



G2Px Cambodia

Cambodia COVID-19 Relief Transfers: a review of the payment mechanisms

Lessons learned from the emergency G2P payments and opportunities to
advance digitization of Government Payments in Cambodia

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ACRONYM LIST

ACH

Automated Clearing House, 5

ASEAN

Association of Southeast Asian Nations, 5

ATMs

Automated Teller Machines, 24

CSS

Cambodian Shared Switch, 6, 12

DLT

Distributed-Ledger Technology, 6

DPS

Digital Payment Services, 4, 7

FAST

Fast and Secure Transfer system, 6

FMIS

Financial Management Information System, 11

G2P

Government to Person, 1, 15, 16

GDT

General Department of Taxation, 12

GPPs

Government Payment Programs, 4, 5, 9, 12, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 41

ICT

Information and Communication Technology, 10, 24, 28, 31

KHR

Khmer riel, 5, 6

MDI

Micro Deposit-taking Institution, 6

MEF

Ministry of Economy and Finance, 10, 11, 23, 41

MFIs

Microfinance Institutions, 6

MIS

Management Information System, 12

MoSVY

Ministry of Social Affairs, Veterans and Youth Rehabilitation, 11, 12

NBC

National Bank of Cambodia, 5, 6, 11, 16, 17

NCH

National Clearing House, 5

NCS

National Clearing System, 5, 6

NPS

National Payments System, 4, 5, 6, 16, 17, 19, 21, 22, 24, 27, 28, 30, 31, 36, 41

NSPC

National Social Protection Council, 12, 15

PDM

Payment Delivery Mechanism, 26, 33

POSs

Point-of-Sale terminals, 24

PSIs

Payment Services Institutions, 6

PSPs

Payment Service Providers, 7, 12, 24, 25, 26, 27, 28, 29, 30, 33, 34, 36, 37, 39

RPS

Retail Payment System, 6

RTGS

Real-Time Gross Settlement, 5, 12

SME

Small and Medium Enterprises, 13

TSA

Treasury Single Account, 10, 11, 26, 33

UPI

UnionPay International, 11

EXECUTIVE SUMMARY

- i. **In response to the challenges from the COVID-19 pandemic, the Royal Government of Cambodia (RGC) has set up a comprehensive response and fiscal stimulus package.** The response aimed to address the health, social, and economic impacts from the crisis. Social assistance has been extended to the poor and vulnerable households utilizing the existing IDPoor database to deliver cash transfer to 2.4 million registered poor individuals. Based on the Pregnant Women program as a model for delivering immediate relief assistance, the cash transfer program has been the largest component of the Government's support package, estimated at \$300 million and implemented nationwide over a period of 7 months to support the poor and vulnerable groups, including people with disabilities, elderly, children, and people living with HIV/AIDS.
- ii. **The implementation has been challenging and yet successful.** The RGC (through relevant ministries) has been working closely with development partners to ensure affordability and to develop a comprehensive implementation plan including identification, registration, linking to banking and mobile payment systems, and building the capacity of at least 30,000 program implementers and commune officials to ensure prompt delivery of this social assistance program. This was the first time a social protection program covered all citizens in poverty (as defined by IDPoor) and was achieved in a remarkably short time frame through an effective, ad-hoc payment mechanism.
- iii. **While the payment mechanism adopted has indeed proven effective as an immediate remedy to an emergency, some limitations should be noted that prevent it from being a springboard for future developments.** These limitations can be summarized under the following three interlinked aspects: (a) use of cash instead of digital payments, (b) reliance on a single service provider, and (c) missed opportunity to advance financial inclusion.
- iv. A first set of recommendations can be identified assuming the current scenario largely unchanged: (a) The **National Bank of Cambodia (NBC)**, as overseer of the National Payments System (NPS) and operator of the core NPS infrastructure, should be considered an important stakeholder when discussing G2P payment mechanisms. (b) Greater effort should be made to consider more than one provider for the distribution of G2P payments, to foster **competition** and efficiency. (c) Beneficiaries could be given the **option of receiving the funds digitally** onto an account or wallet.
- v. **G2P delivery could be further improved in Cambodia if a more substantial reform agenda were developed by the RGC.** At this reform stage, the NPS infrastructure

operated by the NBC could be leveraged for the distribution of G2P payments in Cambodia. Beneficiaries of social payments could be given a full choice of provider and payment methods. Financial education and consumer protection should be an imperative part of this reform effort.

- vi. **The experience with emergency assistance during COVID-19 is an opportunity for the RGC to reform its payment programs.** The share of individuals receiving payments from the government digitally in Cambodia is dramatically low—only 2.9 percent compared to 12.2 percent in East Asia and Pacific and 8.8 percent in lower middle-income countries. As a first step, the RGC could undertake a landscaping exercise, mapping all government payment flows (including, for instance, civil service wages, social security benefits, tax-related payments, payments to and from businesses), and identify for each flow, and for the system as a whole, the steps needed to achieve digitization.
- vii. **Government Payment Programs (GPPs) should support the sound, efficient, and transparent management of public financial resources.** In addition, efforts to modernize GPPs should be leveraged to accelerate the development of the NPS more broadly and to promote financial inclusion. They should therefore be safe, reliable, and cost-effective. More broadly, digitizing GPPs should be a priority, requiring a concerted whole-of-government approach to implement them in the medium term.
- viii. **In the medium term, the RGC should commit to achieving the highest quality of GPP delivery.** This will include ensuring that (i) all components of GPP delivery are digitalized end to end, and (ii) all government payments from and to all individuals and businesses in the country reach the right party, for the right purpose, at the right time, in the right place, and in the right form, in a safe and efficient manner, and in the correct amount; and (iii) GPPs evolve over time so as to promptly satisfy the changing needs of the economy and society. Recommendations in this report describe how this ambitious, yet realistic, vision could be achieved in the medium term in Cambodia.
- ix. **An integrated approach should link the transition to digital GPPs with NPS modernization and financial inclusion, in the context of Cambodia’s economic development and financial stability.** As Cambodia develops its NPS infrastructure (especially the retail segment) and pursues financial inclusion, the transition to digital GPPs should be considered as a key pillar supporting both objectives. Similarly, the government should act strategically and involve all relevant NPS and financial inclusion stakeholders both to ensure full consistency among GPP plans, NPS development, and financial inclusion, and to exploit maximum synergies from their integration.

1 INTRODUCTION

1. Cambodia is one of the world's leaders in economic growth and poverty reduction, although the global economic downturn triggered by the COVID-19 pandemic has hit the country's economy hard and has extolled a heavy toll from the society.¹ Yet, considering its need to improve the capacity to assist its population more effectively and efficiently during crises as well as to strengthen the longer-term growth potential of its economy, the country should not deviate from, and should actually intensify, its commitment to economic digitalization.

2. Adoption of digital technology is nascent in Cambodia. As discussed in the recent policy note on the *Digital Economy in Cambodia* (World Bank, 2018), the country has made substantial progress in delivery of basic digital infrastructure, but provision of next-generation services is still limited. Digital adoption by firms is constrained by challenges in accessing financial services as well as by lack of skilled staff and an adequate legal framework. Digital government remains fragmented, and adoptions of digital services delivery in education and health has been slow to materialize. In recent years, the Cambodian authorities have issued several policy documents related to digital development. Overall, the objectives and high-level program goals are considered consistent with international good practice and envisage partnerships between the Government and private sector at multiple levels.² A national task force and working committee on digital economy has been established, which is preparing a *Long-Term Policy Framework on Digital Economy*.³ The framework is intended to guide the development and transformation of Cambodia into a full-fledged digital economy in the next 10 to 15 years in a coordinated and comprehensive approach.⁴

3. In light of these factors, Cambodia needs to invest in infrastructure and to develop regulations, skills, and institutions, including fundamentally to promote the provision and use of digital payments. Digital payments are at the heart of a digital economy. Without being able to pay remotely through digital channels, it would be difficult to conduct economic activities in a digital economy, such as to buy and sell goods or services online. This is particularly relevant for rural residents who may lack access to brick-and-mortar retail and financial infrastructure. With only a small share of the Cambodian adult population having made or received a digital payment,⁵ much work is needed to encourage growth in this critical area of the digital economy.⁶ A special role can be played by the Government.

4. Governments everywhere are by far the largest single bulk payment agency within their jurisdictions. They make frequent payments to (and collect payments from) large portions of the society (individuals and businesses), and significant financial resources are transferred between the various government agencies on an ongoing basis.⁷ Currently, still in many countries (especially low and lower-middle income ones), the largest fraction of the payments made to or by national public entities rely on non-electronic solutions such as cash or checks, which feature high operating costs, lower control and transparency, and slower payments than would be the case under electronic payment methods, and carry higher risks of leakage and fraud.⁸

5. Improvements in government payment programs (GPPs) that lead to higher levels of efficiency, safety and transparency can have a significant impact in the economy as a whole. Due to their scale and nature, GPPs can also become an effective tool in the pursuit of other public policy objectives, such as the modernization of the national payments system (NPS) or to promote financial inclusion. Digitalization of GPPs would lead to significant cost savings at all levels of the national economy and leveraging government payments would drive usage of (and trust in) digital payments countrywide.

The resulting enabling environment would create a foundation upon which the private sector can further build.

6. For all these reasons, modernizing Cambodia’s GPPs is a critical contribution to the national digital economy development agenda, having in mind the welfare of the people (and in particular, the poor). This report is intended to assist the Government of Cambodia in such endeavor. Specifically, the report aims to support the Government in developing an approach to deliver efficient, safe and inclusive digital GPPs. The approach recommended in the report is consistent with, and should be understood as integrating, the World Bank’s technical assistance to Cambodia for the modernization of the NPS,⁹ and with the World Bank’s policy advice in the area of GPPs.^{10, 11}

7. This report was produced under the umbrella of the G2Px Cambodia project, part of the Cambodia Social Protection and Future Jobs (P165080) project. The report was authored by Biagio Bossone (Consultant, The World Bank) and Marco Nicoli (Sr. Financial Sector Specialist, The World Bank). The report is organized as follows: Section 2 provides an overview of the Cambodia National Payments System; Section 3 illustrates how Government Payments are processed in Cambodia and summarizes recent initiatives in this space; Section 4 describes the payment mechanisms for the COVID-19 Social Relief Transfers; and, Section 5 proposes a strategic approach and guidance on reforming Government Payment Programs in Cambodia.

