disability grants, and old age pensions.

6 Closed-loop proprietary infrastructure refers to the equipment such as POS devices and cards that may be operated using a particular firm's software and systems that conform to its own internal standards instead of international standards. Payment cards issued under such an arrangement may not be used in other providers' POS devices or ATMs.

1.7 Key Performance Indicators

Table 1.5 presents the key performance indicators suggested in assessing payment delivery mechanisms. These indicators, organized by the three criteria discussed in 1.5 and costs (discussed in 1.6) represent the essential data that should be gathered on a payment delivery mechanism in order to effectively monitor its quality.

Table 1.5 Key Performance Indicators

Criterion	Indicator
Accessibility	• Average payment collection time for beneficiaries • Average travel time for beneficiaries, return trip from home to payment point • Average number of beneficiaries per payment point. • Cost to beneficiary as % of value of the transfer
Robustness	• Over the past 12 months what percentage of payments to cash transfer recipients were delayed, that is, paid outside of the established payment window. • (a) Over the past 12 months what percentage of allowances to workers tasked with delivering payments were late and how late were they and/or (b) Over the past 12 months what percentage of PSP's invoices were paid late and what was the length of delay versus the contracted invoice settlement period. • Audit review of the payment procedures in last 12 months • Number of days after the close of payment window for the report on payments to reach the center. • Individual transaction level data reported back to center at the end of each payment window (not a special request or only available in district center). • Percentage of payments made with secure authentication (two factor authentication for payments to recipients) • Straight through processing for payroll processing • Number of exceptions/manual interventions to straight through processing
Integration	• Percentage of beneficiaries paid through a transaction account • Number other financial services available through the payment delivery mechanism • Number of cash transfer and near cash programs using common ID platform to identify beneficiaries and payment mechanism for payments • Percentage of accounts with use by recipient/beneficiary beyond a single withdrawal every payment period
Costs	• Cost to program as a percentage of the value of the transfer • Cost to program per transfer to each recipient in US$

2 Supporting Environment for SP Payments

Regulatory certainty, greater choice of providers and products, and larger numbers of financially included people create a more supportive environment for delivering high-quality SP payment delivery mechanisms for an SP program and its beneficiaries. This section looks at each of these key components, touching on various elements of a country's financial sector; its policy, legislation, and regulations; and its national ID system and mobile network coverage. Note that these various national systems are not looked at comprehensively but only insofar as they affect or address issues related to payment delivery mechanisms. These components are presented in a framework in the assessment matrix.

2.1 Financial Sector

This section focuses on elements of the financial sector that pertain to SP payments—specifically, financial institutions and financial access points.

2.1.1 Financial Institutions

A strongly supportive environment is characterized by a large variety of institutions able to act as PSPs, operating in a competitive market with direct experience in delivering social cash transfers and the ability to offer other appropriate financial services for the poor.

When selecting a private or public PSP to deliver payments for a national SP program, it is useful to assess them according to the criteria of accessibility, robustness, and integration; table 2.1 shows how different types of PSPs typically perform against the criteria.

- To be accessible to SP beneficiaries, a PSP should have a large **distribution network**; this might include its own branches and third-party agents that deliver services on its behalf. Without a large distribution network, the cost of access may be high, particularly in areas with high densities of SP beneficiaries.

- The ability to deliver an appropriate payment delivery mechanism may be indicated by the PSP having an existing corporate interest in **servicing lower-income customers**.

- The ability to deliver a robust level of service may be understood by reviewing a PSP's level of investment in technology, access to relevant national payment systems, organizational processes, and availability of people to support the **secure delivery** of services in remote areas, including low-value payments. A

Table 2.1 Typical Characteristics of Different Types of Payment Service Providers against the Assessment Criteria

Type of PSP	Accessibility: Cost of access	Accessibility: Appropriateness	Robustness	Integration
	Large national distribution network	Interest in serving lower-income customers	Systems for secure delivery of payments	Able to provide a transaction account
Commercial bank	🟡	🟡	🟢	🟢
State bank	🟡	🟢	🟡	🟢
Post office	🟢	🟢	🟡	🟡
MNO	🟢	🟢	🟡	🟡
Microfinance institution	🔴	🟢	🟡	🟡
SACCO/credit union	🔴	🟢	🔴	🟡
NGO	🔴	🟢	🔴	🔴
Aggregator	🟢	🟡	🟡	🔴

Note: 🟢 = usually present; 🟡 = sometimes present; 🔴 = not usually present.

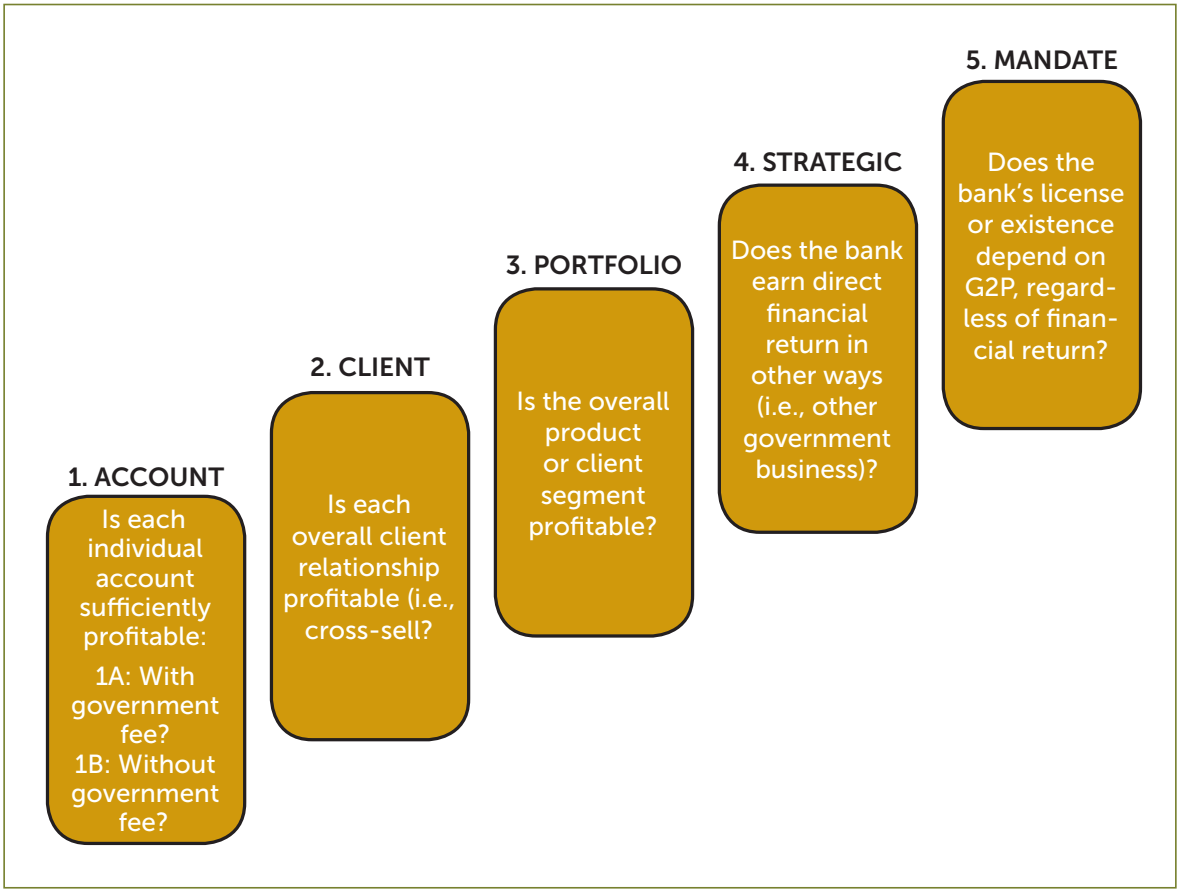
PSP's robustness may also be demonstrated in part by the size of its existing client base; if this would be dwarfed by the proposed number of SP recipients, careful consideration should be given to the PSP's capacity to deliver.

- If integration is an important criterion for a given SP program, the PSP's ability to offer a transaction account should also be reviewed.

2.1.1.1 Making the Business Case

It is important to note that there needs to be a business case for a PSP to be willing to offer its services. A study undertaken by CGAP in 2012 defines five different business cases a PSP can consider to justify provision of SP payment services (Bold, Porteous, and Rotman 2012) (figure 2.1). The **first level business case**, which is rarely met, requires that the individual recipient accounts are profitable on their own, particularly in the short term. If the business case holds at this first level, it will hold at all subsequent levels. The **second level** requires profitability from a single client relationship group—e.g., all clients of a particular SP program as opposed to the individual account level. The business case at this level is strengthened by the ability to cross-sell more profitable services such as credit and insurance to this client relationship group. The **third level** considers the profitability of a whole segment

Figure 2.1 Business Cases for Payment Service Providers



Source: Bold, Porteous, and Rotman 2012.

of clients, such as all retail customers. A large number of small retail accounts with a balance may enhance the bank's liquidity. The **fourth, strategic level** looks at the indirect benefits of providing low-cost accounts to a government program, such as enhancing a bank's position when competing for lucrative government accounts or funding or relaxation of other compliance requirements. The **fifth-level business case**, mandate, is a little more nebulous. This business case is usually determined by the regulatory environment. If a regulator's willingness to allow a bank to operate is dependent on an implicit social contract, this could require the bank to take on loss-making G2P business to ensure its continued existence. State banks may also be required to take on government business regardless of traditional consideration for financial return. In addition to this regulatory view, a PSP's own strong social agenda (or corporate social responsibility) may drive this business case.

Different types of institutions may tender and deliver payments for an SP program. The following descriptions provide a generalized view of the different types of potential PSPs. Not all types of providers listed here will occur precisely as described—e.g., in some countries, mixed public-private ownership of banks exists, meaning that they may have characteristics of both commercial and state banks. In any event, the actual providers in a particular country should be judged on their own specific strengths and weaknesses.

2.1.1.2 Commercial Banks

There must be a business case for commercial banks to sustain their interest in delivering SP payments. Beyond the profit motive, a bank may enter into this business as part of its corporate social responsibility drive. While their interest in the business must be sustained, they must also have the requisite distribution network to service the beneficiaries. A bank with a strong social agenda and background in delivering services to the poor may offer the best solution. For example, Equity Bank in Kenya is delivering social transfers on behalf of a number of government programs including the Hunger Safety Net Programme and the Cash Transfer for Orphans and Vulnerable Children, as well as delivering payments to World Food Programme (WFP) beneficiaries. In Colombia, the Mas Familias en Accion program uses the public-private-owned bank Banco Agrario and Davivienda, a commercial bank, to deliver transfers.

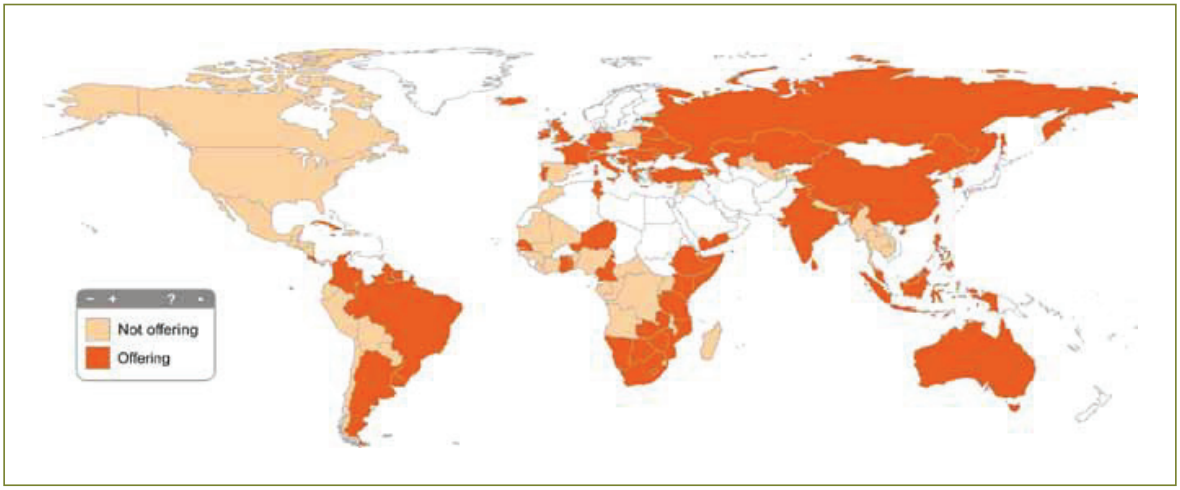
2.1.1.3 State Banks

Many countries no longer have state-owned banks. Those that do may require that they deliver all government transfers. Examples of state banks delivering SP program payments include Land Bank in the Philippines. In Brazil, the state bank Caixa delivers Bolsa Familia transfers; in Mexico, the Oportunidades (now Prospera) program uses Bansefi. In India, the State Bank of India and other state-owned commercial banks are used to deliver social grants.

2.1.1.4 Post Offices

Post offices are characterized by a national distribution network that easily accommodates low-income beneficiaries. After remittances, the second most important financial service offered by post offices is the delivery of government payments including salaries, pensions, and SP cash transfers (figure 2.2). The United Nations' United Postal Union details six distinct business models post offices use in the delivery of financial services: (1) real estate provider, (2) cash merchant for transactional financial services, (3) proprietary transactional financial services, (4) partnership with a financial service provider, (5) unlicensed postal savings and financial services, and (6) licensed postal savings and financial services.

Figure 2.2 Post Offices Offering Government Payments



Source: Berthaud and Davico 2013.

Post offices may not have the necessary infrastructure in place to offer financial services, however. Many focus on the delivery of manual payments through the use of hard-copy payrolls without any option for an account that allows money to be stored and from which partial withdrawals can be made, frequently meaning that the payment process is characterized by slow delivery and time-consuming manual reconciliation and reporting. Although some post offices are investing in technology, the potential exists for a PSP with a strong technology basis to partner with the post office to use its branches as convenient distribution/service access points for beneficiaries. Kenya's government SP programs transitioned from delivery by government staff to outsourced delivery through the Postal Corporation of Kenya; challenges with manual reconciliation led to a transition to e-payments through a commercial bank (Pulver 2012).

As the link between government payments and financial inclusion has become more important, many SP programs have moved from delivering through post offices to payments being made into a transaction account. The key challenge for post offices is to modernize—transitioning from the cash-merchant model toward offering payment accounts or some form of multipurpose prepaid card (Berthaud and Davico 2013).

2.1.1.5 Mobile Network Operators

In recent years, a new type of nonbank PSP has emerged through the introduction of mobile money. According to the GSMA *State of the Industry Report 2015*, there were 271 mobile money services across 93 countries, and the number of registered

accounts grew by 31 percent to 411 million (GSMA 2016). At least 19 countries have more mobile money accounts than bank accounts; this is up from 9 countries in 2013.[1] Fifty-two percent of these services operate in Sub-Saharan Africa. Twelve services have reached scale by topping 1 million active accounts on a 90-day basis. Bulk disbursements through mobile money systems are growing: about 65 percent of total bulk disbursements were used to deliver G2P payments. This approach is most popular in South Asia (70 percent share of total G2P disbursements) followed by Latin America and the Caribbean (29 percent).

The stage of development of mobile money in a particular country and region will determine if it is a suitable SP payment mechanism. Using mobile money to deliver payments requires a bulk payment platform and open application program interfaces, which not all service providers offer.[2] The quality of the network of agents is also important, particularly their willingness to offer services to social transfer recipients and their ability to offer sufficient liquidity. In Uganda, the government's Social Assistance Grants for Empowerment (SAGE) program delivered all 95,000 recipient payments through the MTN mobile money service, and was thus its largest bulk payment customer in 2012 (Zimmerman, Bohling, and Parker 2014).

2.1.1.6 Microfinance Institutions

Microfinance institutions may be targeted at lower-income customers, but in many countries are not permitted to take deposits or offer a store of value. They typically do not have the same number of distribution points across a country as do banks, but tend to operate more locally—and may have better coverage than banks outside the main commercial centers of a country. Where microfinance institutions have invested in some sort of core banking or MIS, they can provide electronic reconciliation. In Ethiopia, Amhara Credit and Saving Institution (ACSI), the regional microfinance institution, piloted delivering e-payments to nearly 15,000 Productive Safety Net Programme recipients using POS devices (EFIP 2012).