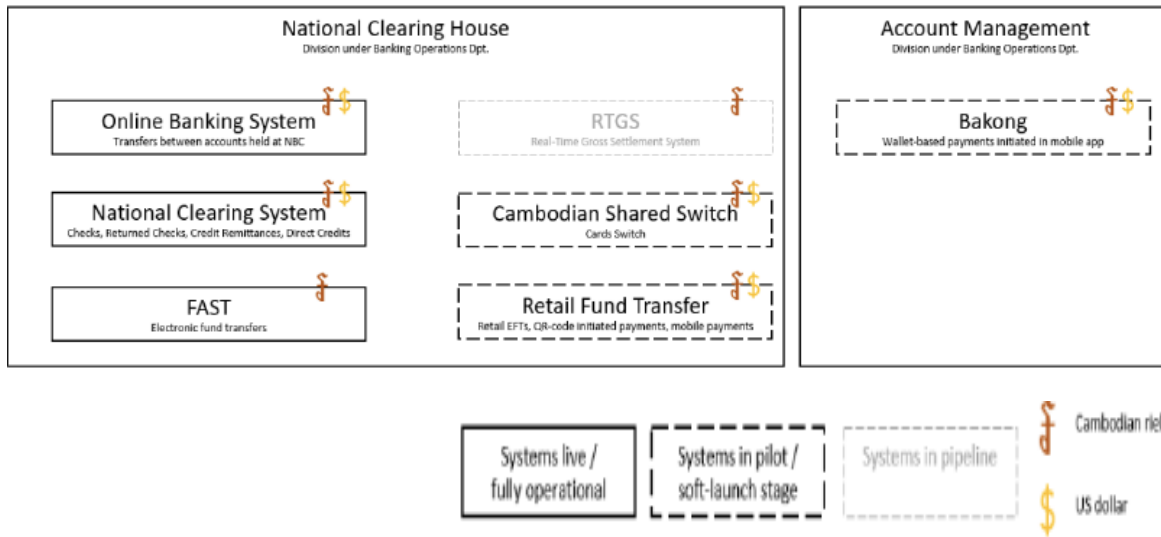
2 THE NATIONAL PAYMENTS SYSTEM

2.1 PAYMENT SYSTEM INFRASTRUCTURES

8. The Cambodia’s NPS consists of several infrastructures, some of which are still work in progress (Chart 1). Cambodia does not yet avail itself of a real-time gross settlement (RTGS) system, which is still under development. *Cheques* (including of large values) are processed through the National Clearing System (NCS), the main infrastructure for interbank payments denominated in USD or in Khmer riel (KHR), which is operated by the National Clearing House (NCH), an automated clearinghouse (ACH) that is owned and run by the National Bank of Cambodia (NBC) and whose members are the country’s commercial banks. Access to the NCS can be direct or indirect. A member may request to change its status of membership from direct to indirect member and vice versa at any time by written approval from the NBC. Other instruments for large-value payments are *paper-based credit orders* and *electronic payment orders* that are executed through the NCH Online platform of the NCS. Several processes are not yet automated, and the existing systems and arrangements do not address in a comprehensive manner the risks and efficiency requirements of a modern system for settlement of large-value payments, as concluded by a recent World Bank study.¹²

9. Against this background, the need for safe and efficient transfer of large-value payments has been growing in Cambodia. This has been driven by the country’s fast pace of economic growth, the rapidly growing needs of the financial sector and the increasing economic integration processes within the region (e.g., ASEAN integration requires Cambodia to prepare its payment and settlement infrastructures in view of their linking with other infrastructures in the region, including linking the countries’ RTGS systems).

Figure 1 Cambodia's National Payments System



10. **The retail payment infrastructure of Cambodia is developing rapidly.** The overall landscape has not yet taken a clear configuration, various initiatives are in place, and some of them overlap to some extent. The introduction of the NCS operated by the NBC has been one of the main drivers for the growing usage of interbank credit transfers in Cambodia. In 2016, the NBC – in cooperation with commercial banks and deposit-taking MFIs – established *Fast and Secure Transfer (FAST)*, a payments system for low-value credit transfers, which offers 24/7 processing of funds (denominated in KHR) and ensures availability to the receiver in close to real time. The system is open to participation of banks, PSIs, and MDIs. The system is still characterized by very low volumes and values of transactions and not all banks are actively using its services, largely due to investment cost issues. The NBC is soft launching the *Retail Payment System (RPS)*, in cooperation with a select group of banks and one micro deposit taking institution. The RPS consists of three retail payment mechanisms (Real-Time Fund Transfer, Mobile Payment System, and QR-Code Payment System) and Electronic Clearing System for the electronic transfer of funds. The main purpose of the RPS is to promote innovation in the retail payments space, improve interbank transactions, accelerate operational efficiency, enhance fund transfer security, and promote financial inclusion. Figure 1 illustrates the NPS infrastructures in Cambodia, including live systems, systems being piloted, and systems in the pipeline.

11. **Moreover, the NBC is promoting interoperability of domestic debit card payments by establishing the *Cambodian Shared Switch (CSS)*.** The CSS aims to enable central clearing for all banks and other financial institutions and, therefore, increasing the convenience and reducing costs for customers and members of the switch. The CSS is also intended to support e-commerce transactions and innovative payment instruments and to increase the number of people with access to financial services. Finally, the NBC is strongly pushing for the launch of *Bakong* in 2020. The Bakong system, which is currently being tested, builds on a wallet-based platform employing a permissioned distributed-ledger technology (DLT) network, and is currently designed for the execution of low-value transactions.

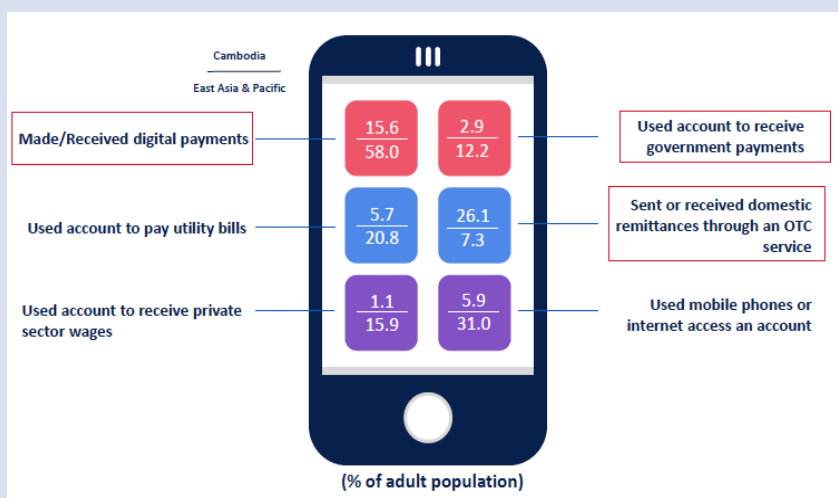
2.2 PAYMENT SERVICES

12. There is a growing number of payment services providers (PSPs) in Cambodia and yet the use of digital payments is very limited (Box 1). As of 2018 there are 16 PSIs operational in Cambodia, this is up from 10 in 2017 and 8 in 2016. Usage of mobile money accounts in Cambodia is low, with only 5.7 percent of the population utilizing an account. This is down from 13.3 percent in 2014. Fifteen percent of adults have made or received a digital payment; this number, too, is declining – with over 17 percent having done so in 2014. Only 1 percent of private sector employees and 2.9 percent of adults received their salary or government payment, respectively, into an account in 2017.¹³ It seems, however, that the prospects for digital payments growth are considerable.¹⁴

Box 1. Digital Payments in Cambodia¹⁵

Despite rising smartphone and mobile broadband penetration as well as consumers' increasing comfort in using digital products and solutions, progress remains slow in Cambodia in improving access to financial services in general and the adoption of digital payments in particular. The most comprehensive dataset on financial inclusion is the World Bank's Global Findex database. Through a triennial survey covering 140 countries, the database records how adults (defined as people above the age of 15) make payments, save, borrow, and manage risks. According to the 2017 survey, only 22 percent of Cambodian adults reported having an account of some sort, virtually no change from the last survey in 2014. This is far below the world average (69 percent) and compares unfavorably with countries in East Asia and the Pacific (74 percent) and peers in the lower-middle-income group (58 percent).

Use of Digital Payment Methods in Cambodia and East Asia & Pacific



This low level of account ownership appears to be a result of the failure of traditional financial institutions to provide what consumers want. The three key reasons Cambodian respondents gave for not having an account were insufficient funds (likely because the minimum balance required to open a bank account is beyond what most respondents could set aside), a lack of necessary documentation (possibly because the know-your-customer process during account opening is too onerous), and the distance to the nearest financial institution. Without a basic bank account, it is no surprise that only a very small proportion of Cambodian adults had access to traditional payments and credit products such as debit cards (7.19 percent) and credit cards (0.55 percent).

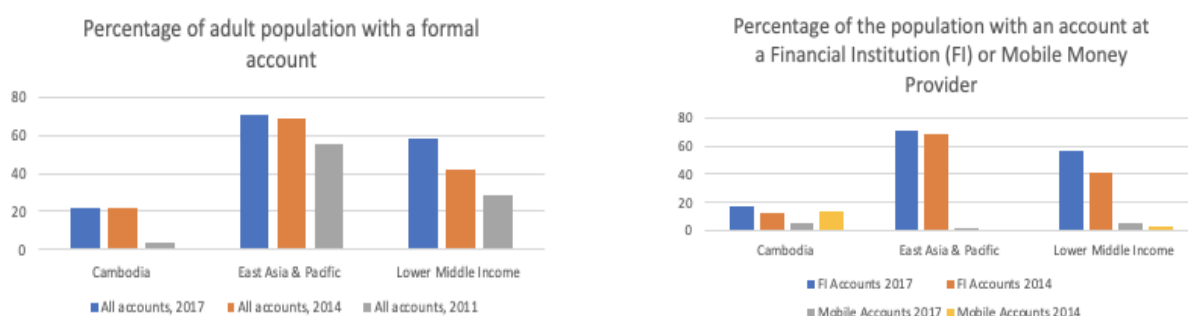
What is more surprising is that, despite the gap between current customer needs and what traditional financial institutions are able to provide, innovative payments service providers such as mobile money providers are no more successful at signing up a meaningful share of unbanked Cambodians. Only 5.7 percent of Cambodian adults had a mobile money account in 2017. Moreover, even though the uptake of social media in Cambodia has been nothing short of phenomenal, Cambodian consumers are still reluctant to adopt mobile

banking and digital payments. In 2017 just six and two percent of Cambodians aged 15- 65 reported using e-commerce and payments apps, respectively.

While comprehensive statistics on cash vs. non-cash transactions in Cambodia are absent, available data suggest that current use of digital payments is negligible. The value of mobile payments in Cambodia was approximately \$3 billion or just 14 percent of GDP in 2017. For comparison, digital payments totaled \$41.5 trillion in China in 2018, an amount equivalent to almost 300 percent of GDP. Furthermore, though a significant portion (42 percent) of Cambodian adults send and receive domestic remittances, the vast majority of these transactions (63 percent) still occur over the counter in cash. Very few Cambodians make or receive payments through their mobile phones.

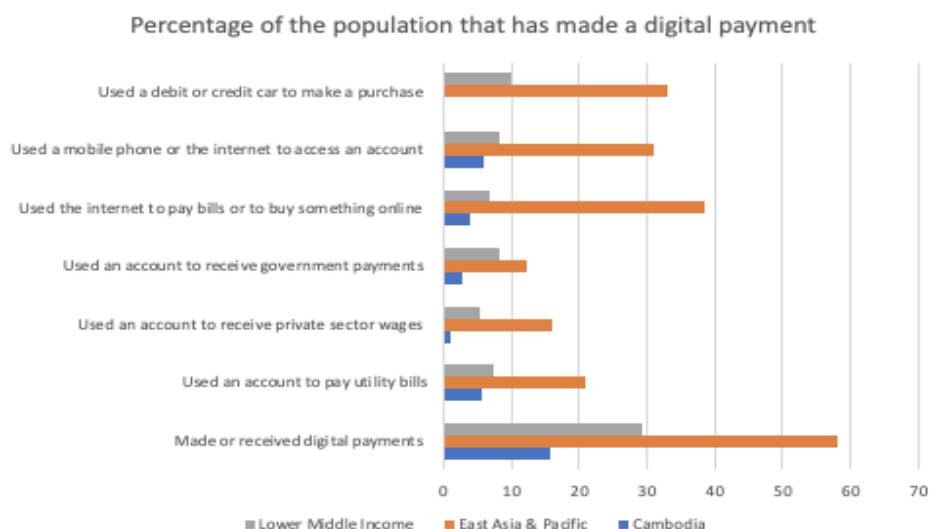
13. Low usage of digital payments is indicative of very low financial inclusion levels throughout the country. As shown in Figure 2, account ownership in Cambodia is one of the lowest in the East Asia and Pacific, with only 21.7 percent of Cambodians currently having access to an account. This compares to a regional average of 70.6 percent. When compared to other lower middle-income countries, Cambodia falls far behind the group average of 57.8 percent. Whilst account usage is low (as shown in Figure 3), there has been good growth over the last 6 years with account ownership increasing from 3.7 percent in 2011 to the current level of 21.7 percent.¹⁶

Figure 2 Key financial inclusion indicators for Cambodia



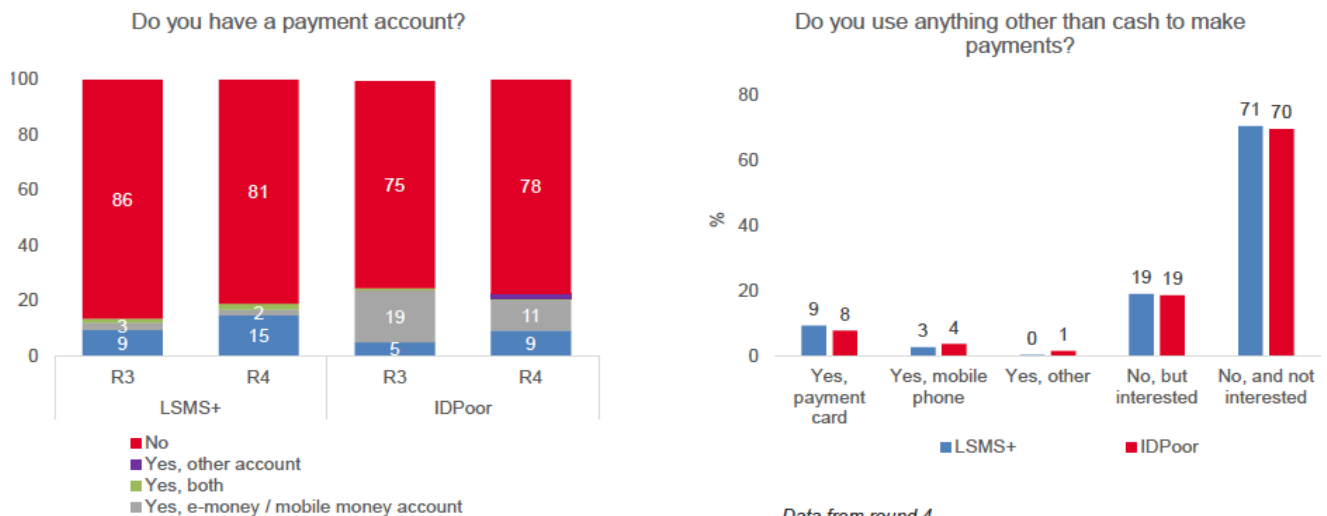
Source: World Bank's 2017 Global Findex Database

Figure 3 Digital payments usage in Cambodia



14. The most recent survey covering IDPoor (see Box 2 on page 14) households confirms that most of them are still unbanked and prefer to make payments in cash rather than using other payment devices (Figure 4). **With limited or no access to e-money facilities especially by the poor, physical cash had to be relied upon to make government funds available to people who had no alternative means to receive it.**

Figure 4 Access to payment instruments among the IDPoor population in Cambodia



Data from round 4.

Source: Results from Round 4 of the Cambodia COVID-19 High Frequency Phone Survey, The World Bank, The European Union, and Australian Aid.

15. **Demand side elements contribute to the low levels of financial inclusion and interest in digital payments in Cambodia.** On the one hand, financial literacy levels are low, especially among the low-income population. In a recent survey, the share of respondents who answered correctly five out of seven financial knowledge questions, which is considered the minimum target level, was 17 percent (compared to 26.6 percent in Vietnam, another low-scoring country). The basic financial needs are satisfied by cash and cash-based services such as over-the-counter person-to-person payments. Even in urban areas where e-commerce is growing and digital financial services are becoming increasingly available, cash-on-delivery is often preferred to digital payment options.

16. **At the same time, several supply-side factors seem to be hindering rather than stimulating the demand.** For instance, acceptance of digital payments is still very limited, and merchants have little incentive to accept cashless payments. QR codes, which are becoming prevalent in the region as a lower cost way to quickly increase acceptance, are also being adopted in Cambodia; however, fragmentation and lack of interoperability is a concern. Pricing for some services may also be too high especially for low-value transactions, although additional data and analysis are needed to confirm this. Innovation in some segments of the market, such as payments aggregation, gateway, and other back-end services, is limited.

3 GOVERNMENT PAYMENTS

17. The provision of digital GPPs is very limited. Its development potential has been suffering from the largely siloed and fragmented organization that so far has affected the whole digital government agenda,¹⁷ and still suffers from a number of key bottlenecks.¹⁸ Although two government-wide e-government programs have been attempted in Cambodia, at present the country does not have a unified national government portal. The result is a variety of user interface styles, many of which resemble earlier generations of website design. The typical government website is simple and focused on providing information. The Ministry of Posts and Telecom has established a National Data Center, which hosts the government email platform, a Content Management System, and some agency websites. Yet, it is unclear whether the ministry will be able to reduce fragmentation among agencies and whether it has the capacity to provide large-scale data center services at a sufficient level. Other agencies are investing in their own data centers, and several use private cloud services for data storage.¹⁹

18. Some online services are available to citizens and businesses, but these do not include payments. The most mature of these services is the business registration process on the Ministry of Commerce website. The process can be completed entirely online, including payment. Payment can be made offline, but the receipt must be physically submitted before registration can be completed.²⁰ While tax registration and payment can be performed online to some degree, taxes cannot be filed electronically. Registration can be partially completed online, but the taxpayer still needs to visit the General Department of Taxation (GDT) to complete the process. An e-payment service is available but is limited to specific banks, and the service is only available to customers of specific internet service providers. E-customs is transactional but not connected with other systems.

19. The absence of a centralized multilateral payments platform linking all banks and billers is a key constraint to more versatile online services delivery by government and private companies. While power bills in urban areas and water bills in Phnom Penh can be paid online, this service is only available through certain bank channels and third-party payment facilities. The government and private companies could provide many more services online if a centralized multilateral payments platform linking all banks and billers could be developed.

20. Several institutions are involved in digital government development, with no clear leadership and significant coordination issues, and overall planning and budgeting for digital government are not systematic. Cambodia has a decentralized Treasury Single Account (TSA). However, the Financial Management Information System does not have a budget planning and formulation module, and there is no e-procurement. In addition, each agency makes its own decisions on solutions and infrastructure investment and includes them as part of their budget proposals. These decisions are not discussed by an interinstitutional committee or subject to central scrutiny, although funding decisions are ultimately processed by Ministry of Economy and Finance (MEF). The absence of central review and coordination has resulted in redundant infrastructure and data communication channels, duplication of efforts, and inefficient deployment of software and licensing, which undermines data compatibility and system interoperability and makes re-engineering costlier. In addition, since ICT spending is spread across the entire government and appears in different spending categories, expenditure tracking and comparison to global benchmarks are more difficult.

21. **On the social assistance front, Cambodia has in place several social insurance, social assistance, and labor market programs to reduce poverty and support vulnerable groups, but their provision is highly fragmented and still largely unautomated (Figure 5).** Social assistance in Cambodia lacks consistency across programs in terms of targeting criteria and most programs have been designed to address specific problems or needs rather than as building blocks of a larger and more coherent system; programs have patchy coverage, target different geographic locations and groups, and have no interoperable information systems or common delivery platforms.²¹

Figure 5 Current Social Assistance Delivery Program 2020-2025

Program	Benefit Rate	Frequency of Payment	Mode of payment	Geographical Target
CTP-PWC	\$190 for two years - \$10- 4 times during pregnancy - \$50- 1 time for delivery (baby bonus) - \$10- 10 times for post delivery and child vaccination	Schedule based	Electronic-payment	Nation-wide
Disability Allowance	Current values set at \$15 (not implement), \$30 or \$60 (based on three different levels of disability)	\$30- moderate/year \$60 severe/ year	Distribute by PDoSVy/District Deposited manually into beneficiaries' bank account (5%)	Target commune, in some districts and some provinces (2020= 524 target communes, in 64 districts, 8 provinces)
Scholarships	60\$ Primary: Children grade 1-6 Secondary: Children grade 7-9	Three times a year	Cash delivery ceremony	Will check

CTP-PWC: Cash Transfer Program-Pregnant Women and Children; PDoSVy: Provincial Departments of Social Affairs.
Source: MoSVY.