2.1.1.7 SACCOs/Credit Unions

Savings and credit cooperatives are frequently the financial institution closest to the rural poor. The SACCO/credit union sector offers a large number of distribution

1 Chad, Ghana, and Liberia joined the list in 2015; the 2013 cohort comprised Cameroon, the Democratic Republic of Congo, Gabon, Kenya, Madagascar, Tanzania, Uganda, Zambia, and Zimbabwe. Added to the list in 2014 were Burundi, Guinea, Lesotho, Paraguay, Rwanda, and Swaziland (GSMA 2014, 2016).

2 See http://www.cgap.org/blog/partnership-missing-ingredient-mobile-money-apis; http://www.cgap.org/blog/can-open-apis-accelerate-digital-finance-ecosystem.

points in most countries but comprise many small local organizations with no formal links to each other. SACCOs/credit unions are also not known for strong internal controls, nor do they tend to make the investments in technology necessary to deliver e-payments—which may make them unsuitable on the grounds of fiduciary risks being too high.

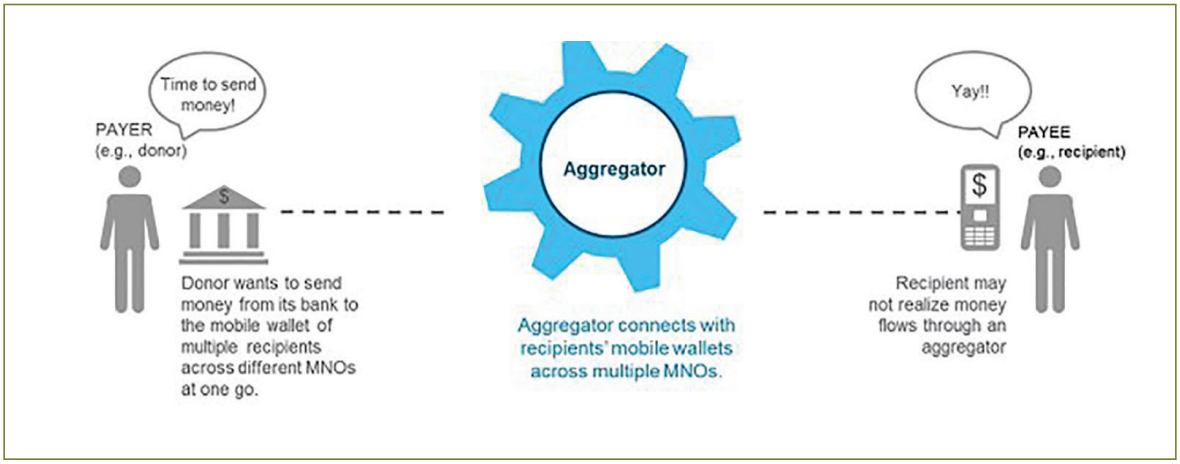
2.1.1.8 Aggregators

Aggregators facilitate interoperability, which ensures the seamless flow of payments between payers and payees across multiple payment instrument providers. Using an aggregator, irrespective of which payment instrument service a recipient decides to use to receive payment or conduct a transaction (a mobile wallet of any MNO on any network, or an account of any bank, a mobile banking application), the payer/originator is able to send funds through a single system and from a single account. Thus, a customer/beneficiary with an account at a certain bank can withdraw from any ATM or use any POS device across the country without being restricted to the payments infrastructure of the bank holding the account. Figure 2.3 illustrates how an aggregator works in the example of a donor or government transfer.

2.1.1.9 Nonbank Payment Service Providers

Not all countries have this type of specialized provider. Nonbank PSPs usually occur in countries where there are large and long-standing SP programs requiring PSP services, such as CelPay in Zambia, FINO in India, and AllPay and Net1 in South Africa. In some cases, these specialist providers now offer services outside their home market. In general, these types of providers tend to offer closed-loop payment systems that rely

Figure 2.3 Example of Back-End Payment Aggregation



Source: McKay and Pillai 2016.

on smart cards and biometric authentication. Consequently, there is highly secure identification of recipients—which may appeal to funders—but recipients are only able to collect payments at dedicated payment points from the PSP, which may be a more expensive alternative to using existing financial access points. The regulation of these providers depends on an individual country's regulation of nonbank e-money issuers.[3]

2.1.1.10 Government or Nongovernmental Organization Staff

Although these are not strictly speaking a PSP, many government SP programs use program or NGO staff to deliver payments to beneficiaries. The advantage of this type of arrangement is that it is relatively quick and easy to establish, because program staff are already on the ground. In some programs that are outsourced in their entirety to an implementing NGO, payments may be delivered by NGO staff or outsourced to any of the above types of PSP.

2.1.1.11 Agents

Many PSPs use agents as part of their solution to delivering SP payments and other financial services to recipient customers. Agents play a critical role in acquiring new customers, enabling them to make transactions, and keeping them satisfied. Their three main tasks are to verify client identity, help clients make transactions, and act as the face of the service:

- Agents verify the identity of customers both when clients sign up and at subsequent transactions. This not only keeps the service in compliance with know your customer (KYC) standards set by regulators, but also helps guard the entire system against fraud—which may help clients view the service as safe and trustworthy.

- In order to have cash when and where customers want it, agents must keep adequate stocks of both cash and electronic value (e-float) to enable clients to make transactions. If they cannot do so, customers may see the service as unreliable, and the provider's reputation can be quickly tarnished.

- Agents are quite literally the face of the service. Customers rely on agents to show them how to use the service, provide an opinion about whether the service is worth trying, and troubleshoot problems when they arise. Agents can help bridge the gap between a high-tech service and low-literacy clients.

3 On the regulation and supervision of nonbank e-money issuers, see Lauer and Tarazi (2012).

2.1.2 Financial Access Points

When trying to assess the stage of development of a country's payment system and the geographic extent of financial access points, it is helpful to compare it to regional norms (table 2.2). Frequently, however, financial access points are concentrated in urban areas. A useful piece of information to glean when reviewing a country's payment environment is the percentage of financial access points outside the capital and principal cities.

Table 2.2 Comparison of Average Number of Financial Access Points by Countries of Different Income Classifications

Access point	HIC	UMIC	LMIC	LIC
Commercial bank branches per 100,000 adults	31.9	27.1	13.0	5.6
ATMs per 100,000 adults	78.3	54.3	21.5	9.7

Source: International Monetary Fund Financial Access Survey 2013.

Note: HIC = high-income countries; UMIC = upper-middle-income countries; LMIC = lower-middle-income countries; LIC = low-income countries.

2.1.3 Interoperability

A review of the SP payments environment should look at the overall development of the e-payment infrastructure to understand (1) the stage of development of the payment system, and (2) the level of interoperability and thus what proportion of the total number of financial access points can be accessed by an individual PSP and its customers. Payment system interoperability makes it easier to make and accept payments and benefits all participants. For example, PSPs, including banks, gain revenue from payments in interoperable systems that they may not be able to achieve with closed-loop (or non-interoperable) systems.

The 2010 World Bank Global Payment Systems Survey included a review of innovative payment instruments and products (World Bank 2011); this category includes prepaid cards, card-based e-money products, and other types of e-money products including those developed around mobile phones and mobile technology. The survey found that innovative products and mechanisms have very limited interoperability, with less than 20 percent reported to be fully or partially interoperable. These innovative products were also less likely to use traditional interbank clearing and settlement infrastructure. Furthermore, levels of interoperability of ATMs and POS devices was strongly linked to

level of economic development, with higher-income countries having greater levels of interoperability.

It is possible to have multiple switches in a country.[4] Not all are a public utility (table 2.3). For example, Rwanda has a domestic national switch which is run like a national utility under a government mandate. If a national switch exists for retail transactions, it links different forms of payment infrastructure and providers at a low cost. This means, e.g., that a customer with an account can make a withdrawal

Table 2.3 Payment Switch Ownership Structures

Region	Consortium of a few large banks	Consortium of all major banks	Central bank	Other gov't bodies	Other private sector entities	Total
Total	30 (18)	58 (35)	20 (12)	14 (9)	50 (30)	164
EAP	1 (7)	4 (29)	3 (21)	0 (0)	5 (36)	14
ECA	0 (0)	3 (27)	3 (27)	1 (9)	6 (55)	11
LAC	14 (45)	10 (32)	0 (0)	2 (6)	6 (19)	31
MENA	3 (23)	5 (38)	4 (31)	2 (15)	1 (8)	13
SAR	2 (25)	1 (13)	0 (0)	0 (0)	0 (0)	8
SSA	4 (13)	6 (20)	4 (13)	5 (17)	12 (40)	30

Source: World Bank 2011.

Note: Numbers in parentheses are percentages. EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SAR = South Asia; SSA = Sub-Saharan Africa.

from any ATM or POS device across the country without being restricted to using the payment infrastructure of the bank holding the account. Interoperability is also facilitated by aggregators (see 2.1.1.8). But while most aggregator agreements are bilateral arrangements, banking switches are multilateral in that multiple banks come together to establish a private, public, or other legal entity that will carry out clearing and switching of payments between them. In a banking switch, all partners agree on—and abide by—standard rules, protocols, and even pricing when applicable. The switch charges a fee for the interconnectivity and sets rules for the smooth flow of payments between its member financial service providers. Most switches are not focused on making profits but on supporting members.

4 A switch is an electronic clearing system that interconnects multiple financial service providers to one another or different transaction channels and payment systems allowing interchange of payment transactions.

2.2 Policy, Legislation, and Regulations

A country's SP strategy or policy sets the tone for all its SP programs. The policy strategy/document provides guiding principles for implementers of a payment mechanism. There may be other documents that frame the SP environment that should be consulted, including the national constitution; the laws adopted by the legislative branch (e.g., labor laws, social security framework, SP legislation, as well as other laws making provisions for administration, financial management, delivery, enforcement, etc.); and regulations from the executive branch such as decrees, circulars, ordinances, and operations manuals.

Regulatory certainty is important in creating a supportive environment for payment distribution. When reviewing the development of the legal foundation for the national payment system, it is important to look at both the number of areas that are covered and the clarity of definitions used, and to understand which institutions are permitted to offer payment services and under what rules. The oversight and regulatory framework for payment services also influences the future development of the payment services market. Payment system oversight and consumer protection issues are of general interest. This subsection covers several areas of particular interest for those concerned with the payment of social cash transfers, including the regulation of agencies for financial service delivery (including the role of banks and nonbanks), the proportionality of KYC rules, and the presence of e-money guidelines and transaction accounts. Also covered are issues related to financial inclusion, procurement, and the government payments framework.

2.2.1 Agency Rules

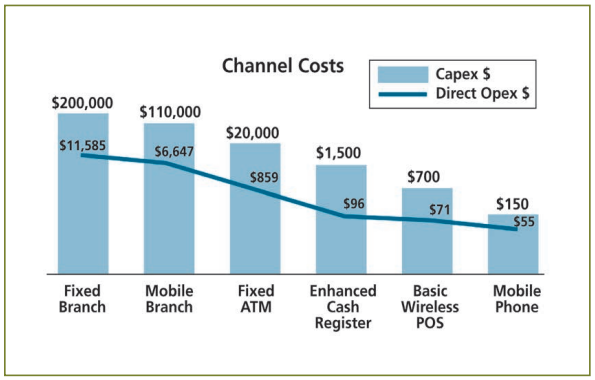
Within the regulatory framework, the rules on agency determine what type of institutions can engage agents, for what services, and what entities can serve as agents (banks and their branches, nonbank financial institutions, retailers). Rules should be in place that allow banks and nonbanks to use agents.[5] While not recommended, there are usually different sets of regulation regarding the use of agents by banks and nonbanks such as mobile money service providers.

Agency rules are important because their existence can support the extension of financial services into previously unserved areas. There are a number of ways that a

5 To ensure optimal and effective use of agents, rules should be in place that (1) allow a tiered structure of agents and subagents, including the use of agent network managers; (2) authorize a wide range of institutions to act as agents, including small shops; and (3) permit agents to carry out a range of services, including account opening (Lauer and Staschen 2013).

bank can deliver financial services to customers. Typically, the most expensive channel is through bank branches. If banks can reduce the cost of service delivery, lower-income individuals can be served in a commercially viable manner. Figure 2.4 shows the cost of different channels or distribution points. The cheapest are typically operated by nonbank agents with an existing business and cash flow, such as shopkeepers.

Figure 2.4 Capital and Operating Expenses of Different Financial Distribution Points



Source: DFID 2009.

Note: Data based on norms prevalent in developing countries. Note that the logarithmic scale compresses cost differentials.

2.2.2 KYC Rules

Global standard-setting bodies such as the Financial Action Task Force define standards for financial integrity and stability. These standards are then implemented by national financial service regulators and include anti-money laundering/combating the financing of terrorism (AML/CFT) requirements.[6] Individual financial services firms then comply with these national requirements by implementing their own firmwide KYC and customer due diligence rules. These rules require that financial institutions identify their customers and verify key information, exercise due diligence, and monitor transactions. If AML/CFT requirements are implemented overly conservatively by either a national regulator or individual financial services firms, this can lead to the financial exclusion of low-income populations. Most frequently, it is individuals with low incomes who do not have the necessary proof of ID and address documentation to meet these requirements (passports, national ID, utility bills) and will be unable to open bank accounts or access other formal financial services. KYC requirements can prove difficult for an SP program seeking to pay a transfer to a recipient without key documents.

The solution is implementation of proportionate regulation, balancing financial inclusion, integrity, and stability to achieve the safety and soundness of the financial sector. In South Africa, the regulator uses tiered AML/CFT rules with a low-value

6 See also Lyman and Noor (2014).

transaction exemption.[7] This exemption allows low-income individuals to participate in the formal financial sector. In 2011, Mexico introduced a tiered scheme for opening deposit accounts at credit institutions. This introduced risk-based account opening requirements for low-value accounts. The innovation here is that it incorporated several levels of simplified accounts, with requirements increasing incrementally as restrictions on transactions and channels are eased. These approaches allow lower-income individuals to open bank accounts and access other formal financial services and thus makes it easier for an SP program to pay to an account. Financial Action Task Force guidance has the flexibility to allow for the combined pursuit of financial inclusion and an effective AML/CFT regime.[8]

2.2.3 E-Money Guidelines

Prudential supervision by the central bank usually involves banks and other deposit-taking institutions. Nonbank PSPs such as mobile money operators may not take deposits, but they are increasingly offering payment services and issuing e-money. An e-money account is classified as a nontraditional financial account, which usually has more limited features than a bank-offered transaction account. This is a positive innovation that can greatly increase payment options for an SP program, especially those operating in rural and remote areas, but suitable rules should be in place. Nondeposit-taking institutions are not able to intermediate funds; because they cannot lend funds to customers, their risks are lower. Rules should reflect this difference.[9]

2.2.4 Basic Bank Account

Basic bank accounts are designed to serve the needs of low-income consumers and are usually characterized by simpler, more limited features and lower pricing. The definition of features such as pricing may be set by regulation or voluntarily provided by banks. These accounts are sometimes referred to as "basic" or "no-frills" accounts. If this type of account exists, it is typically used to deliver social transfers. For example, in 2011 in Colombia, 91 percent of Familias en Accion recipients received their transfers into a Banco Agrario basic bank account accessed via a magstripe debit card (Bold, Porteous, and Rotman 2012). More recently, the program has been using two PSPs providing bank accounts and e-wallets.

7 Exemption 17 eliminates the requirement under South African regulation to verify a client's physical address. This exemption applies to accounts with a maximum balance cap and monthly transaction limit of approximately US$3,571 and a daily transaction limit of approximately US$714.

8 For further information, see FATF (2013).

9 See Lauer and Tarazi (2012).

2.2.5 Financial Inclusion

A country's regulatory and legislative framework for its national payment system, financial services, and government payments determines which payment solutions can be used for government cash transfers—and, in particular, whether the payment mechanism can be financially inclusive.[10]

2.2.5.1 Recognition of Importance of Financial Inclusion

Financial inclusion is a policy goal that seeks to extend financial services to all citizens by ensuring that services are accessible, affordable, and appropriate. Increasing numbers of policy makers from a large number of countries recognize that financial inclusion is an important ingredient in economic and social development. Over 50 national governmental bodies have joined the Alliance for Financial Inclusion by signing the Maya Declaration, an agreement to make measurable progress in four areas proven to increase financial inclusion.[11] In September 2009, the G20 leaders made a commitment "to support the safe and sound spread of new modes of financial service delivery capable of reaching the poor." To take this forward, in 2010, the G20 endorsed a Financial Inclusion Action Plan; this was updated at the 2014 G20 Leaders' Summit in Brisbane and includes the following action areas: commitment to (1) implementing the G20 Principles for Innovative Financial Inclusion under a shared vision of universal access; (2) improving data; (3) supporting capacity building and training; and (4) improving national, regional, and international coordination.