3.1 RECENT INITIATIVES

22. **In support of the broader digital economy agenda, the Government of Cambodia is committed to modernizing its payment methods.**²² The Government has already made progress in moving payments to/from public administrations to digital instruments, reducing payments in cash, and facilitating digital transactions:

- Salaries of civil servants and pensions are paid mostly through bank accounts. Government arrangements for salary and pension payments are through direct transfer to bank accounts of civil servant and pension recipients. Financial Management Information Systems (FMIS) have been used to facilitate these payments, although processes may involve partly automated and partly manual processes, depending on the ministries involved, since process streamlining is currently still ongoing.
- A TSA has been introduced and held at the NBC. Phase 1 of the MEF's Financial Management Information System project, funded by the World Bank, was completed in 2016 triggering payments and revenue collections were to be made through banks. In Phase 2, the program was expanded to line ministries and major government agencies.
- In 2019, the Government has established a National Payments Gateway Working Group. In this context, UnionPay International (UPI) has proposed to the MEF the establishment of a national payments gateway that can be linked with the CamDX system, a data exchange

platform that connects Cambodia's digital government services to users. The UPI's proposed system has its own digital wallet and is implemented as an open loop interoperating with any existing banks and payment service providers.

- The Customs and Excise Department, in cooperation with two banks, has established a portal through which traders can file returns and make payments once liabilities are calculated. Similarly, the GDT and the Department of State Property and Non-Tax Revenue, in cooperation with select groups of banks, are setting up electronic platforms for the collection of dues. Looking forward, the implementation of the RTGS system, CSS and Bakong can facilitate electronic tax collection and boost the use of cashless payment technologies, including for payment of public services and disbursement of social benefits.²³
- In 2020, the GDT indicated its strong interest and determination in setting up a platform (referred to as "Government e-gateway"), which would give the GDT full visibility on all electronic transactions executed in Cambodia, with the aim to expand the country's tax base and to ensure higher tax compliance across the country.
- In 2020, the Government passed the law on e-commerce, which regulates domestic and cross-border activities in Cambodia, including all commercial and civil acts, documents, and transactions executed via an electronic system (unless subject to exemptions as per law provision), recognizes the validity, legal effect, admissibility, and enforceability of electronic communications, confirms that contracts can be made electronically, and provides that electronic communications may satisfy requirements imposed by outdated laws (e.g., "written," "signed," or "original" documents), if they fulfill certain conditions set out in the law.
- In 2020, as a response to the COVID-19 pandemic, the Government has used technology to the extent possible to deliver cash to households, especially the poorest. Lessons have been learned from the experience, which can be used moving forward along digitalization of payment services (see below).
- The Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) is taking steps towards enhancing delivery of social protection. In the context of the Family Package Policy currently under design, consideration is being given to harmonizing delivery systems across social assistance programs/agencies to build common delivery platforms, developing a vision for data management and interoperability, and promoting good governance by reducing opportunities for leakages during delivery, instituting fraud and feedback management, conflict resolutions and articulating clear demarcation of roles and responsibilities across governance levels. Attention is being placed on the need to streamline the payment delivery mechanisms by designing a more centrally managed and standardized process aimed to gain efficiency and effectiveness in reaching the beneficiaries. All this would be supported through the development of an integrated management information system (MIS), the adoption of digital payment methods, and the use of multiple PSPs.
- An inter-agency working group has been established, led by the National Social Protection Council (NSPC), to reform important aspects of Cambodia's GPPs, including by creating a national payments gateway, a digital platform for social protection, and a unified interface for government payments collection, leveraging the Bakong system.

4 COVID-19 SOCIAL RELIEF PAYMENTS

4.1 PROGRAM DESCRIPTION

23. **In response to the challenges from the COVID-19 pandemic, the Government has set up a comprehensive response and fiscal stimulus package.** The response aimed to address the health, social, and economic impacts from the crisis. The Government has introduced, inter alia, social protection to poor and vulnerable groups and economic measures that include wage subsidies and tax relief for businesses in hard hit sectors, a Cash for Work program to create job opportunities in rural areas, a support facility to small and medium enterprises (SME), and low interest loans to struggling businesses through the newly established SME Bank and the Agricultural and Rural Development Bank. Social assistance has been extended to the poor and vulnerable households utilizing the existing IDPoor database to deliver cash transfer to 2.4 million registered poor individuals. Based on the Pregnant Women program as a model for delivering immediate relief assistance (Box 2), the cash transfer program has been the largest component of the Government's support package, estimated at \$300 million and implemented nationwide over a period of 7 months to support the poor and vulnerable groups, including people with disabilities, elderly, children, and people living with HIV/AIDS.²⁴

Box 2. Cambodia's Social Protection Response to COVID-19

Bracing for the economic impact of COVID-19, the Royal Government of Cambodia moved quickly to fund and scale up a cash transfer program for poor households. Before COVID-19, as of early 2020, 506,000 households (approximately 15 per cent of the population) were identified as poor through the country's poverty identification system known as IDPoor, thereby qualifying for a number of social services. Developed within the Ministry of Planning (MOP) since 2005, the IDPoor system uses a proxy means test implemented by community members themselves to identify households living in poverty. Each year approximately a third of villages on a rolling basis conduct the extensive community-led process, ensuring all urban and rural areas are covered during a three-year period. Since 2011, all services for poor people are required by law to use IDPoor to target beneficiaries. Currently households with an IDPoor 'equity' card can access several national programs, for example, free access to health care under the Health Equity Fund; financial assistance via the Cash Transfer Programme for Poor Pregnant Women and Children (0–2 years old); and the Scholarship Programme for Children in Primary and Secondary Schools.

The social protection response to the COVID-19 crisis built on the existing infrastructure of the Cash Transfer Programme for Poor Pregnant Women and Children. Any IDPoor equity card holder can register with an administrator at commune level and receive an account from an e-payment provider (see Box 3). The cash transfer program is implemented primarily by MOP and MOSVY. The MOP is responsible for beneficiary identification through IDPoor, including making data on eligible households available to the MOSVY, which manages registration, benefit calculations and payment processes.

The use of handheld tablets for data entry and authorizing commune councils to review household interview results, rather than sending them to the provincial level, had been piloted as part of a more streamlined process to ensure greater inclusion. The majority of contact was remote, with MOP staff providing implementation support via phone, telegram and web-based meetings, and support visits where necessary. The MOP also created printed training materials and online tutorial videos accessible via the OD-IDPoor app. The OD-IDPoor roll-out meant that a household could apply for and receive their IDPoor equity card within weeks, and then immediately go to a registration site in their commune to sign up for the cash transfer program, where their eligibility data would already be visible in the system, and payments could be authorized.²⁵

Due to a high level of commitment from local stakeholders, the nationwide implementation of OD-IDPoor was successfully completed in all of Cambodia's 1,646 communes in a period of only a few weeks in May 2020. As of November 2020, 697,000 households (3 million individuals) were eligible to receive the cash transfer benefit.

Source: *Policy in Focus*, The International Policy Centre for Inclusive Growth, Volume 19, Issue No. 1, March 2021.

24. The implementation has been challenging and yet successful. The Government (through relevant ministries) has been working closely with development partners to ensure affordability and to develop a comprehensive implementation plan including identification, registration, linking to banking and mobile payment systems, and building the capacity of at least 30,000 program implementers and commune officials to ensure prompt delivery of this social assistance program.²⁶ This was the first time a social protection program covered all citizens in poverty (as defined by IDPoor) and was achieved in a remarkably short time frame through an effective, ad-hoc payment mechanism (Box 3).

Box 3. Social Assistance Delivery Program: The Payment Mechanism

The payment mechanism of the program relies on the services of Wing, a leading mobile payments provider in Cambodia, and its network of more than 9 thousand payment agents across the country. Eligible beneficiaries (heads of household) register for the program with their IDPoor cards in presence of commune council members (who verify household identity) and Wing agents and activate an account. The account is not a fully-fledged mobile money account, it does not require a phone number, and is dedicated to the transfer program exclusively (in fact, the account may not be visible to the beneficiary). Beneficiaries then visit a Wing agent and set up a personal identification number (PIN), which allows them—along with their IDPoor card—to collect cash at a Wing agent every month. Wing is given automated access to relevant fields of the IDPoor database via an Application Programming Interface (API), so that each account can be associated with every owner’s IDPoor number and receives government money to fund cash collection by beneficiaries. By agreement, Wing would set up new agents in any location that would not be well serviced.

The distribution of funds was remarkably smooth given the circumstances. Some challenges were encountered during implementation, especially in the initial stages, but these seem to have affected a minority of transfers. The most frequently reported challenges included implementation aspects (unstable internet connection, issues with timely handling of complaints, limited monitoring capacity); issues at the level of the Commune office (limited capacity of some commune officials or untimely replacement of trained officials, not enough awareness raising, and occasional unlawful practices); and, issues at the level of the household (lack of awareness of the program, lost stolen or damaged cards, forgotten PIN, unpermitted sharing of benefit card, difficulty in withdrawing funds by non-head of households).

25. Forthcoming analysis by the World Bank finds that the relief transfers were highly valued by the recipients. 78 percent considered the transfers to be either extremely important or very important to their wellbeing. A similar share reported that the transfers mattered a lot for their wellbeing. Furthermore, households that received a larger amount of transfers are more likely to have better living conditions. Households that received a larger amount of transfers are more likely to report an increase household wellbeing compared to pre-pandemic (Jan 2020) or pre-relief (June 2020) period. They are also less likely to report food scarcity and have a more optimistic outlook about their wellbeing in the coming months.

4.2 LESSONS LEARNED

26. The payment mechanism was designed with the sole purpose of delivering cash rapidly to beneficiaries, as cash was the quickest option available in the country at such time of high pressure. In this context, the only available option to disburse funds quickly and effectively to those in need was to leverage an existing network of agents to disburse physical cash. Wing has the most extensive territorial reach across the country, to which they were also able to add a commitment to set up new agents in any location that would not be well serviced in the first place. However, despite Wing being a provider of digital payment services, its innovative potential could not be fully put to use beyond the mere cash-out transaction. Moreover, moving forward, exclusive reliance on a single provider for the distribution of social benefits and other Government payments clearly risks reinforcing the dominance of that one provider in the market.

27. Technology has indeed helped all along the pre-delivery phase, in a context that was constrained by mobility restrictions and social distancing. Yet, with limited or no access to e-money facilities especially from the poor, physical cash had to be relied upon to make government funds available to people who had no alternative means to receive it. Also, only one single provider could be used, since no others had comparable territorial reach across the country. Thus, looking forward, the solution that was adopted, though practical given the circumstances, is anything but ideal for modernization, since it neither contributes to financial inclusion nor does it provide beneficiaries with choices. It has proven

effective as an immediate remedy to an emergency, but it cannot constitute a springboard for future developments.

28. Thus, lessons should be learned in view of undertaking future reforms of GPPs – as the National Social Protection Council (NSPC) is already in the process of doing. For instance, a program whose delivery mechanisms is essentially centered on the role of the heads of households, who may typically be the least prepared members of society to accept and use digital instruments, cannot be conducive to digitalization: more will need to be done to promote financial literacy among the beneficiaries and communicate with the youngest segments of the population about future program developments. In particular, greater efforts will have to be coordinated at the national level to promote use of digital payment services and discouraging use of cash, including through education and awareness initiatives on how to access and use digital payment services, how to use mobile wallets through mobile phones, and how digital channels enable users to make transactions, from transferring money to receiving salaries and financial assistance electronically from the Government.^{27, 28} At the same time, it will be necessary to improve existing payment infrastructures and use them more efficiently. These and other measures discussed in Section 5 should be considered strategically as ways not only to further strengthen the resilience of the economy and society to crises but also to modernize GPP delivery services as part of a fast-developing economy, like Cambodia, and more broadly to facilitate access from all its population to digital financial services.

4.3 RECOMMENDATIONS

4.3.1 Improving G2P payments in the current scenario

29. As mentioned above, the COVID-19 relief transfer program was effective in reaching many beneficiaries within the short time available, dictated by the emergency. Some improvements could be considered for similar endeavors in the near future, assuming the current scenario is largely unchanged from a regulatory, infrastructure, and financial inclusion, and education perspective.

30. The National Bank of Cambodia (NBC) should be considered an important stakeholder when discussing G2P payment mechanisms. The NBC is the overseer of the National Payments System (NPS). As such, the NBC should ensure the smooth, safe, and efficient functioning of the NPS, of which G2P payments are also a part. The NBC's voice is particularly relevant in guiding other RGC agencies through the available options for disbursing G2P payments to identify the most efficient alternatives. This should also include how to leverage the NPS infrastructure (that is, the systems operated by the NBC). Also, given the magnitude of G2P programs, the NBC should assess the potential impact of the payment mechanism on competition in the payments market. Finally, the NBC should bring the financial inclusion perspective, as G2Ps payments are considered among the effective use cases that could help expand financial inclusion.²⁹

31. Greater effort should be made to consider more than one provider for the distribution of G2P payments. When distributing G2P payments, an effective go-to option is often to leverage the agent network of the largest payment service provider in the country. While achieving the objective in the short term, especially when quick scale up is of essence, this can end up having a negative impact on the market for payment services in the country. G2P payments allow the leading provider to further strengthen its position in the market, further expand its network of agents or branches, and increase trust and brand recognition among the population. This in turn can make it even more challenging for other players to emerge, thereby distorting competition in the market. Eventually, this may even end

up making future G2P programs more costly, as the dominant player may then be able to negotiate higher processing fees.

32. Beneficiaries could be given the option of receiving the funds digitally onto an account or wallet.

Cash is by far the preferred option of G2P beneficiaries in Cambodia, as seen above. However, distribution of social benefits should be an important opportunity to advance adoption and use of transaction accounts and other financial services. G2P programs could be a unique opportunity for the RGC to promote financial inclusion in Cambodia, increasing the familiarity and trust of beneficiaries of social payments in digital instruments. While times may not be ripe for digital payment instruments to be the only (or even the default) option in Cambodia, given the low levels of financial literacy, giving beneficiaries at least the option to receive money into accounts or wallets, while providing some basic financial literacy message to encourage this option, could be a good first step.

4.3.2 Improving G2P payments: a potential future scenario

33. G2P delivery could be further improved in Cambodia if a more substantial reform agenda were developed by the RGC.

By embracing a more ambitious reform agenda and increasing coordination among different authorities, the RGC may be able to significantly improve the efficiency and effectiveness of G2P delivery in Cambodia in the near future. This could be developed following a similar approach as in Indonesia, where the government, with support from the World Bank, is developing a comprehensive set of reforms (known as G2P 4.0) to improve G2P delivery mechanisms in the country.

34. The NPS infrastructure operated by the NBC could be leveraged for the distribution of G2P payments in Cambodia.

The NBC operates several payment systems (see Figure 1 on page 8 **Error! Reference source not found.**), some of which may have the capability to disburse funds into multiple bank accounts or e-money wallets at once (that is, batch payments). This feature would allow the government to disburse social benefits quickly and efficiently into the beneficiary accounts. The broad participation of banks and non-bank payment service providers in the relevant payment system would allow maximizing the benefits of this approach. The current fragmentation of the NPS infrastructure may hinder such broad participation; hence, the NBC should review the overall architecture of the NPS holistically and strategically.

35. Beneficiaries of social payments could be given a full choice of provider and payment methods.

This would stimulate competition in the market and could motivate payment service providers to develop specific products aimed at expanding their customer base among the low-income population. For instance, at some points during the distribution of COVID-19 relief transfers, the demand for savings was over 10 percent,³⁰ but this demand was not met by any product offering since beneficiaries could only withdraw cash. At first, to ensure a smooth transition and avoid the possibility that anyone in need of funds is unable to receive them, the option to receive cash could be maintained. However, the option to receive the funds into an account should be considered the default method.

36. Financial education and consumer protection should be an imperative part of this reform effort.

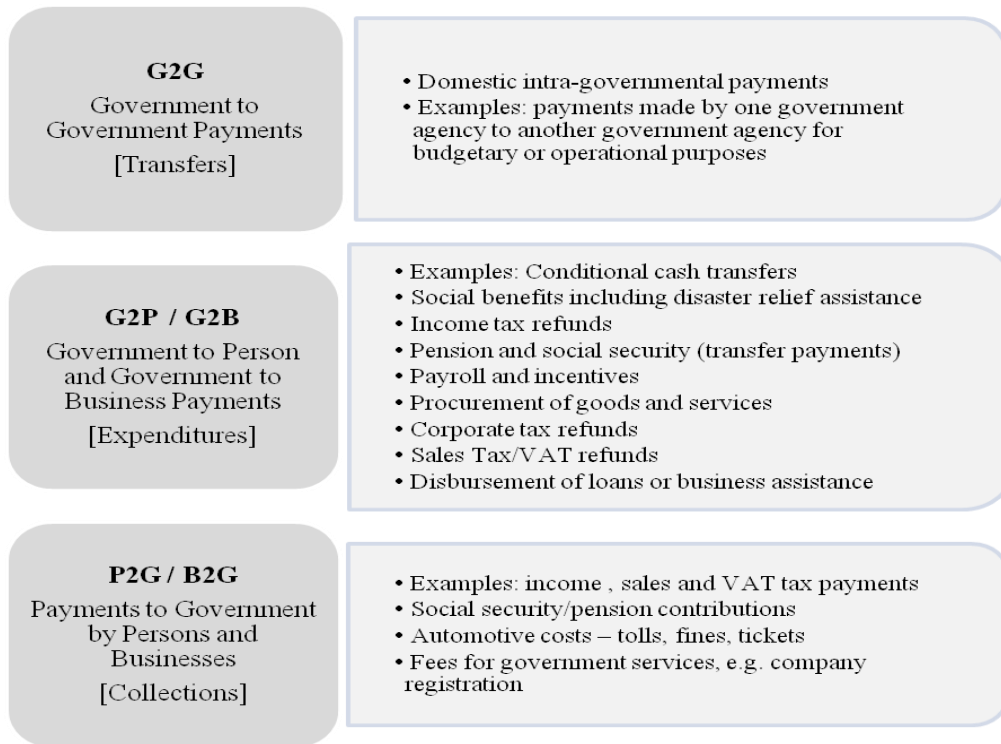
As new customers are reached by financial services with which they were not previously familiar, it will be critical to accompany them in the process, taking the opportunity to provide basic financial and digital literacy for the beneficiaries. Consumer protection, including adequate redress mechanisms, should also be in place to ensure beneficiaries can easily resolve any issue with the service provided.

5 REFORMING GPPs: A STRATEGIC APPROACH

37. **The experience with emergency assistance during COVID-19 is an opportunity for the Government to reform its payment programs in the context of the review of country’s system of social benefits.** GPPs should support the sound, efficient and transparent management of public financial resources. In addition, efforts to modernize GPPs should be leveraged to accelerate the development of the NPS more broadly and to promote financial inclusion. They should therefore be safe, reliable, and cost-effective.

38. **This section lays out a strategic framework for GPP reform.** Starting with the definition of an operational objective, the framework identifies the essential components of the framework, and designs operational arrangements for delivering safe, efficient, and inclusive GPPs. For the purpose of this report, “government payment programs” are defined to include government disbursements and collections, and the expression “delivery of digital GPPs” refers to the execution of government payments to/from users through electronic instruments and channels. Also, the expression “government payment program(s)” refers exclusively to the payment aspects of these programs (e.g., the regulations, policies, and entities involved in the execution of the payments associated to the programs) and does not extend to the aspects that relate to the social or economic rationale of these programs, their budgetary implications, their associated entitlements or obligations, the selection and enrollment of beneficiaries, the identification and registration of contributors, etc. Also, this section will adopt the terminology used in the World Bank’s *General Guidelines for the Development of Government Payment Programs* (cit.), in particular as concerns the key types of government payments (Figure 6), the processing of government payments, and the payment instruments and systems used to execute GPPs. Finally, in some cases, beneficiaries and/or contributors of government payments will more broadly be referred to as GPP *users* or *customers*.