In October 2013, the president of the World Bank Group stated that universal financial access is vital to reducing poverty, highlighted the importance of access to basic transactional services, and launched the global Universal Financial Access 2020 initiative with a defined goal of "universal ownership of a store-of-value transaction account." A broad coalition of partners from the private sector (including banks, credit unions, card networks, microfinance institutions, and telecommunication companies)

10 A national payment system covers the entire payment process and all its participants. It thus includes institutions such as banks, payment instruments such as cards, and payment devices such as ATMs, as well as the framework of laws, regulations, and procedures that govern payments.

11 These four areas are (1) to create an enabling environment to harness new technology that increases access and lowers costs of financial services; (2) to implement a proportional framework that advances synergies in financial inclusion, integrity, and stability; (3) to integrate consumer protection and empowerment as a key pillar of financial inclusion; and (4) to utilize data for informed policy making and tracking results (www.afi.org).

and the donor community has been convened to achieve this goal. Twenty-five target countries have been identified for heightened engagement on financial inclusion.[12]

2.2.5.2 Impact of Financial Inclusion

Access to financial services helps households reduce their vulnerability to shocks, notably by supporting opportunities for income generation and asset accumulation. In the context of SP programs this means making payments into a transaction account.

CGAP has drawn attention to a number of randomized control trials that have provided evidence supporting the development of inclusive financial systems as an important component of economic and social development (Cull, Ehrbeck, and Holle 2014). At the microeconomic level, a number of positive impacts are noted including self-employment, business activities, household consumption, and well-being. The studies show positive benefits associated with access to savings, which can help households manage cash flows and smooth consumption as well as build capital for investment in productive assets such as livestock or investment in education. Evidence showed that commitment savings enabled users to mitigate health shocks, increase food expenditure for the family, and increase investments in their businesses. Strong positive benefits were also noted from insurance products helping poor households mitigate risks and manage shocks (Cull, Ehrbeck, and Holle 2014).

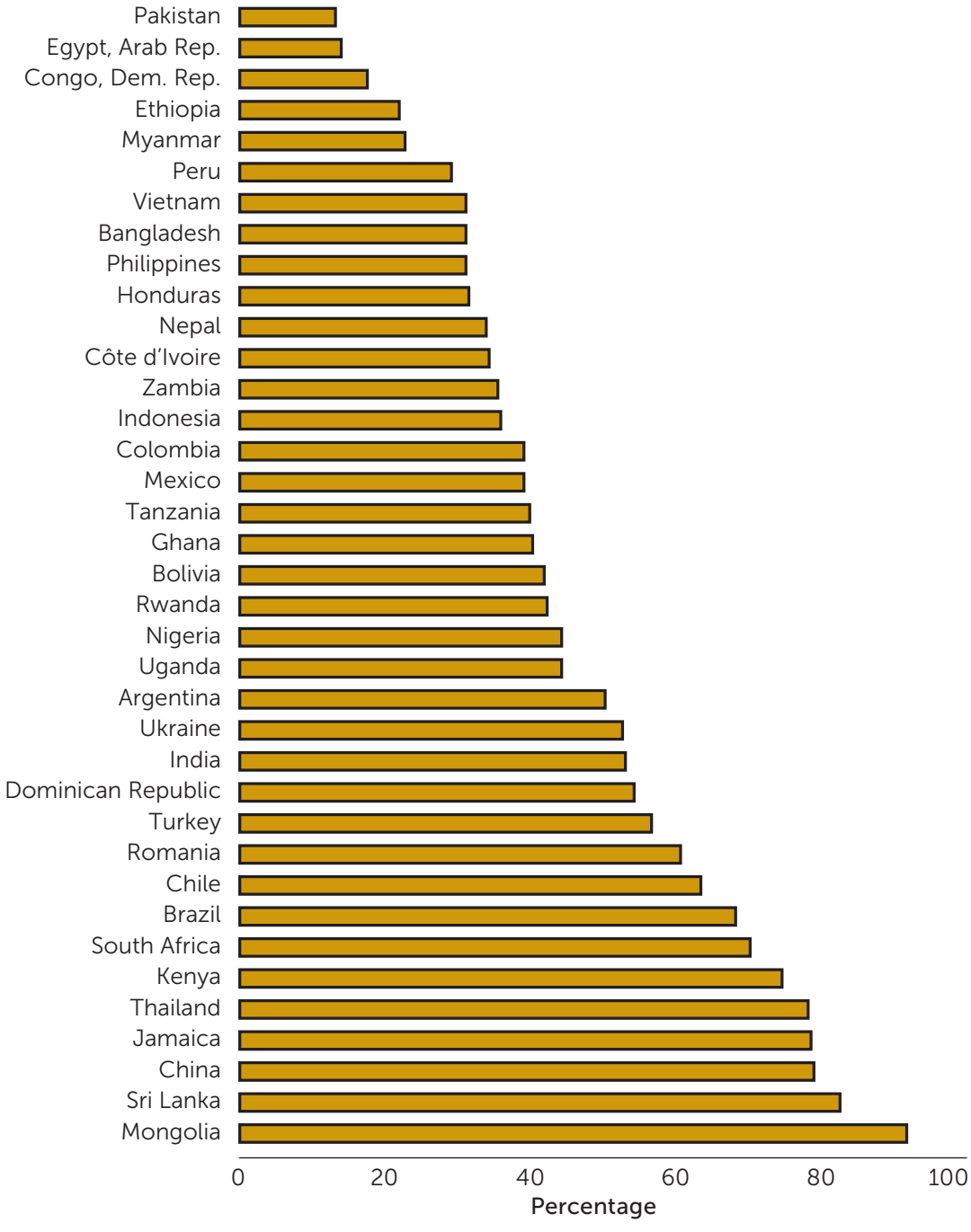
2.2.5.3 Measuring Financial Inclusion

Demand-side information on financial inclusion—i.e., the views and experiences of the poor using financial services—can be gathered from nationally representative surveys such as FinScope, the Financial Inclusion Insight tracker surveys, household budget surveys, financial diaries, and focus group discussions with transfer recipients.[13] In addition, the Global Findex database measures how people in over 140 countries save, borrow, make payments, and manage risks (Demirguc-Kunt et al. 2015). Global Findex is very useful for regional and international benchmarking because of the number of countries it covers (figure 2.5).

12 Committee on Payments and Market Infrastructure (2016). The 25 focus countries—prioritized based on share of unbanked International Development Association countries and priority fragile and conflict-affected situations—are Bangladesh, Brazil, China, Colombia, Côte d'Ivoire, the Democratic Republic of Congo, the Arab Republic of Egypt, Ethiopia, India, Indonesia, Kenya, Mexico, Morocco, Mozambique, Myanmar, Nigeria, Pakistan, Peru, the Philippines, Rwanda, South Africa, Tanzania, Turkey, Vietnam, and Zambia.

13 See InterMedia's financial inclusion insights on www.finclusion.org.

Figure 2.5 Financial Inclusion Figures from Global Findex



Source: Global Findex 2014; http://www.worldbank.org/en/programs/globalfindex.

FinScope is a much more detailed survey tool than Findex, but is only available in 18 countries, 15 of which are in Sub-Saharan Africa. FinScope is a nationally representative study of consumer perceptions on financial services and issues, and provides insight into how consumers source their income and manage their financial lives. Looking at the results of the survey for the poorest respondents can help in developing an understanding of the beneficiaries of SP programs.

A financial diaries study (conducting periodic, typically bimonthly interviews over a period of a year) with 300 poor households from Bangladesh, India, and South Africa shows the importance of financial services for the poor. Not one of these households was living without the use of financial services. Most households were saving to manage their irregular and unpredictable sources of income. Though the poor actively used a wide range of financial instruments, their needs were not being met. Informal mechanisms are not always reliable, and users risk losing all or part of their savings. Formal instruments are not ideally suited to the cash flow patterns of the poor. Yet the poor's continued reliance on these flawed instruments indicates that the appetite for better financial instruments is strong and that all areas of their lives would benefit from having better financial options (Collins et al. 2009).

To inform potential PSPs for the Social Cash Transfer program in Zambia, FinMark Trust presented the latest FinScope survey with results for the poorest to serve as a proxy for program beneficiaries. The poorest were identified as those who responded that they always or often go without enough food to eat—8.3 percent of the total population. (In many countries, the FinScope data are analyzed by quintiles, enabling users to easily look at the poorest 20 percent of the population.)

CGAP has identified behavioral research tools that help in understanding beneficiaries' financial experiences, habits, and preferences and translating these into SP program and payment delivery design that is financially inclusive and customer centered. Research in SP programs identified that there are very different levels of familiarity and preferences in using payment services depending on beneficiaries' location, access to payment points, access to markets with sufficient stock and variety of goods, and household situations. For example, in a cash transfer program by WFP Kenya, which transfers payments into bank accounts linked to debit cards that can be used for merchant payments via POS devices, recipients living in more urban locations with a range of participating merchants preferred the card, as it would be reserved for food expenses without provoking misuse by other household members. In the remote program areas, however, recipients criticized the limitation in using the payments only at one or two participating merchants and not being able to buy from street vendors and other smaller suppliers that better served their needs and offered better prices.

In 2012, WFP Kenya carried out a pilot for its Cash for Works beneficiaries and found that there was a strong preference for using transfers for electronic merchant purchases (Pulver 2012). The main reason for this preference was the fees for withdrawing money at the cash-out points. Even though beneficiaries are generally very price sensitive and WFP had added a top-up to the transfer to cover these fees, beneficiaries were willing to travel farther to a participating merchant to make electronic purchases at no cost and thereby keep the value of the top-up. This type of arrangement depends on the availability of merchants with card acceptance infrastructure and well-stocked outlets.

Any information that can provide a fuller picture of the typical profile of beneficiaries is useful. For example, information about ownership of or access to a mobile phone is helpful if a program is considering using SMS to communicate with beneficiaries and/or deliver via mobile money. Which financial services are the poor already using? How literate and numerate are they? What sort of distances do they have to travel to obtain health care or education, how long does it take to cover the distance, and what does it cost to do so? This last piece of information is useful when considering how close payment access points should be to people's homes.

2.2.6 Procurement and Contracting

Rules on procurement and contracting will dictate the method and mode of selecting and working with a PSP. The procurement approach should ideally be based on a thorough understanding of program requirements, the marketplace of potential PSPs, and any regulatory constraints.

If program staff are not going to deliver funds, then the services of a PSP will be required. Most SP programs operate in areas of limited infrastructure, because this is where the poor and vulnerable live. If there is no payment infrastructure in the areas where payments need to be made, an SP program will need to pay enough for payment delivery to incentivize a PSP to extend infrastructure into these areas, either through permanent or temporary/movable payment points (e.g., movable ATMs or agents.[14] To incentivize investment by a PSP, the contract period needs to be sufficiently long to allow a PSP to recoup these investment costs. This frequently leads to the decision to undertake a formal procurement process. Government SP programs

14 If there are insufficient funds to incentivize a PSP to go to very remote areas, the program will have to continue to rely on delivery by government or program staff in these areas. An assessment of potential PSPs should highlight if there is appetite for full national coverage, or if there are certain areas of the country where PSPs are unwilling or unable to operate.

may be restricted to contracting with certain types of organizations, depending on specific national rules.

In a small-scale program, this generally results in the procurement of a single PSP. A larger-scale program affords the opportunity to have multiple PSPs, each of which can cater to the specific needs of a certain program area or type of beneficiary, although this adds considerably to the complexity of management. In many countries, no single PSP can deliver everywhere (at least in the near term), so a detailed scoping exercise will be needed to identify the multiple providers that can best deliver. In some areas, outsourcing may not be possible or is suboptimal; in these cases again, the better option is to continue with a manual payment process managed by the SP program.

Transitioning from an in-house manual process to an outsourced electronic process may place particular challenges on SP programs that carry out sensitization or training sessions at the same time as making payments. A PSP may deliver payments in a manner that no longer requires recipients to gather at a single point at the same time on a particular day. Program administrators will therefore need to motivate attendance at program information sessions either by making attendance a condition of payment and/or ensuring the sessions are of relevance and value to program beneficiaries.

2.2.6.1 Procurement Process

Procurement and contracting will generally be determined by national rules and/or donor rules. The type of rules will determine the time frame for the procurement of a PSP; in general, the process takes around 6–12 months. The rules must be carefully followed, and the process should be perceived as fair and transparent to avoid problems. Some government implementing agencies have been mired in years of litigation with PSPs over procurement, thus undermining their ability to implement their payment strategy.

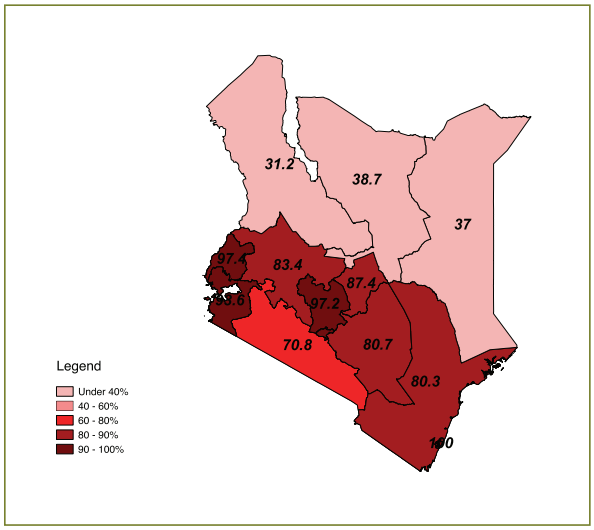
SP policy makers and program implementers define the parameters of outsourced payment arrangements through the terms of reference or scope of work used in the procurement process and through the service level agreement included in a contract with one or more PSPs. The terms of reference or scope of work should explain the problems of delivering payments and request solutions to meet the needs of all actors. The requirements should be "technology agnostic," encouraging multiple approaches from a wide variety of potential providers. Program implementers should be looking for payment services rather than POS devices and smart cards of a particular technical specification. Thus, service levels should be defined rather than requiring technical specifications.

It is possible to compare and evaluate technical proposals using standardized assessment criteria, even though they might all suggest using different approaches and technology. These criteria could be based on the objectives for payment delivery proposed in this tool—i.e., accessibility, robustness, and Integration. The actual criteria used will be determined by the requirements of the program and the local context. The requirements should be based on a good understanding of the supply side (potential PSPs) to ensure there is a business case for them, thereby ensuring sufficient responses for a competitive process. A service level agreement forms an essential element of the contract with the PSP. Its actual contents will depend on the PSP selected and the technology to be used to deliver payments.

2.2.6.2 Beneficiary Choice

An alternative to program-led selection of a PSP is to enable beneficiaries to select their own PSP from a menu of choices. This approach is generally only viable when there are existing financial access points in place in the areas where payments need to be made. For example, in the case of an urban food subsidy transfer, there should be multiple potential PSPs accessible to beneficiaries. Determining the appropriateness of this approach relies on a detailed review of the financial sector. In areas with good coverage of financial access points, it may be possible to offer beneficiary-led choice; in areas of poor access, the traditional procurement of a PSP may be more appropriate. In some countries, highly detailed geospatial mapping of financial access points has been done, such as that undertaken by the Bill and Melinda Gates Foundation in Bangladesh, Kenya, Nigeria, Tanzania, and Uganda. Figure 2.6 presents a map for Kenya.[15]

Figure 2.6 Percentage of Kenyan Population within 5 Km of a Formal Financial Access Point by Region



Source: Bill and Melinda Gates Foundation, Central Bank of Kenya, and FSD Kenya 2016.

Note: Financial access points include banks, insurance, mobile money and bank agents, ATMs, SACCOs, and MFIs.

15 Also see http://www.fspmaps.com/#/map@0.57128,37.789536,7(dark,kenya_cicos_2015),Kenya.

The requirement to open a bank account in order to receive a transfer is easy to communicate but may not lead to optimal outcomes. Beneficiaries' choice should be empowered through a process that strengthens their financial capability. Beneficiaries should be aware of the main available payment options and educated in how to access and use these. In Bihar in India, a program of communication and financial education has been implemented to support the transition from paper-based payments to electronic transfers to bank accounts, ensuring that participants are better able to select a suitable no-frills bank account from a convenient provider. In this regard, note that the financial inclusion industry is moving away from a narrow definition of financial education and looking instead at the impact of interventions, specifically those that improve individual's financial capability and financial health.