Figure 6 Types of Government payments



5.1 DIGITALIZING GPPs: CHALLENGES³¹

39. Governments have a fundamental role to play in building the foundations for safe, efficient, and inclusive GPPs. In particular, they can do a lot to support both the supply and delivery side of GPP services as well as to encourage the demand for such services from the public. However, this requires using a holistic approach to GPP reform and the coordination of a large set of actions to be taken on several fronts, given the relevance of the challenges that may hamper the transition to digital GPPs.³² An increasing number of countries have initiated the transition to digital GPPs, yet in some cases the process has been stifled by bottlenecks, including inter alia ineffective systems or inadequate policies that have limited the incentives or capacities necessary to achieve the desired objectives. Failure to resolve the issues at hand may risk not just to slow down the transition process, but to damage the credibility of the government plans in the eyes of the citizens and to weaken public confidence in payment innovations.³³ Annex 1 discusses a number of significant challenges that may be encountered in the transition process toward digital GPPs.

5.2 THE STRATEGIC FRAMEWORK

40. Reforming GPPs, and addressing the challenges that such endeavor typically raises, requires the authorities to take a number of important steps. Objectives must be defined and clearly articulated into realistic operational targets, tools must be used to achieve the objectives effectively and efficiently, and stakeholders must be involved and induced to cooperate to the same end. A holistic strategic approach is therefore necessary. The framework here proposed is inspired to the following Vision and Mission:

The Government of Cambodia commits to achieving the highest quality of GPP delivery by ensuring that (i) all components of GPP delivery are digitalized end-to-end, and (ii) all government payments from/to all individuals and businesses in the country reach the right party,³⁴ for the right purpose, at the right time, in the right place, and in the right form, in a safe and efficient manner, and in the correct amount; Government also commits to (iii) ensuring that GPPs evolve over time so as to promptly satisfy the changing needs of the economy and society.

41. The Vision and Mission subsumes an integrated approach that links together the transition to digital GPPs with NPS modernization and financial inclusion, in the context of Cambodia’s economic development and financial stability. This implies that as Cambodia develops its NPS infrastructure (especially the retail segment) and pursues financial inclusion of financially excluded people, the transition to digital GPPs should be considered as a key pillar supporting both objectives.³⁵ Similarly, the Government should act strategically and involve all relevant NPS and financial inclusion stakeholders both to ensure full consistency between GPP plans, NPS development and financial inclusion and to exploit maximum synergies from their integration.

42. The Vision and Mission requires, in principle, that the full business process of digital GPP delivery be digitalized, not just its payments component. Digitalizing payments, only, would not be enough to generate the full efficiency gains that are expected from the transition to digital GPPs, since people receiving/making payments from/to government might still need to spend unnecessary time to submit paper documents (e.g., certificates, forms, records, etc.) and to have such documents validated by government officials. In situations like this, electronic payment solutions would not eliminate the need for consumers to go to government offices and stand in long lines, which diminishes the value of electronic payments.³⁶ Nor do electronic payment solutions by themselves fully address governance and control issues (e.g., protection from misuse of funds, fraud or corruption), as they merely shift the point at which unauthorized third-parties or criminal actors may skim off part of the funds exchanged. Instrumental to achieving the strategic objective as operationalized above is that GPPs be made “end-to-end digital,” that is, the exchange of value underpinning them should be digital from initiation to fund transfer to settlement and disbursement.³⁷ This requires that the transition to digital GPPs be coordinated with the e-government agenda, so that all components of GPP service delivery are treated integrally within the transition plan to digital GPPs.

43. The Vision and Mission requires the Government to adopt a neutral approach to technology and to take on a developmental orientation to digital GPPs. Ultimately (and ideally), every individual or business agent should be able to make/receive government payments using any means, through any provider of choice, and to/from any place in the country. Multiple options (in terms of instruments, channels, and providers) should be available to all users, and the rise of alternative options as well as of preferences leading to choices should be left to the interplay of market demand and supply. Government should facilitate such market interplay and create the conditions for promoting the greatest range of choices possible. In the context of a realistic and gradual approach, however, government should to a minimum ensure that all citizens and businesses, everywhere in the country, be able conveniently to access at least one basic type of electronic payment channel (including also through the help of PSP agents) for the purpose of making/receiving government payments.

44. For the purposes of this report, however, a pragmatic and gradual approach is envisaged. Accordingly, “agent-assisted” transactions (whereby agents help customers make or receive government payments using the users’ individual accounts) will be considered to be part of the

transition to digital GPPs, although they fall one step short of fully-fledged digitalization.³⁸ This approach is justified by the need to take due consideration of today's reality in Cambodia, where cash is still largely in use and the number of cash-in points is limited, making it difficult for customers – particularly the unbanked and underbanked ones – to store value electronically. At the same time, the service providers and authorities should have effective measures in place to ensure that agents do not exploit or mis-inform beneficiaries.

45. Finally, the Vision and Mission should allow to achieve a number of practical (and possibly measurable) outcomes. These include, inter alia: (i) lower transaction costs; (ii) improved management of public funds; (iii) less leakages and losses of interest on private and public funds lying idle in intermediary accounts; (iv) less time spent on the processing of administrative practices and payment execution; (v) suppression of the need for one-on-one relationships between GPPs and financial institutions; (vi) detection and elimination of ghost beneficiaries and duplications; (vii) higher volumes of electronic payments; and (viii) higher numbers of people reached by formal finance.

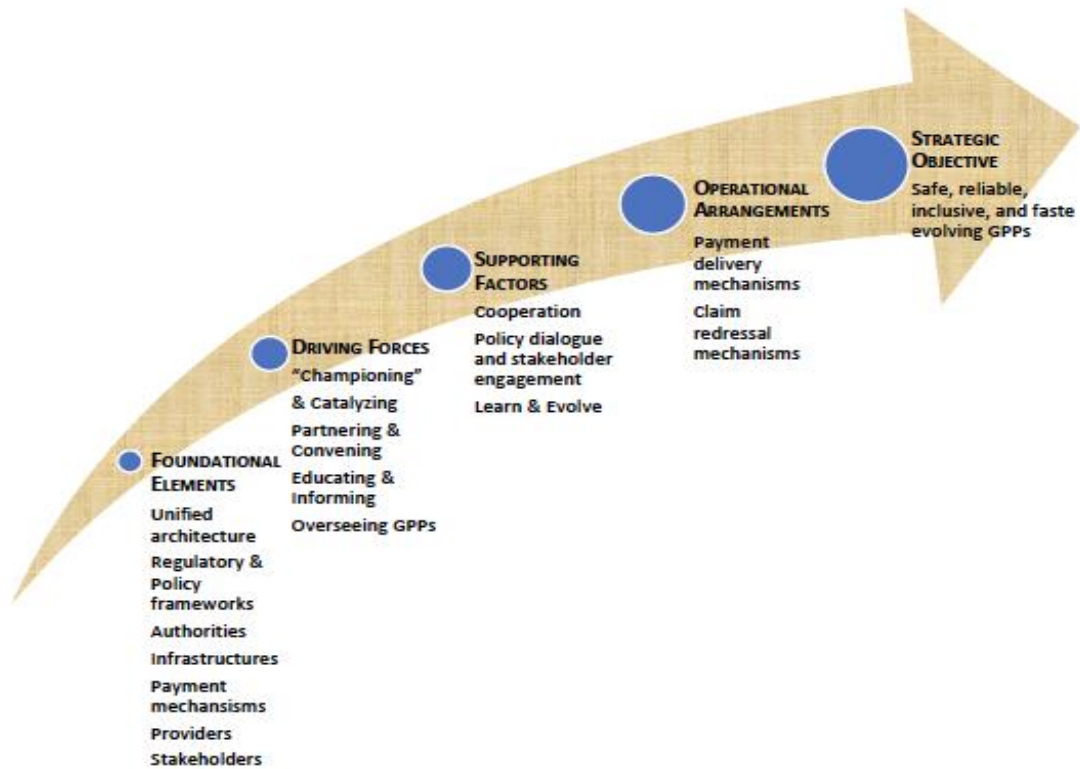
5.2.1 Strategy Components

46. The strategic framework for the transition to digital GPPs laid out in this report consists of the following components (Figure 7):

- **Foundational elements:** these are the building blocks (infrastructures, policies, and actors) underpinning the delivery of safe, efficient, and inclusive GPPs
- **Driving forces:** these include the positive dynamics that governments must set in motion to facilitate the transition to digital GPPs
- **Supporting factors:** these define the involvement of the relevant stakeholders in the transition process to digital GPPs, and their contributing roles and responsibilities
- **Operational arrangements:** these are the delivery mechanisms of digital GPPs. The first three components of the strategic framework must ultimately be conducive to the design and implementation of operational arrangements that are consistent with the strategic and operational objectives set for delivering digital GPPs
- **Strategic & operational objectives:** These include the goals that the GPP strategy is set to achieve, to be defined and clearly articulated into realistic operational targets.

The first three strategic components are described next, while the Operational arrangements – as the core component of the GPP strategy – are the subject of section 5.2.1.4 below.