The advice communicated to beneficiaries would be based on a detailed understanding of the options on the ground, including the types of providers, the types of transactional products and features they offer, and charges and fees entailed. The program could then decide to provide a top-up to cover account opening, maintenance, and withdrawal charges, if any, and for a defined amount of transactions. However, covering only one withdrawal per payment period incentivizes recipients to cash out full amounts at once instead of using the services more frequently. The SP program could contract or negotiate with multiple PSPs that agree to standard service conditions and fees, and then let recipients select a PSP based on their individual preference.

Regardless of the approach taken to introducing beneficiary choice, it empowers recipients, transforming them from beneficiaries to customers who understand the services, basic terms and conditions, are aware of their rights, and find a value in the financial services provided them. Being able to switch PSPs easily may improve service delivery by strengthening recipients' position with respect to service providers as well as fostering competition among PSPs. To secure these benefits, the program must actively communicate with beneficiaries to ensure they have the necessary information and understanding to make informed choices.

2.2.7 Government-to-Person Payment Policies

Government is usually the largest payee and payer of micropayments in a country: collecting taxes as well as distributing salaries, pensions, and social transfers. If the government has a specific policy supporting the transition from manual to e-payments, delivering SP transfers electronically can contribute to meeting such a target. Moving the payment of government transfers from cash to electronic transfers

could increase the number of individuals with a formal transaction account by up to 130 million (Demirguc-Kunt et al. 2015).

Table 2.4 lists the full spectrum of payments to and from government. Cash transfers and social benefits are a subset of these government payment streams. As cash transfers exist within an ecosystem of government payments, they may be subject to the prevailing trends and policies that seem to be supporting a transition away from cash and paper-based instruments to e-payments. The snapshot taken in Zambia in 2010 shows that while cash was used primarily for payments made from businesses or people to the government, payments originating from the government to persons and businesses were predominantly made through manual paper-based instruments such as checks.

Table 2.4 Types of Government Payments and Means of Delivery in Zambia, 2010

Types of payment	Mainly cash	Mainly checks	Mainly electronic
G2P			
Public sector salaries		●	●
Pensions and transfers payments		●	●
Cash transfers and social benefits		●	●
Government to business (G2B)			
Procurement of goods and services		●	●
Tax refunds		●	●
Person to government (P2G)			
Taxes	●	●	●
Utility payments	●	●	●
Payment for services, etc.	●	●	●
Business to government (B2G)			
Taxes	●	●	●
Utilities	●	●	●
Benefit transfers	●	●	●

Source: World Bank 2011.

Many governments are encouraging the use of e-payments by mandating that government payments be electronic. In India, for example, the Ministry of Finance mandated in April 2012 that all payments above a certain threshold had to be paid electronically. And in Kenya, the government is mandating a transition from manual to e-payments. The introduction of GPay in 2011 ended the issuance of checks by government ministries. The Central Bank of Kenya instead facilitated the use of real-time gross settlement for transactions over K Sh 1 million and electronic funds transfer through an automated clearinghouse for transactions below that value. The president of Kenya announced in November 2013 that there would be no more cash payments for government services, in line with the country's information technology objectives (IBM 2013). The government's commitment seems to initially focus on e-payments to government for taxes and other services as a means to reduce corruption. It will require the introduction of electronic invoices and a payment gateway, which could be facilitated by the Central Bank of Kenya.

The Better Than Cash Alliance highlights a number of reasons to make this switch from manual toward electronic delivery of social cash transfers to beneficiaries.[16] Cost savings can be large as in the case of Brazil's Bolsa Familia program, where the government saved administrative costs by consolidating SP programs and switching to e-payments: the administrative costs were reduced from 14.7 percent to 2.6 percent of the value of the grants disbursed (World Bank 2012b). In Mexico, as described in box 1.1, the government's decision to move its Oportunidades program transfer payments to an electronic system by providing a bank account to each of the 7 million beneficiaries decreased overall transaction costs and reduced processing losses. Assuming Mex$75 saved per beneficiary per year, the government's estimated savings were about US$36.9 million for 2011 alone (World Bank 2013). Another study estimated annual savings of Mex$17 billion (US$1.27 billion), or 3.3 percent of total government expenditure on wages, pensions, and social transfers (Babatz 2012).

Switching to electronic delivery also improves transparency, increases accountability, and reduces leakage as fund flows can be monitored in real time. For example, in Argentina, where the Ministry of Social Development has shifted to e-payment cards, the percentage of recipients who admitted to paying bribes to local officials to access their money dropped from 3.6 percent to 0.3 percent. Other reasons for making the shift include improved speed and security of delivery, the ability to offer financially inclusive services, and the potential for economic development in the areas where the shift occurs.

16 The purpose of the Better Than Cash Alliance is to "empower people by accelerating the shift to electronic payments" (http://betterthancash.org).

2.3 Identification System

A strong national ID system is one that aims to cover all of a country's citizens and that issues uniquely numbered IDs that are not easy to falsify or duplicate. Ideally, IDs are maintained in a central registry that can be accessed by SP programs and financial institutions to facilitate beneficiary enrollment and open accounts. Such an ID system supports SP payment delivery in three ways:

- By **ensuring uniqueness**—that is, by making sure that a single individual is registered in—and thus paid by—the program only once
- By **meeting KYC requirements** set by the financial services regulator and/or the PSP
- By **authenticating** the identity of a recipient during a payment transaction and at other points in the SP program

2.3.1 Uses of an ID in SP Programs

The ability to **ensure uniqueness** prevents a single individual from entering the system multiple times and therefore potentially receiving multiple benefits. In the absence of a national ID system, an SP program may ensure uniqueness by issuing its own program ID or through the use of biometrics. However, it is much less costly and much more expedient to use an in-place national ID system. Such a system can additionally be used to cross-reference IDs to bank accounts, as does the Unique Identification Authority of India. The national ID card thus doubles as a payment card, and the SP program is freed of having to handle transaction account details.

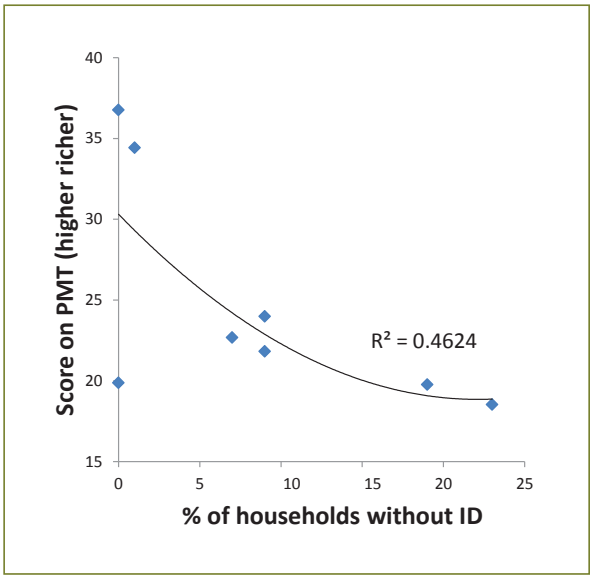
As discussed in 2.2.2, a country's AML/CFT rules and regulations require financial service providers to take steps to verify the identity of their clients and the sources of their income. These **KYC requirements** will specify which forms of ID are acceptable, but the most common form is the national ID. Having a national ID authority with an easily queried registry supports quick and easy account opening. For example, Kenya's Integrated Population Registration System is used by the Hunger Safety Net Programme's PSP to verify an individual's identity prior to opening a bank account for that person's receipt of program payments. For each person in the registry, the system contains a unique and intelligently configured PIN, surname, first name and other names, date and place of birth, sex, nationality, marital status, occupation, residential address, biometrics, and (if applicable) date of death.

Authentication is the process by which the PSP verifies the identity of a recipient to ensure that payment is being made to the correct person (1.3.5). Authentication involving national ID is most frequently encountered in manual payment processes, but may also be necessary at cash-out points for e-payments. The recipient presents his or her national ID for manual verification, and the person issuing the payment manually matches this to the ID number on the payroll and ensures that the photo on the national ID resembles the person holding it.

2.3.2 Ensuring Coverage of the Poor and Vulnerable

While all citizens of a country may in principle be entitled to a national ID, in practice, the poor and vulnerable are significantly less likely to hold a national ID than the general population. In Kenya, up to 20 percent of the beneficiaries covered by the WFP did not hold a national ID; the same was true for 20 percent of Hunger Safety Net Programme beneficiaries and 10 percent of Urban Food Subsidy Programme beneficiaries. And data from the Benazir Income Support Programme in Pakistan show that poorer people are less likely to hold a national ID (figure 2.7).

Figure 2.7 Access to National ID in Pakistan's Benazir Income Support Programme by Poverty Rank



Source: Palacios 2014.

Note: PMT = proxy means test.

The requirement to hold a national ID can cause exclusion. Research by the Center for Global Development found that due to the lack of a national ID, 12 percent of the elderly in Nepal were unable to receive social pension benefits, one third of potential beneficiaries were unable to enroll in the Dominican Republic's conditional cash transfer program, Solidaridad, and 15 percent of those eligible in Peru were excluded from SP cash transfers (Gelb and Clark 2013).

The easiest way for SP program administrators to address this potential exclusion issue is to have beneficiaries **nominate a recipient** with a national ID—typically a family member—who can collect the cash on their behalf. The solution is imperfect, however,

because a nominated recipient might not give the full amount of the transfer to the beneficiary. A more inclusive approach—although more difficult to implement—is for SP programs to **support beneficiaries in acquiring national IDs** by advocating for their inclusion in registration drives. Gaining a national ID provides benefits far beyond the ability to collect one's own SP payments, as it ensures access to other services as well. This approach thus contributes to realizing a broader vision of social and economic inclusion.

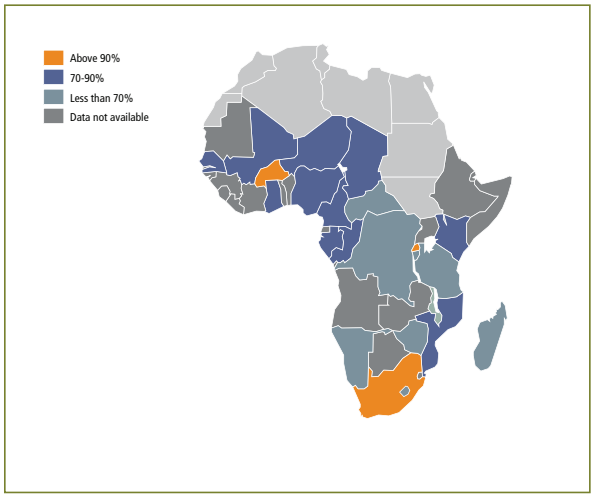
2.4 Mobile Network Coverage

POS and similar payment devices communicate transaction information to a central service provider. Thus, the reach of a country's mobile network—which typically exceeds its fixed telephone line network—**determines the availability of affordable, real-time, online payment facilities**.

The extent of these networks varies widely across developing countries (figure 2.8). In areas without a functioning communications network, two options exist for delivering e-payments:

- Conduct transactions off line, which requires the use of relatively expensive smart cards and entails delayed settlement and reconciliation, thus increasing the risk of fraud and error.
- Use relatively expensive satellite communications technology to enable real-time, online transactions.

Figure 2.8 Mobile Network Coverage in Sub-Saharan Africa, 2012



Source: GSMA 2012, based on data from Wireless Intelligence.

Because many MNOs offer mobile money services that can be used for payment delivery (see 2.1.1.5), it is important to know the number/percentage of program beneficiaries who own or have access to a mobile phone.

3 Country SP System

Social protection payments do not occur in isolation but in concert with the SP system within which a particular SP program operates. If the payments mechanism is to support SP policy objectives, there must be a clear understanding of the unique context. This section describes aspects of the country's SP system as a whole, including the programs, stakeholders, and mechanisms that offer opportunities for synergy or trade-offs in SP payment delivery mechanism design and implementation.

3.1 Overview of SP Policies and Programs

It is important to have a good understanding of what role the program being assessed plays within the country's most prominent SP programs as well as the options available to harmonize its payment delivery mechanisms with that of other programs targeted to the same groups (when applicable). It is relevant to understand the main objectives and risks covered by each SP program (aligned as noncontributory social assistance, contributory social insurance, labor market measures and services, and social services), their target population (and the total number of beneficiaries), the benefit level and coverage, the main characteristics of the institutional ministry/agency responsible for program implementation, and the expenditure level (compared to total SP expenditure) of the programs. This information is compiled in a country SP program inventory.

The state of development of the SP system will determine the requirements of a payment diagnostic. The four categories of development are described in table 3.1. There are different types of payment issues associated with each stage of development; these will determine the purpose of the diagnostic.

The SP institutional arrangements also have a bearing on payment strategy. In the early stages of SP implementation in a country, there are a number of SP pilots testing different modalities. The different pilots or subscale programs may be in different departments or ministries or may be managed by implementing NGOs. A desire for better alignment emerges as programs begin to reach scale.

Centralized implementing agency arrangements not only improve alignment between programs but can provide an opportunity to capture economies of scale when contracting with PSPs. That is, rather than negotiating for rates on a relatively small-scale individual program, it may be possible to secure more cost-effective solutions that are delivering payments to a large number of programs and thus a larger number of beneficiaries. Centralized decision making may also ensure that managers of individual SP programs can benefit from the centrally retained knowledge on SP program management.

Table 3.1 SP Stages of Development from a Payments Perspective

Category	Description	Payment issue
Clean slate	No SP programs, or very few fragmented pilot programs	Need to develop a payment strategy based on a diagnostic of the SP and payment environments
Early stage	Very few SP programs or beneficiaries exist	Need to develop an SP payment strategy based on a diagnostic of the SP and payment environments to cover emerging coordination issues
Transition	Existing SP programs; payments predominantly manual	Desire to investigate a transition from manual to e-payments; requires an assessment of the costs of the existing process including rates of leakage to establish if there is a case for change and an exploration of potential PSPs
Maturity	Large number of SP programs or recipients; most payments are made electronically, and there is coordination across payment modalities	Need to assess the payment mechanisms used in different programs against objectives; need to focus on harmonization and coordination

Having larger numbers of beneficiaries may also provide the opportunity to offer beneficiaries a choice of payment mechanisms so they can select the payment option that best suits their needs and preferences. Although such mixed payment systems have benefits for recipients, they can also be complex to manage. This approach might also require the contracting party to manage multiple PSP relationships. In countries with a well-developed national payment system, a credit transfer to a beneficiary's existing provider is all that is needed—requiring payment instructions rather than contractual arrangements.

This type of centralized implementation supports the alignment of SP policy and practice. There are many international examples where operational aspects are separated from policy setting. In payments, this would lead to centralized PSP procurement and management with local governance of delivery. In South Africa, the Department for Social Development sets policy while the South African Social Security Agency (Sassa) implements policy. The agency contracts with a number of specialized PSPs that deliver the individual transfers to the various program beneficiaries. In Mexico, the Oportunidades program (now Prospera) is implemented by an independent agency.[1] In Kenya, the payment component of the Hunger Safety

1 Babatz (2012) provides an explanation of the steps taken to centralize payments.

Net Programme is managed by Financial Sector Deepening Kenya which procured and manages a specialist PSP to deliver transfers to individual bank accounts.

3.2 How Payments Are Delivered in SP Programs

The payment mechanism is not an isolated component but is influenced by and has impacts on other aspects of the SP system, including ID, eligibility, enrollment, grievance and redress, monitoring and evaluation, communications, and case management. Payment mechanisms are an integral part of a broader system for delivering SP benefits. The core elements of this delivery system may be supported through the use of a program registry or MIS. This discussion considers how a payment mechanism fits within the SP system.

3.2.1 Flow of Funds in SP Payments

There are a number of steps entailed in making final delivery of payments to SP program recipients. From the original source of financing to the SP payment recipient, the funds flow through a value chain, which can present potential bottlenecks that cause delays or errors. For example, delays in the disbursement of upstream funding can cause knock-on delays to the ultimate beneficiaries receiving the transfers. Sources of financing for noncontributory SP programs include a range of stakeholders, including from government and development (multilateral and bilateral) partners. The source of funding determines the procedures for moving resources into individual SP program accounts. Some of these procedures will be automated; many may require multiple steps of manual approvals and multiple transfers between different accounts. The number of steps and movements between accounts before the funds are made available to an individual SP program will be determined by the local context.