Figure 7 Strategic Framework for the transition to Digital GPPs



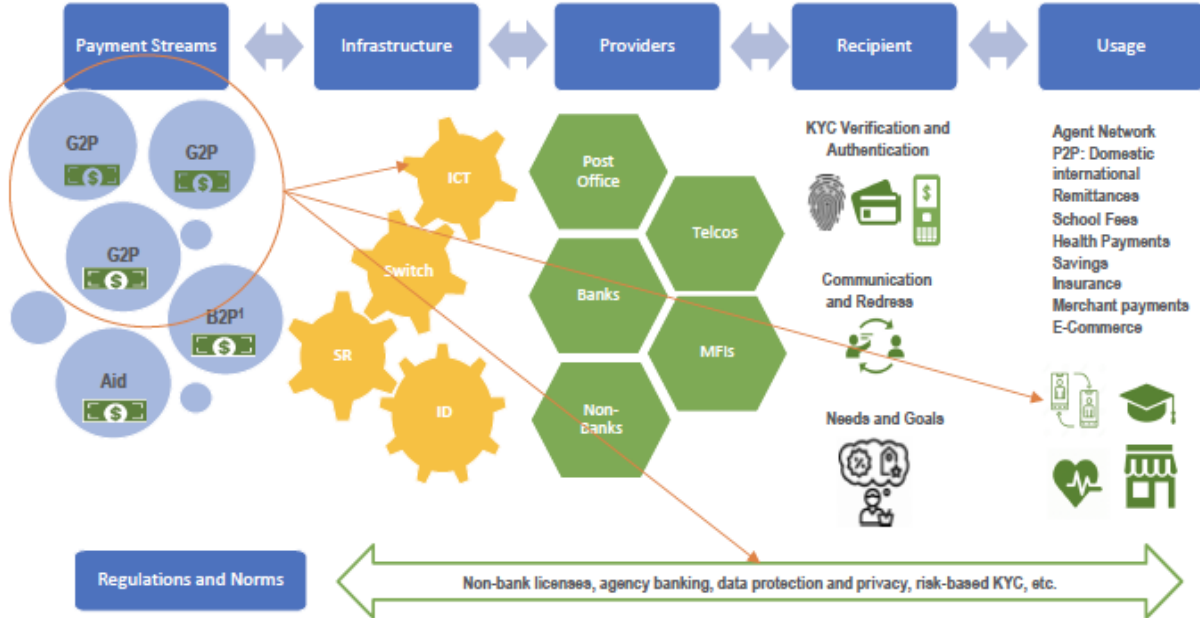
5.2.1.1 Foundational Elements

47. The transition process to digital GPPs and their delivery rest on a number of building blocks.³⁹ These include:

5.2.1.1.1 Unified architecture

48. A holistic approach to GPP reform should be inspired to, and aim at, setting up a unified GPP architecture (Figure 8). A unified architecture makes it possible to pursue consistency of strategy design, implementation, and oversight; reflects one whole single logic that enables strategy designers to identify needed common infrastructures, take an integrated approach to different systems and processes, and plan for their interoperability, where necessary; exploits synergies and economies of scale, scope and network across the payments ecosystem; and provides a coherent scenery that helps market actors to plan for an active role and participation in GPPs. Moreover, viewing GPPs together (rather than tackling them one by one) makes it easier to push for improvements and to drive changes across the NPS, especially in the context of serving rural and underserved areas and supporting financial inclusion more broadly. While pursuing a unified architecture is a complex and time-consuming task, failing to do so would likely result in inconsistencies, gaps or overlapping, which would hamper and delay the transition and make it much harder to implement.

Figure 8 Unified GPPs architecture



5.2.1.1.2 Stocktaking

49. **Initiating the transition to digital GPPs should be preceded by careful stocktaking of the country’s infrastructures supporting e-government, the NPS, and financial inclusion.** Stocktaking of the existing infrastructures should cover all procedural steps involved in payment execution and GPP provision. Stocktaking should provide a detailed review of the status quo and highlight gaps and deficiencies of existing arrangements (legal, institutional, operational, etc.) underpinning the provision and delivery of GPPs across the country. Stocktaking would prove essential to identify missing or weak building blocks in the context of the strategic framework adopted and would constitute a pre-requisite for the design of an effective transition plan to digital GPPs. Proper stocktaking requires cooperation between the GPP authority and the relevant stakeholders (as well as any critical external partners involved) in the areas of e-government, NPS, and financial inclusion, as discussed below.

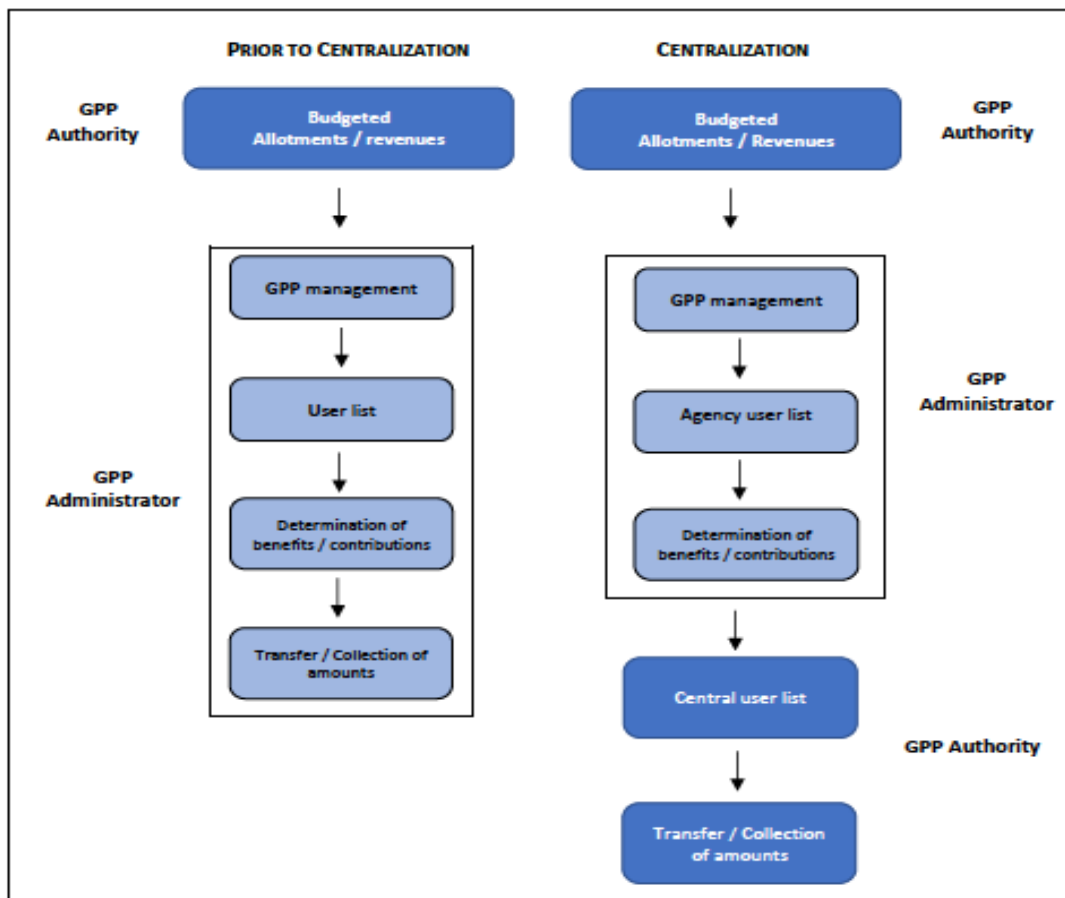
5.2.1.1.3 Regulatory & Policy frameworks

50. **Legal certainty and incentive-compatibility of policy directions are critical to create an enabling environment for the provision of safe, efficient, inclusive, and fast evolving GPPs.** They, respectively, set the rules and guiding principles for GPP implementers. However, they do not happen in a vacuum and should in fact be consistent with all relevant national laws that directly or indirectly relate to GPPs (e.g., legislation on labor, social security, public administration, financial management, financial services, information security, tax administration, etc.). In particular, to the extent that GPPs involve transfer of funds across the economy, their legal basis should fall within the purview of the extant NPS legislation (e.g., on payment systems, providers and services) and government policies for GPPs should be consistent with the policies governing the NPS (including for oversight). At the same time, when reviewing the development of the NPS legal foundations, it is important that government and NPS stakeholders consider whether and how to amend these foundations with a view to strengthening their support to the delivery of digital GPPs.

5.2.1.1.4 Authority

51. The transition of all government payments to digital GPPs requires delegating to a **central GPP authority** the responsibility to ensure the delivery of all digital government payments across all government administrations, under consistent standards of safety, efficiency, inclusiveness, and change management. After transition, the GPP administrators continue governing and managing their programs while the GPP authority becomes responsible for delivering all program payments and for handling all payment-related policy, regulatory, and operational aspects (Figure 9). The government agency to act as GPP authority would typically be the Treasury department (the “Treasury”) within the MEF. It would be responsible for designing, governing, and operating digital GPPs across government administrations, and for managing the risks associated with GPP operations, if necessary, by coordinating the GPPs administered by relevant agencies.⁴⁰ Every government program implying disbursement or collection of financial resources (e.g., for health, education, social welfare, revenues, customs, etc.) is owned by a specific government agency, which acts as **GPP administrator** and is responsible for the policy and regulatory aspects of the program, its administration and implementation.

Figure 9 Allocation of functions for GPPs



52. The **GPP authority needs adequate capacity and appropriate resource organization.** Its tasks should be assigned to a dedicated unit within the Treasury. Through automated systems, the unit would collect payments on behalf of all government agencies and execute payment orders initiated by

government agencies, through the network of PSPs participating in the delivery process of digital GPPs.⁴¹ The unit would receive payment disbursement and collection reports from the PSPs and ensure that payments are executed/received in line with instructions. When users do not have a PSP of their choice for making/receiving payments to/from government, the GPP authority would be responsible for outsourcing the delivery of digital GPPs to designated PSPs and for ensuring correct delivery. This would require defining service level agreements with individual PSPs and monitoring their execution. The GPP authority should also be responsible for the oversight of its own systems to ensure their safety and efficiency in line with international standards and best practices. Proper governance would entail separation, within the GPP authority, between those operating the systems and those responsible for overseeing system operations. The GPP authority should coordinate its oversight activity with the NPS oversight function carried out by the central bank. Cooperation and oversight will be discussed below.

5.2.1.1.5 *Infrastructures (I): Power supply*

53. A reliable supply of electricity is vital to digital GPPs. Power supply interruptions negatively affect PSPs, users, and access points, and the geographic areas with the highest rate of financial exclusion are usually those with no reliable access to electricity.⁴² Today, vendors offer solutions that minimize the impact of power outages on ATMs and POSs.⁴³ Solutions are also becoming available for charging phones conveniently and at low costs.⁴⁴

5.2.1.1.6 *Infrastructures (II): National ICT*

54. The quality and affordability of the ICT infrastructure, in particular, adequate network coverage, has direct effects on digital GPP providers, users, and access points. Increased competition, including by adopting network infrastructure (tower) sharing solutions, and opening the market to foreign operators,⁴⁵ can substantially improve a country's ICT infrastructure. Improvements can also be achieved through the use of conditional licensing requirements, whereby (domestic and foreign) operators under long-term licenses would be required to provide services across selected parts of the country within a pre-agreed number of years of starting operations.⁴⁶ Other measures could be implemented or induced to help in making access to ICT infrastructure more affordable, such as the adoption by network operators of pricing models better suited to low-income consumer environments.⁴⁷

5.2.1.1.7 *Infrastructures (III): Government ICT*

55. This foundational element comprises (i) the e-government infrastructure, (ii) the Treasury system, (iii) the government's data and financial information management systems, and (iv) the government agencies' databases and servers. The *e-government infrastructure* that is relevant for the purpose of digital GPPs includes the systems for the electronic provision of the information, goods, and services that relate to each specific GPP.⁴⁸ *Treasury system* assists the Treasury (as the GPP authority) in automating, recording, and controlling payment functions and in managing the government accounts, including verification of fund transfers between the PSPs and the government's bank. The Treasury system could be complemented by an electronic gateway platform (for payment collection), which allows transactions from individuals and businesses to be processed through a singular, centrally hosted payment webpage. The *government's data and information management system* guides the delivery process (outreach and intake) and directs the transfer of information between Treasury servers at the front- or back-end and the individual government agencies' databases and servers.⁴⁹ The *databases and servers of the government agencies* (as GPP

administrators) handle all data and information relating to the program(s) owned and governed by the agencies, including, inter alia, those necessary to assess the needs and conditions for determining GPP eligibility for enrolment, to calculate what GPP users owe or are due and when, to approve user transactions, to launch the beginning of the payment process, and to determine the time profile and frequency of GPPs.⁵⁰ Significant investment are required to ensure strong security and connectivity across both the front end and back end of GPPs and involving information security (firewalls, data encryption, etc. to protect consumer data) and physical security of data centers and information systems.