Sometimes funds flow directly from development partners to the implementing agencies. Direct government funding will be made available according to the ministerial disbursements from a national treasury according to the provision of approved budgets and subject to the availability of funds.

There are three typical structures in place for the disbursement of government payments, with each level representing greater centralization of payment:

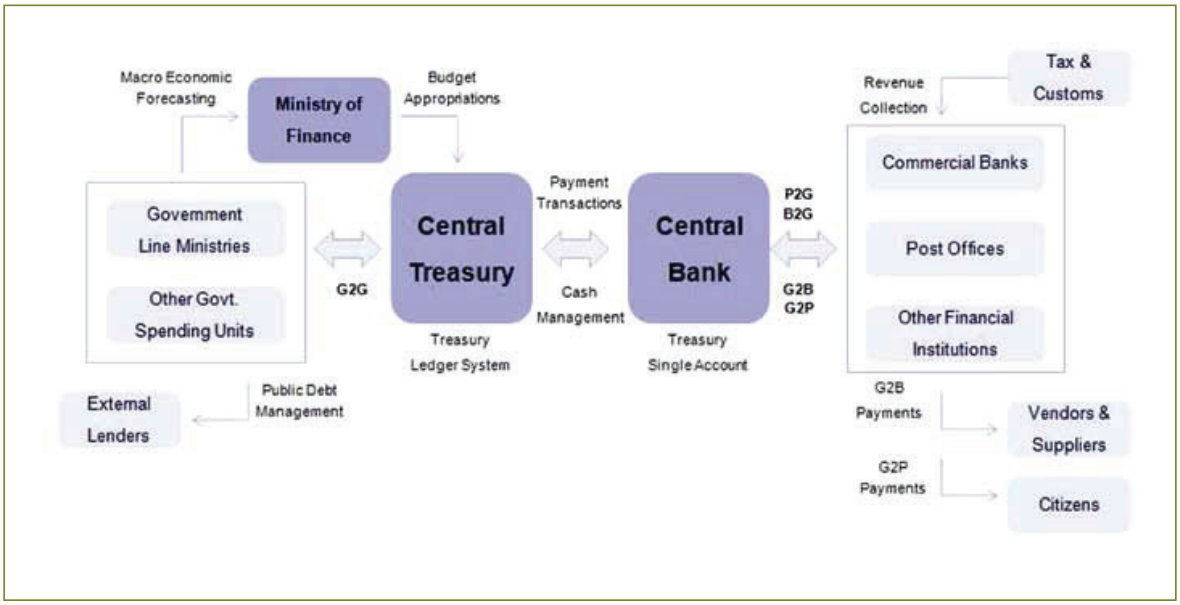
- The treasury transfers budget resources allocated to a particular government agency to accounts held at a bank. The government agencies then instruct the bank to transfer funds to particular beneficiaries.

- Same as above, except the treasury maintains central control of the cash. The treasury sweeps idle balances from accounts held at commercial banks and consolidates the government's cash position at the end of each day.

- The treasury directly controls all transactions and makes payments on behalf of the spending agencies.

The global trend is streamlining and consolidation into a unified structure by implementing a central treasury model (figure 3.1).

Figure 3.1 Central Treasury Model with the Treasury Single Account Held at the Central Bank



Source: World Bank 2012b.

Note: This model assumes that the treasury single account is held at the central bank.

The centralized treasury model relies on two key pillars. The first is the treasury single account, which is an account—usually at the central bank—where all government funds and receipts are held and from which all payments are made. The primary objective of the treasury single account is to ensure effective aggregate control of government cash balances, but it can also significantly reduce transaction costs. The second pillar is an integrated financial MIS, which is a system that provides the treasury with a unified view of the government's cash position and processes all payment

requests. The introduction of a treasury single account is considered a key component in improving the safety and efficiency of government payments by increasing transparency and accountability.

The upstream flow of funds described here is electronic. It is the last-mile distribution to program beneficiaries that determines if a program payment delivery mechanism is characterized as electronic or manual.

3.2.2 Social Registries and Management Information Systems

The term "social registry" is commonly used to describe an information system used to support the implementation of noncontributory social assistance (benefits and services) or other programs targeted to the poor and vulnerable groups. This information system consists of both a data system and an MIS. The data system includes data about clients (potential and actual beneficiaries) of selected SP programs. The MIS constitutes the information and communications technology tools and business process rules that guide the delivery chain phases of outreach, intake, and assessment of needs and conditions in determining eligibility for enrollment.

Electronic recordkeeping can reduce errors and is usually a prerequisite for outsourcing payments to a third party. Data quality controls should be built into the system to reduce failed payments due to incorrect data. The MIS must be able to create a regular payroll with details of a recipient's name, location, ID number, and the amount to be paid by the PSP. The ability of the MIS to verify which individuals are eligible for what type of payments is essential and becomes more demanding when payments of changing values are made—as is the case with public works or conditional cash transfers. Once payments to beneficiaries are made, the PSP can then send an electronic update for automatic reconciliation with the program's MIS.

3.2.3 Program Registration

Registration refers to the process of reaching out to the eligible population, and identifying and registering individuals and/or households in an SP program.[2]

2 Program registration could be accomplished through a program ID, using a national ID or drawing from a civil registration system, which is often linked to vital statistics on births and deaths. The importance of the ID system in delivery rests in its ability to establish a unique identifier to which program beneficiaries have access that provides a means for effective verification of identity. Authentication (see 1.3.5) at the point of the transaction provides the most robust approach to ensuring that SP payments reach the right beneficiaries.

This same information may be used by a PSP to identify and pay the correct person. The program administrator must identify the recipient of the funds (who may or may not be the same person as the beneficiary). Recipient details that should be collected to facilitate payment include name, location, ID, and unique program ID number. It is important to issue a unique program ID, because names cannot be used as a unique identifier and even in those countries with a national ID they may not be unique. If a PSP has already been selected before registration activities occur, they may want to participate in this activity to collect the additional recipient details necessary for their particular payment mechanism, or they may request the program administrator to collect additional information—e.g., if there is the requirement for an electronic photograph of the recipient and/or biometric information.[3] While in some cases, it may be more costly to have the PSP collect this additional information, there is a trade-off because it may also be easier for the PSP to control the quality of data it collects.

3.2.3.1 Eligibility

Eligibility verification refers to the process whereby it is confirmed that households or individuals fulfill the eligibility criteria to benefit from a certain SP program. For noncontributory SP programs, this often begins with a social registry of potential beneficiaries and is complemented by poverty targeting methods (such as geographic location, community-based targeting, or proxy means tests) and/or, depending on program design and objectives, verification of other eligibility criteria such as age or health status, to determine whether a particular household or individual meets the eligibility criteria. There are trade-offs involved between accuracy, cost, and errors of inclusion or exclusion; attention must be paid to updating eligibility.

3.2.3.2 Enrollment

This refers to the process of formally registering eligible beneficiaries for program benefits. In the case of noncontributory schemes, enrollment typically follows the process of verifying that a person is eligible for a benefit. The aim is to assess the robustness of the database of beneficiaries and whether the enrollment process is able to generate verifiable data to indicate that those who are eligible for a benefit are recognized as beneficiaries and receive their entitlements.

3 Sound ID and authentication processes are a prerequisite for accurate payment processes. However, it is beyond the scope of this tool to discuss ID systems for SP programs in detail. If ID is identified as an issue of concern through payment system assessment, it is recommended that an assessment of the ID system be conducted using the ISPA tool.

3.2.4 Training and Communication

Explaining the program to beneficiaries is a vital activity. Such explanations should include entitlement conditions and payment information—specifically, the value of the transfer to be received and how it is calculated, its frequency, where and how to collect payment, what documents or instruments will be used to collect transfers (e.g., ID, payment card and PIN, SIM card and PIN). Beneficiaries need to understand what the process should be and, if this process changes, how to raise a concerns through the complaints and appeal mechanism or grievance and redress mechanism. If beneficiaries have a clear understanding of the value of the payment they should receive every month, in the event that they are given less, they will know to raise this as an issue and receive an explanation for it. In conditional cash transfer programs, particular attention should be paid to the application of deductions.

Well-trained staff are the starting point for good communication with beneficiaries. In some countries, unclear explanations or contradictory information from program staff who were not well informed about entitlement conditions or payment modalities has undermined the credibility of SP programs (box 3.1).

3.2.5 Calculation of Transfer Amounts

For programs whose payments are contingent upon verifying compliance with particular ongoing requirements—such as conditional cash transfers dependent on school attendance or well-baby check-ups, or public works programs that pay wage rates—there is a need to verify whether these requirements have been met by beneficiaries. Program rules will determine the transfer rate per complying child or adult; this may be expressed as a transfer per child with different rates according to stages of schooling or a daily wage rate per adult. The final total value of a transfer to an individual recipient will be calculated based on household composition, program transfer rates, and reported compliance with conditions.

3.2.6 Payments and Transactions

This includes cash and near cash transfers, for the purpose of this tool. The payments process is to ensure that SP payment mechanisms are performing adequately with respect to their accessibility regarding cost of access and appropriateness for the target population; their robustness, including adequacy, rights and dignity, governance and security; and their integration with respect to financial inclusion as well as coordination and interoperability.

Box 3.1 Training and Communication in the Benazir Income Support Program in Pakistan

Training sessions on financial literacy curriculum modules have been conducted for master trainers comprised of program staff at both the central and field levels, the partner PSPs, and social mobilization stakeholders.

These financial literacy curriculum modules were developed in collaboration with the State Bank of Pakistan. They aim to enhance knowledge of financial concepts such as budgeting, savings, and investment as well as use of technologically driven payment modalities—i.e., ATMs and POS devices. The modules employ storytelling and interactive training tools for effective transmission of knowledge and skills to the target audience.

As a form of community-level outreach, beneficiary committees have been formed. These serve as a participatory platform for information sharing, dialogue, and collective action to mobilize communities with regard to financial literacy, payment-related awareness, conditional cash transfer compliance, and grievance management. They also help enhance women's overall inclusiveness and empowerment related to payments and the program overall.

The program staff must oversee the relationship between the recipient and the beneficiary to reduce the likelihood of abuse. Household benefits require the selection of a transfer recipient, which can create tensions within a household. Program implementers should consider sensitizing households to these issues and then monitoring them to reduce the likelihood of intra-household tension and violence. A regulated PSP may require that all recipients hold a national ID card or other valid photo ID. (The poor frequently have lower rates of national ID ownership than the general population.) In those cases, where a beneficiary's only impediment to being the recipient of his or her own transfer is a lack of a valid photo ID—as opposed to being under age or infirm—implementers should prioritize obtaining an ID for the beneficiary to avoid risks of abuse. Consumer research in several cash transfer programs around the world has recorded cases where the nominated recipient does not give the full amount of the transfer to the beneficiary or asks the beneficiary to pay a commission.[4] In such situations, the SP program should consider supporting beneficiaries in acquiring national IDs. Additionally, adult beneficiaries using a recipient should be sensitized to the risks of such a relationship and be provided with the option to change their recipient should the relationship break down.

4 See, e.g., Baur and Zimmerman (2016).

3.2.7 Grievance and Redress Mechanisms

These includes mechanisms that enable beneficiaries to lodge complaints or make appeals regarding the program. These mechanisms are often grounded in legislation and embody processes to help ensure that this element of the system is impartial, transparent, effective, simple, rapid, accessible, and free of charge for applicants.

This element is put in place to ensure that beneficiaries' rights are upheld. Any such accountability mechanism should be able to log payment issues and escalate them to the responsible entity—program management or the PSP, depending on the nature of the complaint. A service level agreement should be in place between the program administrator and the PSP that establishes clear responsibilities and timelines for resolving standard issues. These might include, for example, the time taken to replace a lost or stolen payment instrument (SIM or bank card), unblock a SIM or bank card that was blocked after repeated erroneous PIN entries, issue a new PIN, or fix a broken access point (ATM, agent/merchant POS device). The feedback mechanism should be able to identify issues, submit them to the PSP, and track their resolution. Those responsible for the complaints and appeal mechanism may also be called upon to advise the PSP on defining the parameters of its own process to ensure the rights of beneficiaries are not infringed.

3.2.8 Monitoring and Evaluation

Regular monitoring and evaluation systems ensure effective and efficient program management, and improve program implementation and design based on a changing payment environment, beneficiary needs, and program context. Monitoring and evaluation rely on a systematic process of collection and use of administrative data and survey data to track implementation, and to understand program impact and assess what is driving the success or failure of the SP program. These efforts should include information from beneficiaries, field staff, and the community if possible. For example, applying behavioral research tools such as mystery shopping can provide useful insights that help in reviewing the quality of payment service as well as beneficiaries' behavior when using payment services.[5]

Regular monitoring and evaluation also ensure that the payments component of an SP program works in concert with the other program delivery elements described above and that they together constitute an ecosystem within which the programs operate.

5 For more about using mystery shopping in a digital social payments context, see Zimmerman and Baur (2016).

3.3 Key Stakeholders in SP Payment Delivery Mechanisms

There are many different actors or stakeholders that may influence the design, implementation, and performance of a payment mechanism for an SP program (del Ninno et al. 2013). These actors have some objectives in common and some competing objectives, which require decisions to be made about trade-offs. Table 3.2 seeks to define the criteria for stakeholders of SP payment delivery mechanisms and to highlight the criteria typically of greatest importance to them. Different actors may have different perspectives; thus, the primacy of those different points of views will lead to a country's or program's final agenda. These various perspectives, objectives, and options for trade-off are described in the following paragraphs; see 1.5 for a description of the criteria.

Table 3.2 Matrix of Stakeholder Objectives for Payment Delivery Mechanisms

Criterion		SP policy makers and implementers	Program funders	Beneficiaries	PSPs	Financial services regulator
Accessibility	Cost of access	●		●		
	Appropriateness	●		●		
	Rights and dignity	●		●		
Robustness	Reliability	●	●	●		
	Governance	●	●			
	Security	●	●	●	●	●
Integration	Financial inclusion		●	●	●	●
	Coordination	●		●	●	●

3.3.1 SP Policy Makers and Program Implementers

As SP experts, policy makers may not be familiar with payment mechanisms and are thus unlikely to set specific policies regarding payment delivery. Policy makers may set some guiding principles for implementation such as inclusiveness, dignity, and equality. The payment mechanism should support and reflect the priorities and principles defined by the SP policy. SP program implementers may be separate from

policy setters, as in South Africa. There are also cases where implementing NGOs are involved in or used for implementation. Policy makers and program implementers have better aligned objectives than other actors because of their shared concern for beneficiaries. However, depending on the particular country and program context, this alignment of objectives may not be perfect.

3.3.2 Program Funders

Funders can be the government, or one or more bilateral or international donors. In the case of multiple funders of a single SP program, the payment objectives of each funder should be understood and any trade-offs between differing views discussed. For example, funders typically focus on fiduciary risks, and on ensuring that the funds are secure and reach their intended beneficiaries without significant leakage.

3.3.3 Beneficiaries

Beneficiaries of SP programs are often characterized by their vulnerability and lack of voice. It is therefore important that policy makers and program implementers advocate on their behalf and install participatory elements in program design and implementation to ensure their voice is heard when making trade-offs between competing agendas.

3.3.4 Payment Service Providers

In those countries with a well-developed financial sector and high levels of financial inclusion, it may be sufficient to gather beneficiaries' account details in order to make direct payments. It is more typical in developing countries to find beneficiaries with no existing bank account or mobile wallet and distant from the existing payment infrastructure. Such programs either deliver payments manually or undertake a formal procurement process to select single or multiple PSPs. (The choice of using a single or multiple PSP depends on the number of suitable PSPs available, the scale of the program, the availability of financial infrastructure provided by PSPs, and the ability of program managers to manage the complexity of multiple PSP contracts.) Depending on the program requirements and preferences, the PSP may be a bank or nonbank, such as an MNO or aggregator. A review of the financial sector will indicate the pool of viable PSPs in a country. The requirements and budget for a PSP should not simply reflect the needs of the program, its funders, and beneficiaries, but should also ensure that there is a sustainable business case for the PSP to be willing to supply quality payment services to the target population. Holding a competitive bidding process may not be sufficient to ensure delivery to all beneficiaries, since some PSPs may be unwilling to operate in certain areas regardless of price.

In cases where a PSP is using agents such as bank agents or mobile money agents to deliver payments, there should be incentives in place to ensure agent engagement. The case for agent participation in payments is built on commission levels, increased traffic in their shop, if they have one, and enhanced standing within their communities. Measures should also be in place to allow for the orderly resignation of agents and their replacement. In particularly remote locations with limited business activities, this may pose challenges for agent recruitment. Temporary measures may be taken to serve beneficiaries using mobile or temporary payment points while a replacement agent is found.

3.3.5 Financial Services Regulator and Overseer

The central bank is typically the lead regulator overseeing PSPs. In the case of large SP programs targeting the poor, beneficiaries are typically financially excluded. Cooperation with the regulator may help the central bank fulfill its financial inclusion agenda while providing expert opinion on the relative merits of different PSPs and bringing about enhancements in the national payments system. The central bank in its capacity as financial sector regulator may also grant a specific exemption to a PSP or program. An example of this is relaxing KYC requirements in order to open accounts for social grant recipients. Another example is allowing a bank to deliver services to social grant recipients through agents before guidelines on bank agency have been released; this allows for lower-cost payment delivery close to beneficiary homes and may also provide the regulator with information on new financial mechanisms for extending financial services to the poor and excluded.

4 Assessing SP Payment Delivery Mechanisms

This section provides guidance on assessing payment delivery mechanisms; it can be used to assess the payment performance of an individual SP program or can be applied from a systems perspective across all of a country's main SP programs. The assessment —as shown in the SP Payment Delivery Mechanisms Assessment Matrix— has three components that look at, respectively, (1) the individual SP payment delivery mechanism, (2) the country's supporting environment for SP payments, and (3) the country's overall SP system. The three components create a baseline against which change can be measured over time. The data for the assessment are collected through the SP Payment Delivery Mechanisms Questionnaire.

4.1 Questionnaire

4.1.1 Purpose

The SP Payment Delivery Mechanisms Questionnaire has been designed to collect the information needed to carry out an assessment of a given SP payment delivery mechanism, compile a country SP program inventory, and prepare the associated country report. It consists of two parts: the first is carried out through desk research; the second through key respondent interviews. The purpose of the questionnaire is to ensure that comparable information can be gathered across a number of SP programs to enable comparison of different payment mechanisms within the SP system of an individual country and across multiple countries.

4.1.2 How to Administer

The questionnaire is intended to be used by an individual or team of people with an in-depth understanding of the issues discussed in this guidance note; it is *not* intended for use by an enumerator. The desk research—carried out through database review, literature review, and informal requests made to key respondents and local partners—aims to establish a common understanding among team members (particularly any from outside the country) of the country context and of any potential issues. Once this preliminary information has been collected, questions are posed to key respondents in a series of face-to-face meetings.

4.1.3 Identifying and Collecting Resources

Ideally, as much information as possible should be gathered in advance of the key respondent interviews. Read through the questionnaire to determine which questions can be answered during the desk research phase.

Table 4.1 lists some suggested sources of information to be consulted through database and literature review. Note that not all countries are covered by all the sources listed and that additional sources are available.

During the desk research phase, develop a list of those involved in the payment process of the program being investigated so as to identify key respondents for the interviews.

4.1.4 Conducting Key Respondent Interviews

In-person conversations should be held with a number of key respondents both to gather specific types of information (table 4.2) and to verify/triangulate this information by asking the same question to a number of different sources, at the team's discretion.

The final set of questions for key respondents will depend on the amount of information gathered during the desk research stage. Questions should be shared with interviewees at least a week ahead of the meeting to give them time to prepare their answers and obtain any necessary data.

Ask each respondent the following core questions at the end of each interview:

- What do you see as the current constraints to proper functioning of [respondent's area of expertise]?
- What opportunities do you see in further development of [respondent's area of expertise]?
- What are the planned next steps/vision for further development of [respondent's area of expertise]?

Beneficiaries should be interviewed in a focus group setting with 8–10 participants, and the questions should be adjusted to the type of SP program and the local context to ensure beneficiaries understand the questions and feel respected. The focus groups should be private, preferably without program administrators and/or PSP staff in attendance. Beneficiaries should be told that these discussions do not in any way risk their eligibility to receive payments and that their answers will be handled confidentially. Explain that their remarks will be used to help improve the quality of service and will be conveyed in summary form without naming individual respondents. Give the facilitator and the translator at least a week to review the questions in advance so they can adjust the language appropriately and identify the essential questions to be asked.

Table 4.1 Data Sources for Desk Review

Topic	Source
General country context	• World DataBank (http://databank.worldbank.org) • CIA World Factbook • World Economic Outlook Database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx) • International Labour Organization country profiles • International Labour Organization's World Social Protection Report • The State of Food Insecurity in the World (http://www.fao.org/hunger/en/) • Human Development Report (http://hdr.undp.org/en/content/human-development-index-hdi) (Human Development Index [HDI], Multidimensional Poverty Index [MPI]) • UNHCR Population Statistics Database (http://popstats.unhcr.org/en/overview#_ga=1.87185240.1159664038.1468094210) (internally displaced people, refugees) • Country ministry of labor (minimum wage data)
Supporting environment for SP payments	**Financial sector: policy, regulation, providers, and services** • World Bank Global Payments Survey • Financial Access Survey (http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C) • Country assessment reports by International Monetary Fund or World Bank • Financial Inclusion Guide (http://www.bu.edu/bucflp/initiatives/financial-inclusion-guide/about-the-financial-inclusion-guide/) (laws, regulations, and related materials on microfinance and financial inclusion) • Central bank/financial sector regulator website (key legislation, sector information) • Country financial inclusion strategy/policy • GSMA Intelligence (https://gsmaintelligence.com) (MNOs and their services) • Supply-side data from self-reported databases – MIX (www.theMIX.org) – World Council of Credit Unions (www.woccu.org) – World Savings Banks Institute (www.savings-banks.org)
	Types of government payments and means of delivery • World Bank Global Payments Survey

Table 4.1 Data Sources for Desk Review *(continued)*

Topic	Source
Supporting environment for SP payments	**Financial inclusion** • World Bank Little Data Book on Financial Inclusion • Demand-side information from latest FinScope survey (http://www.finmark.org.za/finscope/) • Global Findex database (http://www.worldbank.org/en/programs/globalfindex) • Any financial inclusion study for the country of interest prepared by CGAP, UNCDF, or other interested parties. • Country household budget survey
	Remittances • World Bank migration and remittances data and annual factbooks (http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data) • World Bank, http://remittanceprices.worldbank.org/en • National central bank website and economic review, annual, and balance of payments reports
	Mobile network coverage and affordability • GSMA (http://www.gsma.com/) • GSMA study on mobile phone gender gap in low- and middle-income countries (http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/GSMA_Women_and_Mobile-A_Global_Opportunity.pdf) (gender-disaggregated data) • Global Findex database (http://www.worldbank.org/en/programs/globalfindex) • World Development Indicators database (http://data.worldbank.org/products/wdi) • FinScope (http://www.finmark.org.za/finscope/) • MNOs
Country SP system	• SP policy and related reports • International Labour Organization's World Social Protection Report • Atlas of Social Protection Indicators for Resilience and Equity (ASPIRE) (http://datatopics.worldbank.org/aspire/) (social assistance and social insurance coverage)
Payment delivery mechanism	• Program financial reports and process evaluations, including latest internal and external monitoring and evaluation reports • Operations manual • Any other recommended reports

Table 4.2 Key Respondent Interviews

Key respondent	Purpose of interview
SP program managers (government and nongovernment; including program administrator, agency head, senior program staff, payment manager)	To review different payment delivery mechanisms currently in use
Central bank payment and banking supervision departments (financial sector/ payment system regulator and specialist, finance and audit, procurement, field staff)	To understand regulatory context (current and pending) and any financial inclusion agenda
Donors or NGOs with a focus on financial inclusion	To learn their views on financial services for the poor
SP policy makers	To understand guiding principles that should be used for SP program payments
Donor/government SP program funders (e.g., ministry of finance)	To determine objectives and priorities for payments specifically and SP programming in general
High-potential PSPs identified in desk research	To determine their capacity to deliver SP payments in the future and gauge their interest in doing so
All existing PSPs delivering payments for SP programs	To understand their successes, frustrations, and challenges in delivering SP payments
Program beneficiaries	To understand their experience of the current payment mechanism and their existing use of and need for financial services

In conducting all interviews, ensure that the terminology used is clearly defined and mutually understood. For example, ensure necessary distinctions are made between "recipients" and "beneficiaries."

4.2 Criteria for Assessing Effectiveness of SP Payment Delivery Mechanisms

The key performance indicators (presented in 1.7) are the essential data that should be gathered from a payment delivery mechanism to effectively monitor quality.

Note that in large national programs, different conditions exist in different program areas, meaning that the approach best for one area may not work in another. For example, urban areas typically already have a better distribution of financial access points (ATMs, POS, bank branches and agents, mobile money agents) that can be

used by a program, but rural areas may require the development of access points or alternative approaches. The act of scoring a particular SP program payment delivery mechanism against the proposed criteria (see the typical characteristics of 1–4 score across all criteria in section 4.6) is meant to support dialogue between the different actors and to develop a consensus on the areas that could benefit from adjustments. The scoring is thus a means to an end and should not distract from the ultimate goal of strengthening the overall payment delivery mechanism.

4.2.1 Accessibility

4.2.1.1 Cost of Access for Beneficiaries

There is a cost associated with beneficiaries collecting their payments. This may simply be an opportunity cost. During the time it takes to travel to the payment point and wait for a payment, a beneficiary may need to close a small business, stop farming, or be absent from school. Alternatively, there may be a direct cost associated with transportation fares incurred in travel to and from a payment point or childcare costs. A payment mechanism with a high cost of access can undermine the value of the transfer and hence the program's impact. It is important to consider what the cost of access is for beneficiaries in order to ensure that policy makers' SP goals are not undermined by an inaccessible payment mechanism.

In this regard, collection times are the most important measure, as travel times are more reliant on local context. That is, in an area where the normal travel time to reach the nearest health center or primary education facility is four hours, it would be acceptable for payment delivery to be made within the same travel time.

Remoteness is not simply a function of geographical distance, but is also a result of terrain—e.g., very mountainous regions and areas affected by seasonal flooding may have accessibility problems. Additionally, issues surrounding insecurity may also create disruptions to payment delivery. Those issues that can be foreseen can be mitigated against. For example, in the case of seasonal flooding, if populations move they can access alternative payment points; if they are cut off, they can be prefinanced, which allows them to stock up on goods during their isolation.

One of the most effective ways to reduce costs of access is to ensure that there are sufficient payment points to allow payments to be collected reasonably close to beneficiaries' homes, their place of work, or some other location they frequent such as a marketplace. There is a direct trade-off here—better accessibility for beneficiaries is frequently associated with higher payment costs for programs due to the requirement for PSPs to set up additional payment points. SP policy makers and program

implementers will want to carefully consider what are appropriate distances for recipients to travel possibly based on distance norms for accessing markets, education, and health services, and the affordability of these distances. In some cases, it may be more cost-effective to top up the payment for small numbers of beneficiaries in particularly remote locations, to cover the cost of travel to their nearest payment point, or to make payments less frequently. In the 4Ps, a conditional cash transfer program in the Philippines, a top-up payment is provided to recipients in remote locations (CGAP 2014). There is little point in going to great effort to transport cash to remote areas where there is no market activity that allows beneficiaries to exchange cash for food and other goods and services. Thus payment at a market center to coincide with a weekly market may be more appropriate. Areas where cash transfers for a large number of recipients are regularly paid will develop local markets.

CGAP identified behavioral research methods that provide a more effective and cost-efficient insight into beneficiaries' experiences, challenges and behaviors, habits and preferences in accessing and using financial services. In a behavioral research project with mobile cash transfer recipients in Northern Kenya, it was found that beneficiaries had to travel vast distances and incurred additional costs (unofficial agent fees, transportation costs, and time) to access their transfers due to a lack of licensed mobile money agents in their areas. As a result, beneficiaries started using unofficial payment facilitators who would collect their SIM cards and PINs and then travel to the next agent to withdraw their transfers against a commission that was up to half of their transfer amounts (Baur and Zimmerman 2016).

4.2.1.2 Appropriateness

Payments should be accessible to all type of beneficiaries by ensuring that an appropriate payment mechanism is used. The program should ensure that recipients are provided with **sufficient training** to ensure that they develop the knowledge and capabilities necessary to access payments securely and reliably. The value of transfers and the time of their delivery should be **clearly communicated** to beneficiaries of government transfers. If beneficiaries do not have a clear understanding of the value and timing of their transfer, it may increase the risk of leakage. There should also be training and transparency on the fees, if any, and conditions of the payment service. This communication should take into account the languages spoken by beneficiaries and their literacy levels.

Serving the excluded does not preclude the use of technology. The uptake of mobile money in many countries (particularly across Sub-Saharan Africa) by all sectors of society including the poor, the illiterate, and even those without mobile phones demonstrates that the ability of poor people to adopt new technology should not

be underestimated. In Kenya, 80 percent of adults use mobile money services, thus demonstrating their ability to both adopt new technology and to use a PIN-based authentication process.[1] The introduction of new technology, however, should be supported with sufficient training and communication to ensure adoption by beneficiaries and program staff.

Consideration may also be given to involving beneficiaries in the design of the payment delivery mechanism by directly canvasing their opinions and better understanding their needs.

Recipients should be provided with a payment mechanism that gives them access to information and, if possible, choices. Offering beneficiaries a choice of different payment mechanisms may only be economical in larger-scale programs and will add complexity for program managers if they are directly managing multiple PSP contracts. On the other hand, providing choices can lead to better and more responsive payment services for beneficiaries as market forces exert their influence.

4.2.1.3 Rights and Dignity

To ensure accessibility, special consideration should be given to the needs of vulnerable groups such as the poor, the elderly, women, children, the illiterate, and the disabled. For example, biometric fingerprint authentication may be harder to implement for the elderly and those who have been manual laborers because of their worn fingerprints. It is also important to consider that in some societies women may be unable to access services that are offered to them only by men.

Individuals' rights need to be protected through the design and implementation of a suitable complaints and appeal system (sometimes referred to as grievance and redress mechanisms). This should include a process for the collection of beneficiaries' payment issues and their resolution. Where there is a program-level complaints and appeal mechanism, this should cover payments as well as other operational elements. Any PSP should also have its own mechanism for addressing customer issues and complaints. An example of a typical issue is the reporting of a lost or stolen payment instrument used to access payments, which would require the issuance of a replacement card or SIM within an agreed number of days. Management of customer

1 Pulver (2012). From Mas (2012): "I am frequently subjected to anecdotes about how some people who are new to banking or mobile money share their PINs, or soon forget them. That is taken as prima facie evidence that PINs may not be appropriate as an authentication mechanism for the poor. In the same breath in which we marvel at how the poor are sophisticated portfolio managers per Portfolios of the Poor, we question whether they can handle four digits."

issues and the provision of reporting data on these issues should be managed through a tracking tool connected to the program MIS. All stakeholders also need to be informed of complaints and appeal mechanisms. In SP programs, there is a specific support hotline for agents serving SP program beneficiaries, as they are often the main contact point for beneficiaries who experience a problem.[2]

In addition to the bottom-up feedback mechanism, a top-down monitoring process is needed. At the contracting stage, a comprehensive set of standard types of issues should be defined and standard timelines agreed for resolving them; these should then be monitored and enforced. This would also include a commitment from the PSP to deliver reports and respond to nonstandard issues that the PSP may raise from time to time. The program contractors and implementers will need to actively manage the PSP to ensure that service standards are met. It is important that the program and not the PSP set the payment agenda. This may require specialist assistance to strengthen the hand of government. It may also be beneficial to include some sort of local payment monitoring activities to increase community engagement.[3] Regardless of the quality of the PSP employed, outsourcing does not end a program's responsibility for payments.

SP programs handling and storing electronic information about beneficiaries should take account of the confidentiality of private information and data security. Internationally recognized fair information practices emphasize the importance of (1) limiting data collection to what is absolutely necessary; (2) ensuring data quality; (3) clearly specifying the purposes that data can be used for and (4) to whom it can be disclosed and under what circumstances; (5) installing safeguards for protecting data from unauthorized access, destruction, modification, or disclosure; (6) ensuring transparency of data rules and (7) the right of individuals to challenge and correct their data; and (8) clear accountability of a designated data controller for any breaches of the preceding principles.[4]

2 See also Zimmerman and Baur (2016).

3 CGAP has identified mystery shopping with actual program recipients as an easy-to-implement, cost-efficient tool for program monitoring that involves recipients and trains them in how to monitor PSP service quality and report inappropriate service delivery. See Mazer and Baur (2014).

4 The Organisation for Economic Co-operation and Development (OECD) created a set of eight Fair Information Practices codified in the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. The eight principles OECD published in 1980 were agreed upon by member countries through a consensus and formal ratification process. These guidelines form the basis of many modern international privacy agreements and national laws. Source: OECD (2013).

Taking a broader perspective of consumer protection, it is also important to extend the same service level to beneficiaries of government transfers as would be the norm for other mainstream customers of financial services. (SP programs may pay for an account and for a limited number of transactions to be provided free of charge for beneficiaries.) Whenever feasible, payments should be made in a socially inclusive way; i.e., using financial access points used by the general population rather than special mechanisms only used by SP beneficiaries, which may stigmatize them and enhance their exclusion and also deprive them of other benefits that mainstream payment mechanisms could provide. Furthermore, to avoid stigmatization, transactions should be private, e.g., a payment made to someone who is HIV positive should ensure the beneficiary is not identified at obvious public gatherings to collect payment.

4.2.2 Robustness

4.2.2.1 Reliability

One of the most important aspects of a payment mechanism and the flow of funds is that cash transfers be delivered reliably. Reliability is based on a **schedule of payment dates that is defined, communicated, and adhered to**. Reliability has a number of different aspects: reliability of the flow of funds, fund availability at payment points, and reliability of the payment mechanism. Reliability and regularity are vital, as erratic and delayed delivery of benefits undermines their impact and can erode confidence in the SP program—as well as financial services more broadly and thereby undermine a government's financial inclusion agenda. As an example of the adverse impacts of delays, there is evidence from South Africa that beneficiaries may use expensive informal credit providers to bridge the gap in funding (Collins 2007; Collins et al. 2009). The usual very high costs of such credit can result in the beneficiary becoming trapped in debt. Being trapped in debt increases a beneficiary's economic vulnerability in stark contrast to the intended impact of cash transfers. Even if a beneficiary does not take on debt, without a reliable flow of funds, he or she is unable to plan efficiently or manage risks. For example, beneficiaries are unlikely to make a regular commitment to paying for education or investing in any income-generating activity that may reduce their vulnerability and help them to graduate from a program. A review of a large-scale unconditional cash transfer program in Indonesia revealed that the delayed receipt of transfers reduced expenditures by 7.5 percentage points (Bazziy, Sumartoz, and Suryahadix 2014).

Liquidity or cash management by a PSP is important to ensure that there are sufficient funds available to allow payment (cash-out) to all beneficiaries. In the case of agent-based solutions, it is vital that the PSP has sufficient information about their agents' capacities to ensure that all payments can be cashed out. Similarly, all parties

involved in ensuring the reliable delivery of payments should be incentivized to deliver payments when required. This is most important where an agent-based solution, which relies on local liquidity, is operating in an area of limited economic activity and means that many more agents may be needed to be recruited in such areas to prevent cash shortages leading to nonpayment. There also needs to be an orderly process to manage the resignation of agents and their replacement. A CGAP review of common consumer risks in digital social payment programs identified liquidity shortages as a primary challenge for recipients and a key disruptor of financial inclusion potentials. Illiquidity was found to erode recipients' trust and confidence in the system, thereby creating an imperative to withdraw all of a payment at once upon deposit, consequently exacerbating liquidity issues at cash-out points (Baur and Zimmerman 2016).

Late payments may not always be caused by a PSP, but may be due to **upstream delays in funding**. Mitigating measures such as reducing the frequency of payments may help increase reliability, but careful planning and realistic timelines with safety margins are essential. Less frequent payments may make it harder, however, for beneficiaries to manage their finances. There needs to be a clear understanding of the upstream funds' flow with commitment to stick to a defined process and timelines to increase reliability.

Reliable payments are usually based on a clear understanding of the flow of funds from the funding source or sources to the ultimate beneficiaries. Mapping all steps in the fund flow process; agreeing to achievable timelines for the process; monitoring the process; and then holding the institutions, departments, and individuals involved in the flow of funds to be accountable for meeting those timelines are fundamental. The process should be transparent, with beneficiaries receiving information about payment dates well in advance. Any changes to payment schedules should be communicated to beneficiaries; this may be done through community committees or via direct short message service (SMS) blasts. It necessarily requires coordination among multiple actors involved in the flow of funds, i.e., donors, the ministry of finance, the ministry in charge of SP, program staff, and the PSP and its agents (if applicable).

Without **accurate and timely information** being reported about payments, it is very difficult to manage the process to ensure reliability. The rapid transmission of comprehensive and accurate data through electronic reporting mechanisms supports this process. At the end of each payment cycle, there should be an active review of progress against target timelines with subsequent adjustments to the process if required.

The **operational reliability of the payment mechanism itself** is important. Contingency planning should take place to identify risks and implement mitigating measures to address known risks that may delay payments. How reliable are the technology and systems used? Are system uptimes adequate? If a PSP is delivering payments, the long-term reliability of payment delivery relies on fair contracting. If the PSP does not have a long-term business case for continuing to deliver payments, or the scope of payment service increases or cost of delivery unexpectedly increases, this may lead to a PSP ceasing to deliver the payments.

4.2.2.2 Governance

Governance entails having a well-governed and functioning system for implementation of the payment delivery mechanism, both where delivery is through government or program staff and where it has been outsourced to one or more third-party (private or public) PSPs.

Procedures and processes with clearly demarcated roles and responsibilities must be defined and recorded in an operations manual and/or service-level agreement with a PSP. If payments are delivered using internal resources, extra care must be taken to ensure that internal rules and procedures limit the risk of leakage. There should be sufficient funding to support frequent and timely reporting on payments; this should be supplied in detail and electronically if possible. There should be sufficient skilled and experienced staff to ensure that the payment delivery function is adequately overseen and implemented.

In outsourced arrangements, there must be sufficient **oversight of the PSP** to ensure a high quality of delivery; this includes clearly defining a service level at the point of contracting and then continually monitoring adherence to it. There must be sufficient staff to oversee the PSP; if possible, they should have a background in or understanding of financial service providers. A robust MIS needs to be in place that can facilitate reporting from a PSP, and payment reconciliation should be automated to the extent possible. The speed and accuracy of reporting directly affects the ability of the SP program to oversee the payment process. The sooner the PSP provides information about payments and the greater the detail of this information—ideally at the transactional level—the better control staff overseeing the PSP will have.

Government entities that contract with PSPs should be aware of the information asymmetry inherent in such a relationship. (Further information on the procurement of and contracting with a PSP is provided in 2.2.6.) PSPs know a great deal more about payments than SP policy makers or implementers, yet it should be the government—not the PSP—that sets and drives the payment strategy for the SP program. In addition

to the information provided in this guidance note, government staff may need to rely on specialist advisers, particularly in designing terms of reference and negotiating contracts with a PSP, to ensure that SP program staff have the necessary tools to effectively manage the PSP contract. **Outsourcing payment delivery does not negate government's responsibility to oversee payments and ensure that service standards are met.**

4.2.2.3 Security

Security primarily relates to the concerns of SP funders and program administrators that the full amount of money intended for beneficiaries reaches them. Checks and balances should be in place to prevent fraud and leakage, and to protect recipients against fraud and theft at the point of payment.[5] The process must be transparent and easy to audit. Making e-payments through prudentially regulated financial service providers operating within an effective payment system oversight framework is usually the safest way to transfer money.

The transmission of payment instructions should be secure, with measures in place to prevent accidental or deliberate changes being made. Leakage can result from the deliberate inclusion by an SP program staff member of a ghost beneficiary at the point of enrollment. Building a data bridge between the MIS of an SP program and the PSP would prevent such errors and frauds on payment lists. Consideration should also be given to personal data protection, both in the payment information held in the program MIS and any information transmitted to and handled by a PSP.

Cash delivery requires significant security measures to be taken. In some cases, armed guards, police, or soldiers are used to provide this security. In insecure locations, cash in transit services may be unwilling to operate, or it may be prohibitively expensive to do so—meaning that cash is not a viable payment instrument in such locations.

Authentication is the process by which the PSP verifies the identity of a recipient, to ensure payments are made to the correct people. There must be a secure authentication process in place using a variety of measures, including program ID, community identification of recipients, and national ID.[6] There are different ways to

5 Evidence of the most common types of fraud and leakage experienced by low-income consumers of digital financial services, and digital social payment beneficiaries in particular, as well as existing mitigation strategies by providers and regulators can be found in McKee, Kaffenberger, and Zimmerman (2015) and Baur and Zimmerman (2016).

6 The ISPA tool on Identification for SP provides detailed guidance on how to assess the performance of identification and authentication processes in an SP program.

authenticate identity. Two-factor authentication—identifying someone in two different ways—should be the minimum standard for payments. An example is providing a payment card and remembering a PIN in order to complete a transaction. The quality of the two-factor authentication is important; there are cases where all recipients have used the same PIN in a given scheme, for example.[7] Some of these weaknesses can be addressed through education and monitoring.

The choice of authentication approach should balance security of identification against the needs of beneficiaries. For example, the use of a PIN may be an unfamiliar concept for beneficiaries, requiring that they be trained in how to create (and possibly change over time) a memorable number and how to use it. As noted earlier, fingerprint biometrics may not be appropriate for elderly beneficiaries or manual laborers, as their fingerprints may be worn—possibly leading to reading errors and failed payments. The focus on security should always be balanced with program objectives and the beneficiary profile. Note too that a highly secure payment mechanism may increase the cost of access for program recipients and ultimately be more expensive for the government.

The use of payment devices and instruments that rely on international standards may be more robust than stand-alone proprietary systems. Proprietary technology is owned by the PSP and therefore does not follow international standards. Mainstream technology is necessarily subject to the application of credible international standards on which considerable reliance can be placed, significantly reducing costs. For example, if a POS device is certified by the leading international card association (Visa or MasterCard), a provider deploying it can be confident that it meets security standards without undertaking its own verification. The process of verification is technically demanding, seeking to ensure that all potential security vulnerabilities are addressed.

The systems a payment service relies on to deliver payments should also be reviewed. For example, a bank's core banking system may have limitations on the number of accounts it can host or the number of transactions it can process. Consideration should be given to the existing customer base of a PSP to ensure that it has the capacity to manage hundreds of thousands or millions of social grant recipients. Preference should be given to online systems that settle in near real time, as opposed to offline systems that require batch settlement. (In areas without a good communications infrastructure, this can be achieved using satellite communications technology.) This approach can significantly reduce problems associated with reconciliation.

7 See Baur and Zimmerman (2016).

In agent-based solutions for delivering payments, it is important to ensure that the beneficiary is protected against the possibility of agent fraud, such as making unauthorized deductions from beneficiary bank accounts or e-money wallets, charging unauthorized fees, or charging higher than normal prices for beneficiary purchases of goods. Appropriate measures to address this risk would include ensuring trustworthy individuals were hired to act as agents and that the PSP monitors agent performance as well as maintaining a complaints and appeal mechanism that does not involve agents, such as a free phone help line.[8]

While cash-based manual delivery mechanisms are more vulnerable to fraud and theft, an electronic system is not a guarantee of the elimination of fraud. Electronic delivery does, however, significantly reduce the incidence and volume of fraud, especially in cases where recipients have been informed of and trained in self-protection strategies. The quality of procedures and controls, and management oversight, are vital in reducing leakage. In this regard, see table 1.3 for a list of typical rates of leakage found in manual and electronic systems.

4.2.3 Integration

4.2.3.1 Financial Inclusion

Financial inclusion may not initially be an obvious objective for SP program implementers when considering the parameters for the payment mechanism. It is worth considering, however, because it can enhance the developmental impact of the transfers. There is evidence that this type of approach can support graduation and/or productive inclusion in some cases.[9] There is also evidence that access to appropriate financial services can help individuals improve their welfare as well as develop local

8 To learn more about agent fraud and possible mitigating strategies, see McKee, Kaffenberger, and Zimmerman (2015) and Baur and Zimmerman (2016).

9 Following on from the BRAC original graduation program in 2002, a number of graduation pilots have been launched. All graduation models explicitly target the very poor, incorporating saving services (typically through a savings group), consumption support (e.g., cash transfers, food aid) that enable households to engage in other income-generating activities, a large asset transfer to support value chain entry or expansion, and skills training and coaching in technical skills and general business management over 18–36 months. Sources: Hashemi and de Montesquiou (2011); Hashemi and Rosenburg (2006); Hashemi and Umaira (2011); Natu, Kuraian, and Bhushan (2008); Sabates-Wheeler and Devereux (2011); and Samson (2011a, 2011b). Also see the CGAP technical guide to graduation approach (de Montesquiou and Sheldon 2014). Note that permanently labor-constrained individuals such as the elderly and disabled are unlikely to graduate.

economic activity.[10] Access to financial services helps households reduce their vulnerability to shocks and can support opportunities for income generation and asset accumulation. Households can save transfers for use when most needed. Managing a family's well-being may include building savings for occasional large expenditures such as school fees, or for the purchase of productive assets such as seeds or livestock, or protecting against natural disasters such as drought or a death in the family.

SP cash transfer programs' approach to financial inclusion can be categorized in two stages: (1) savings enabled and (2) savings encouraged. The savings enabled stage provides some form of transaction account that enables recipients to store some or all of their payments for future use (they are not all able to make further deposits). In 2012, the New America Foundation's Global Savings and Social Protection Initiative tracked 84 SP programs in 43 countries, covering 74 million beneficiaries. The initiative found that 64 percent of cash transfers are savings enabled. The most popular mechanism to enable savings was a bank account (74 percent of cash transfer programs). Some cash transfer programs (27 percent) went further, by actively encouraging savings. Cash transfer programs use multiple mechanisms to encourage savings, sometimes using more than one in the same program. These mechanisms include mandatory savings (41 percent of cash transfer programs, including Argentina, Bangladesh, Ethiopia, India, and Nigeria), seed accounts (31 percent of programs, including India), matched savings (13 percent of programs, including Chile, Colombia, and Mexico), financial literacy training (10 percent of programs, including Ethiopia), lottery (5 percent of programs, including Chile and Peru) (Zimmerman, Ravi, and Tosh 2012).

Typically, when social grant recipients are provided with a transaction account, they withdraw the full amount of the transfer in a single transaction (Bold, Porteous, and Rotman 2012; Collins et al. 2009; Committee on Payments and Market Infrastructure 2016). This may be due to confusion and concerns surrounding account charges and privacy and/or program rules requiring the withdrawal of funds within a set period to avoid forfeiting the transfer (Bold, Porteous, and Rotman 2012). If there are insufficient convenient access points, high transportation costs can also undermine usage. Therefore, complementary interventions to encourage uptake and usage of transaction accounts may be helpful. The transaction account used should also meet customer needs. Customers with low and irregular incomes may be used to physically setting aside cash to meet specific needs; moving to e-payments may mean losing this method of budgeting funds. A transaction account should thus offer built-in budgeting

10 A summary of evidence from randomized control trials is provided in Cull, Ehrbeck, and Holle (2014).

tools or allow earmarking of funds for particular purposes (Committee on Payments and Market Infrastructure 2016).

Providing beneficiaries with a transaction account can serve as a gateway to a range of other financial services. At a macro level, there is a strong association between increased levels of financial inclusion and increased economic development. This objective can initially be met if a regulated institution provides an account for a beneficiary. Program implementers considering linkages to other appropriate financial services may do so with the aim of making saving easier for beneficiaries with the ultimate objective of supporting graduation. Having an account creates an electronic record of transactions (a digital footprint) that allows providers to offer other suitable financial services such as microcredit and microinsurance. Having an explicit financial inclusion agenda may also help develop support for SP measures from other stakeholders, as it may support ministry of finance or financial regulator policy objectives.

The decision to make payments in a financially inclusive way should be based on a detailed analysis to determine if the necessary conditions for success are in place; see the guidance provided in section 2 for reviewing a country's supporting environment for SP payments. For example, financially inclusive payments may be a counterproductive aim in the absence of appropriate financial infrastructure accessible to the poor. Note too that having an account is the beginning, not the end, of financial inclusion. Special consideration needs to be given to the development of appropriate linkages that support the improvement of beneficiaries' financial health.

An SP program typically aims to mainstream previously excluded households. The payments mechanism should therefore also aim to be socially inclusive, which means using financial access points used by the general population, where possible, instead of keeping beneficiaries in payment silos. Where financial access points are available, beneficiaries should access their payments through the same ATM or mobile money agent that their nonpoor neighbors use. Delivering through existing financial access points is also more cost-effective than establishing new stand-alone payment points. The mainstream approach in most countries is for PIN-based transactions either with a card or mobile money account. This two-factor authentication approach can be used with a variety of transaction devices including an ATM, POS device, or mobile phone; it may require training beneficiaries in the use of PINs. As noted earlier, nonstandards-based payment technology and biometric authentication are expensive and significantly limit the financial inclusion potential of beneficiaries, unless they are specifically linked to other financial services and/or have the ability to use financial access points open to the general public with a supplementary PIN. This is not to

suggest that biometric-based systems should not be considered, but that the use of public payment access points should not be excluded without careful consideration.

SP programs with linkages to financial services may want to provide financial education to beneficiaries to enhance their financial capability. Quality open-source curriculum has been developed by Microfinance Opportunities specifically for low-income households.[11] Also, Fundación Capital has created LISTA, a tablet-based application to provide financial education to low-income families, primarily recipients of conditional cash transfers; this has been found to be an effective approach to changing behavior, with users increasing their savings and acquiring financial knowledge.[12] In South Africa, a Savings and Investment Linkages pilot is operating with some of the households receiving a child grant.[13] Recent behavioral research has highlighted the potential of providing savings "nudges" though short message service (SMS).

4.2.3.2 Coordination

The payment delivery mechanism should support coordination across SP programs by providing a single payment address in the form of a transaction account for multiple payees, including different government ministries and departments, donors, and individuals. This coordination can be achieved incrementally, by working across a few programs and progressively incorporating others. This approach also creates flexibility, e.g., by allowing the value of transfers sent to beneficiaries to vary and to include the disbursement of one-off or emergency payments. If multiple programs across government use the same transaction account, there may be some efficiency gains. Owning a transaction account and payment address reduces the costs—and therefore the barriers—to beneficiaries in receiving multiple payments, including national and international remittances from friends and family. Providing beneficiaries with a transaction account might also be advantageous for PSPs and policy makers that are required to meet financial inclusion targets.

11 This content was developed by Microfinance Opportunities, which can assist in implementation and tailoring of the content. The curriculum can be downloaded at https://www.microfinanceopportunities.org/portal/professionaldevelopment. The core curriculum consists of five modules covering financial negotiations, bank services, debt management, savings, and budgeting.

12 LISTA is currently being implemented and tested in Brazil, Colombia, and the Dominican Republic. http://fundacioncapital.org/digital-solutions/lista-initiative/?lang=en.

13 The Savings and Investment Linkages pilot is managed by the Economic Policy Research Institute in partnership with the South African Social Security Agency (Sassa), with the goal of enabling poor households to more effectively smooth transition from receipt of a child support grant to more sustainable income security by providing a savings and financial inclusion mechanism that supports human capital and financial asset development through the two final years of high school.

A flexible payment delivery mechanism can support the delivery of emergency payments,[14] supporting coordination between SP and humanitarian actors. Designing and implementing a payment delivery mechanism with consideration to future eventualities can improve efficiency in the long run. Examples include the use of the 4Ps program in the Philippines to deliver emergency funding following Typhoon Haiyan in 2013, which enabled payments to newly vulnerable individuals and existing beneficiaries. In Fiji, following Typhoon Winston in 2016, the government provided a top-up to existing beneficiaries while allowing people to borrow against their pensions. A new procurement process for the Hunger Safety Net Programme in Kenya was taken as an opportunity to prepare for any required scale-up of payments including for emergency responses. The Kenya program is a cash transfer program for 100,000 poor and vulnerable households. In times of emergency, it plans to scale up and provide short-term cash transfers to an additional 302,000 households (approximately 2.7 million people). The PSP Equity Bank has opened accounts for the additional recipients identified, to allow for rapid scale-up and disbursement of transfers in emergencies (Pulver 2015).

A government commitment to pay G2P benefits, salaries, and/or vendor payments through a payment system to individual transaction accounts can also help establish and promote coordination.

4.3 Guidance for Assessing a Payment Delivery Mechanism

This review may look at a payment delivery mechanism used by an individual program or those mechanisms used across the whole SP system (this provides a common framework for comparing multiple payment delivery mechanisms). For each criterion,

14 In February 2016, the U.S. Agency for International Development (USAID) organized a workshop in Barcelona that brought together 35 representatives of donors, implementers, and thought leaders working in humanitarian response and/or financial inclusion to discuss the appropriate use of digital payment systems. Eight draft principles for Building Resilience through Humanitarian Payment Systems were identified: (1) facilitate pathways to financial inclusion when possible; (2) design for client empowerment, protection, and choice; (3) prioritize and build on existing local (payment) systems and infrastructure; (4) invest in preparedness to quickly leverage digital payments whenever appropriate; (5) safeguard the right to data privacy and protection; (6) collect recipient data that is relevant and proportional, and when possible, aligns with minimum local KYC requirements; (7) coordinate the use of open and shared payment systems between humanitarian organizations; and (8) develop institutional and collective capacity for engaging in effective dialogue with the private sector. For more information, see International Rescue Committee (2016).

this table describes the typical characteristics of payment mechanisms ranging from latent or emerging payment systems to more advanced systems. An existing SP program's payment delivery mechanism can be measured against these criteria to provide a snapshot of its stage of development as well as tracking its evolution over time. Note that these scores do not define a "perfect" payment delivery mechanism because there are some trade-offs between the objectives of different stakeholders. Therefore, a program or SP system may deliberately identify their own best fit. This table is meant to support a rapid assessment process and hence may not always be able to rely on data but the best judgment of a group of stakeholders involved in payments. The table may also be used as a tool for dialogue to highlight the different perceptions of a single payment mechanism across stakeholder groups.

4.4 Guidance for Assessing the Supporting Environment for SP Payments

The background for this review is provided in section 2. This review looks at the key components of a supportive environment for an SP program and its beneficiaries. The premise is that regulatory certainty, greater choice of providers and products, and larger numbers of financially included people create a more supportive environment for delivering SP payments. The table provided is meant to support a rapid assessment process and hence the best judgment of a group of stakeholders familiar with the national payment system, procurement rules, national ID, and mobile network coverage of the country in question. This is **not** meant to serve as an assessment of the national payment system, but rather as a tool to identify how enabling or supportive the environment is for SP payment delivery. An understanding of this environment should help determine the future direction of payment delivery based on an understanding of the opportunities and challenges and hence feasible options.

4.5 Guidance for Assessing the Country's SP System

The background for this review is provided in section 3. Assessment of the country's SP system considers its SP policy and the institutional arrangements and SP modalities used by the programs under review. This component of the assessment seeks to understand the role the program being assessed plays in the country inventory of prominent SP programs, and to identify options for harmonizing the program's payment delivery mechanism with that of other programs targeted to the same groups when applicable. To get a quick sense of the context of the SP system, this tool proposes compiling an inventory of the country's most important SP programs

(categorized as noncontributory social assistance, contributory social insurance, labor market measures and services, and social services).

Annexes

Glossary

Accessibility: The first criterion for assessing the quality of payment delivery mechanisms.

Account: Refers to an account held at a payment service provider (either bank or nonbank) that holds funds and allows transfers to be made to and from it. Also referred to as a transaction account, and includes traditional bank accounts and nontraditional accounts including the provision of e-money wallets by banks and nonbanks including mobile network operators offering mobile money.

Agent: A representative of a payment service provider such as a bank or mobile money operator that facilitates payment transactions in the field. Agents are typically shopkeepers or airtime dealers, but could be individuals as well, who provide cash-in and cash-out services for a fee on behalf of the bank or mobile money operator and its clients.

Agent banking: The provision of services by appointed agents of banks.

Aggregator: Enable the collection, disbursement, and circulation of electronic payments across multiple payment providers irrespective of which payment instrument service is used to conduct a transaction. Aggregators allow payment instrument providers—such as mobile network operators offering mobile money services or banks offering mobile banking—to easily integrate with entities that want to send money to or receive money from end customers. These entities can be, e.g., utility companies that want to receive payments, businesses that want to pay salaries, or donors that want to pay recipients.

Authentication: Refers to the verification of the identity of a person claiming to be the rightful recipient of a payment. There are a number of different approaches to authentication, which may be carried out manually, e.g., by physically verifying a national identification card and visually comparing a photo, or electronically. There are three factors of authentication, in order of increasing reliability: (1) something you know (personal identification number, password), (2) something you have (payment card, national identification), and (3) something you are (biometric fingerprint, voice). Strong systems use two factors of authentication to verify a person's identity, e.g., a card and a personal identification number.

Basic bank account: Typically focused on payment services and characterized by low-cost and no-frill features.

Beneficiary: The individual or household identified to benefit from a transfer. See recipient.

Biometric: Using biometrics for identification means assessing an individual's identity based on a unique physical or behavioral trait, such as fingerprints, iris, or voice—i.e., something they are. See authentication.

Branchless banking: Financial services delivered outside of bank branches often through the use of agents.

Cash and near cash transfers: Cash transfers represent social protection program benefits delivered to recipients in a financial value as opposed to those delivered in kind such as food or education. Near-cash transfers include benefits delivered using vouchers and spending electronic value directly without first converting into physical cash such as paying a merchant using a payment card.

Closed-loop payment instrument: A payment instrument that only operates on a stand-alone system. For example, the automated teller machine (ATM) cards issued by a particular bank may only be used to access funds through that bank's network of ATMs. See interoperability and open-loop payment instrument.

Digital financial services (DFS): Financial services delivered via digital infrastructure (mobile or Internet) with low use of traditional brick-and-mortar branch infrastructure. DFS include the full range of products (digital transfers, payments, stored value, savings, insurance, credit, etc.), channels (such as mobile phones, Internet, or automated teller machines), and providers including mobile network operators, banks, nonbank financial institutions, and electronic money issuers, retailers, post offices, and others.

Electronic payment (e-payment): In the context of social protection payments, refers to those occasions where e-payment instruments are used to make the social protection payment, often accompanied by automation of various elements of the overall social protection payment process. This may include the use of payment cards and point of service devices.

Electronic money (e-money): Record of funds or value available to a consumer stored on microchips, prepaid cards, mobile phones, or computer systems as a nontraditional account with a bank or nonbank entity (e.g., a mobile money operator).

Electronic wallet (e-wallet): An electronic money product where the value of funds is stored; e.g., smart card or mobile phone. Also referred to as mobile wallets or digital wallets, these are money accounts that allow stored value and are accessed through a mobile phone.

Financial inclusion: According to the Centre for Financial Inclusion, a state in which all people who can use them have access to a full suite of quality financial services, provided at affordable prices, in a convenient manner, with respect and dignity. Financial services are delivered by a range of providers in a stable, competitive market to financially capable clients. Many governments have determined a national financial inclusion policy, which usually includes government's own definition of financial inclusion.

Financial access point: Physical location where customers can access financial services including payments. Examples include bank branches, mobile money agents, automated teller machines, bank agents equipped with a point of service or other device, post office branches, savings and credit cooperative organization branches, and microfinance institution branches.

Financial capability: Clients have the combination of knowledge, skills, and behavior to manage their money well and make the best financial decisions possible, given their economic and social circumstances. Financial capability plays an active role in improving access and the quality of services that consumers receive.

Financial literacy: Describes the level of knowledge about financial services and markets.

Government-to-person (G2P) payment: Includes the payment of government salaries, pensions, and social transfers.

Integration: The third criterion for assessing the quality of payment delivery mechanisms according to this tool.

Interoperability: Creates a situation where a user of one bank or financial service provider can exchange a transaction with a user of a different bank or financial service provider. Interoperability may be achieved by participants all using the same system or through agreements between systems. This also means a situation in which payment instruments belonging to a given scheme may be used in platforms developed by other schemes, including in different countries. Interoperability requires technical compatibility between systems, but can only take effect where commercial and

operational agreements have been concluded between the schemes concerned. See aggregator and switch.

Leakage: Loss of funds due to payment through theft and corruption or by making payment to ineligible recipients or of the wrong amount to eligible recipients.

Manual payment: Where individuals (usually program staff) are required to move physical cash and all transaction records are made in paper hard copies.

Merchant payment: Use of electronic payment instrument for making an in-person purchase at a physical merchant. This may be a card payment or, more frequently in developing markets for retail purchase of goods and services, a mobile money wallet. See electronic wallet.

Mobile banking: Use of a mobile phone by bank customers to interact with their bank accounts. Typically, mobile banking is provided through a smart phone application, but Unstructured Supplementary Service Data (USSD) and Java applications also exist. Accessing banking services via the Internet from a mobile phone is not included in this definition.

Mobile financial services: Financial services delivered digitally over a mobile phone, including payment services and more complex products and services such as savings, credit, and insurance; a subset of digital finance. In general, mobile financial services includes using specific capabilities of mobile phones such as Unstructured Supplementary Service Data (USSD), location detection, etc.; and not Internet access from mobile phones.

Mobile money: A subset of e-money, where the e-money is accessed through a mobile phone.

Mobile network operator (MNO): A company that has a government-issued license to provide telecommunications services through mobile devices.

Mobile wallet: See electronic wallet.

National payment system: Includes institutions such as banks and nonbank payment service providers; payment instruments such as cards and e-money; payment devices such as automated teller machines; payment systems such as real-time gross settlements, automated clearinghouse, and payment card switches; as well as the framework of laws, regulations, and procedures that govern payments.

Near cash: See cash and near cash transfers.

Open-loop payment instrument: A payment instrument that can be used at acceptance infrastructure beyond those of the issuer. For example, if Bank A issues an automated teller machine (ATM) card, that card can be use in Bank A's ATMs and other ATMs either provided by third parties or other banks. See interoperability and closed-loop payment instrument.

Payment: As used here, either (1) the transfer of cash or near cash to social protection program recipients, or (2) the mechanism used to deliver such transfers.

Payment instrument: Any instrument enabling the holder/user to transfer funds. In the context of social protection payments, the token used by a recipient in a payment device to initiate an electronic payment transaction such as a payment card or SIM card.

Payment delivery mechanism: Mechanism used to deliver cash or near-cash transfers to social protection program recipients. This mechanism may use specific parts of the national payment system or other means to deliver these transfers.

Payment service provider (PSP): The public or private sector organization tasked with delivering the social protection program's payments, such as a bank, post office, or mobile network operator.

Personal identification number (PIN): A numeric code the cardholder may need to quote for verification of identity. In electronic transactions, a PIN is seen as the equivalent of a signature.

Point of sale (POS) device: Payment device used in a payment transaction. It is typically held by a merchant or agent and requires a card and personal identification number or card and biometric to carry out a payment transaction. Also referred to as electronic data capture devices, etc.

Prepaid card: Payment card used to access prior deposit of funds. This is a type of e-money product.

Recipient: The individual authorized to receive a payment. In certain cases, the recipient and the beneficiary are different people. For example, in the case of an orphans and vulnerable children's program, the child is the beneficiary while the primary caregiver is usually the recipient. The payment service provider is responsible

for delivering payments to recipients; the program must mediate to ensure that funds reach the beneficiary.

Robustness: The second criterion used to assess the quality of a payment delivery mechanism.

SIM (subscriber identity module) card: The microchip used in a mobile device (e.g., mobile phone) to uniquely identify the subscriber's account. It may be moved from device to device.

Smart card: An integrated circuit card with a microprocessor, capable of performing calculations.

Social protection (SP): In the Inter Agency Social Protection Assessments (ISPA) context, refers to the set of policies and programs aimed at preventing or protecting all people against poverty, vulnerability, and social exclusion throughout their life, with a particular emphasis on vulnerable groups.

Store of value (electronic): Can hold funds such as a stored-value card, which is a type of e-money product that does not involve the deposit of funds into an account but instead stores funds directly on the cards in the embedded integrated circuit chip (see smart card and account).

Switch: An electronic clearing system that connects multiple financial service providers to one another or different transaction channels and payment systems allowing interchange of payment transactions. A payment switch is typically used for routing authorization and authentication-related messages between participating institutions, and can also generate and distribute clearing and settlement files. In some settings, the individual institutions could themselves have payment switches to connect their own automated teller machines and point of service terminals to their own internal processing systems; these payment switches are then connected to a central inter-institution payment switch. Payment switches are also beginning to be used to process payment transactions initiated through other channels such as the Internet and mobile phones.

Transaction device (electronic): Device used to facilitate or accept an electronic payment transaction, such as an automated teller machine, point of service device, or mobile phone.

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