56. GPPs handling and storing electronic information about users should take account of the confidentiality of private information and data security. Internationally recognized best practices emphasize the importance of: (i) limiting data collection to only what is necessary; (ii) ensuring data quality and integrity; (iii) disclosing the purposes for which data may be used, to whom they may be communicated and under what circumstances; (iv) installing safeguards to protect data from unauthorized access, destruction, modification, or disclosure; (v) ensuring transparency of rules governing data management; (vi) protecting the right of individuals to challenge and correct their data; and (vii) designating data controllers and holding them accountable in the event of breaches of the data management rules. Data quality controls should be built into the systems to reduce failed payments due to incorrect data, and connectivity should be ensured throughout the transaction chain to allow user access and use end-to-end solutions, information transmission between front-end and back-end servers, and reconciliation of funds between user accounts and the Treasury. Government should be responsible for developing and integrating its back-end systems, while PSPs as business partners should be responsible for managing front-end solutions.

5.2.1.1.8 Infrastructures (IV): National IDentity system

57. GPPs and their partnering institutions (e.g., the PSPs that execute payments associated with GPPs) must be able to access the personal identity (ID) information of citizens as GPP beneficiaries. Digital IDs allow for the automation of customer due diligence (CDD) processes, commonly referred to as Electronic Know Your Customer (e-KYC) processes, leading to lowered costs to users.^{51, 52} A digital ID system also helps to remove duplication of social assistance transfers. Cambodia's National Identification system covers roughly 89 per cent of the population, but the country does not yet have a digital ID program in place.⁵³ The lack of such system is an impediment to superseding the current siloed approach to social protection and GPPs, whereby each government agency maintains its own database of beneficiaries. The *National Strategic Plan for Identification (2017 – 2026)* lays out the plan for an Integrated Population Identification System that will allow for a digital ID system accessible to institutions.⁵⁴ This is still a work in progress and keeping with the strategic plan, a digital ID framework-law has been drafted and is under review. The *Principles on Identification for Sustainable Development*, launched by the World Bank-hosted "Identification for Development" initiative and endorsed by many global organizations (ranging from development agencies to think tanks and industry groups), set out guidance to help facilitate the development of robust and inclusive digital ID systems.⁵⁵

5.2.1.1.9 Infrastructures (V): Payment systems

58. This foundational element includes payment switches, clearing houses, and large-value settlement systems, as well as centralized account management systems. Cambodia avails itself of a modern and dynamic payments infrastructure and should pursue its further completion and configuration.⁵⁶ An essential complement to it is the network of access points. The success of digital

GPPs depends critically on the availability, quality, and reliability of access points.⁵⁷ Limited access to either in-person or remote payment facilities reduces the likelihood that transaction accounts or electronic payment instruments are adopted and actually used.⁵⁸

5.2.1.1.10 Payment delivery mechanisms

59. Payment delivery mechanisms (PDMs) are a core part of the system governing digital GPPs. They must interact effectively with the government registries and information systems discussed earlier. Three PDM models are typically in use worldwide, each reflecting a different degree of centralization of GPP management.⁵⁹ Cambodia has adopted a centralized model based on a Treasury Single Account (TSA) held at the central bank, where all government funds and receipts are deposited and from which all payments are made/received. The model requires interconnecting the TSA with the information systems that are relevant to the government payments function and requires creating an integrated financial management information system (IFMIS) where all relevant GPP data and information are stored and recorded and can be accessed and managed electronically. This requires further interconnecting the TSA-IFMIS with the MISs at the government agencies that own and administer GPPs. The integrated system provides the Treasury with a unified view of the government's cash position at any given moment, as well with the necessary information and infrastructure to process all incoming and outgoing payments at much lower transaction costs than alternative solutions.

5.2.1.1.11 Payment service providers

60. Providers should include all (public and private, financial and nonfinancial) entities tasked with delivering digital GPPs and those that, on their own initiative, participate in the delivery of digital GPPs by providing payment or payment-related services.⁶⁰ Most GPPs operate in areas of limited infrastructure, where the poor and vulnerable live. In such cases, GPPs will need to incentivize PSPs to extend their services into those areas. To incentivize PSP investments, contract periods will have to be sufficiently long to allow PSPs to recover the investment cost. This typically requires undertaking a formal procurement process, which may be restricted to contracting with certain types of entities, depending on national rules or donor rules.

61. A detailed scoping exercise would be necessary to identify best PSPs. The GPP authority would define the parameters of outsourced payment service provision through terms of reference based on procurement rules and the service level agreements with PSPs. Yet, procuring PSPs has its own challenges, since PSPs in some cases may be unavailable or unwilling to operate in certain areas; also, the procurement process may take long and be expensive since PSPs tend to see GPP services as stand-alone silos and not as extensions of their core business, with costs being already covered. An alternative to GPP-led selection of PSPs is to enable GPP users to select PSPs. This approach is viable only where there are existing financial access points in place and users are well informed and they have the tools and possibility to choose; it empowers the users, strengthening their position vis-à-vis the PSPs and fostering competition among PSPs. This eventually leads to more choices, better quality, and stronger protection of user rights and interests. In geographical areas with good coverage of financial access points, it may be possible to offer such user-led choice; in areas of poor access, on the other hand, the traditional procurement of PSPs may be more appropriate.

5.2.1.1.12 Stakeholders

62. A successful transition to, and maintenance of, digital GPPs cannot happen in isolation. The GPP authority should team up with other public-sector institutions, starting with the central bank and including other government agencies involved in spending and collecting financial resources, and should as well engage all relevant PSPs, NPS operators, and the user community. All such entities should work as allies and constitute a building block for the success of the transition process. Cooperation and buying into the strategy from all relevant stakeholders are necessary requisites for successful transition. The challenge is how to engage stakeholders and how to make their cooperation work effectively (a subject to be discussed below).

5.2.1.2 Driving Forces

63. Governments should create positive dynamics that facilitate the transition to safe, efficient, inclusive, and fast evolving GPPs.

5.2.1.2.1 Championing & Catalyzing

64. Any ambitious policy plans, especially those involving several stakeholders with different interests and agendas, benefit from having a “champion bearing the flag.” Being an outstanding and recognized figure, a champion gives voice to issues of common concern for a community of different stakeholders, overtly advocates for addressing the voiced issues, and galvanizes public interest on the initiatives designed to tackle them. The same should hold for the transition to digital GPPs as a national strategic objective, whereby a testimonial could be chosen for the purpose, supported by a team of GPP experts and external relations professionals. Championing digital GPPs should aim to embed the transition objective into the existing dialogue between policy makers, relevant stakeholders, and any partners involved in the process (such as donors, international financial organizations, and NGOs), and to make it a relevant public subject. It would push for including it as a talking point in speeches by senior policy makers and in public appearances by political leaders; it would promote the inclusion of the subject in the public discourse on economic development and the empowerment of the poor; and it would direct focus on the subject by facilitating cross-institutional meetings of experts, officials and relevant stakeholders. Finally, by using national and local media and appropriate communication channels, championing digital GPPs would operate to disseminate knowledge systematically and to raise awareness on the subject among the public.

65. The GPP authority should act as a *catalyst* for the transition to digital GPPs. In such capacity, the authority should prompt and coordinate suitable actions by the relevant stakeholders to implement digital GPP initiatives, with the aim to achieve their acceptance and to encourage their active participation in the transition process. In cooperation with the central bank (as the agency responsible for NPS oversight and financial stability), the financial inclusion authority, and other partners as necessary, the GPP authority should carry out or outsource research activities on digital GPP design, operation and policy, and should propose or draft related legislation. Specifically, the authority should focus on policies and regulations that can facilitate the transition to digital GPPs and encourage use and provision of transaction accounts and payment instruments, if necessary, through fiscal incentives.⁶¹

5.2.1.2.2 Partnering & Convening

66. Governments initiating the transition to digital GPPs should consider establishing partnerships with select actors from the NPS space. Partners could include PSPs that could help government to deliver digital GPPs to remote places or hard to reach segments of the population, as well as select vendors, such ICT partners, training agents, marketing agencies, etc.) that could support the GPP authority in the design and implementation of digital payment programs (Box 4). Possible partners might be, inter alia, international organizations, donors, NGOs, academic experts, and external consultants, with specialized knowledge and experience in the policy or business aspects of digital GPPs. Partnering would enable the GPP authority to leverage the know-how of other entities that can extend governmental and institutional support.

BOX 4. THE ROLE OF DONORS AND INTERNATIONAL ORGANIZATIONS

Donors and international organizations can support governments in:

Improving the digital GPP infrastructure. Specifically, they could help in ensuring that enabling conditions for digital GPPs are in place. Donors and international organization are uniquely positioned to play this role given the breadth of their interaction with governments: they provide funding to individual countries, help countries work on their policy agendas (in some cases, even help write/draft agendas), provide technical assistance, and have a cross-country perspective that they can share.

Investing in country-level diagnostic studies. These could precede the launch digital GPP pilots. This would entail understanding if a specific country’s infrastructure is primed for investments in digital P2G initiatives and identifying in advance priority investments and use cases that can drive adoption. It would also entail mapping existing business processes to optimize them for digital payments. Pilot program designs may be poorly matched to country contexts without the insight provided by these diagnostics.

Investing in enabling infrastructure. Governments should take the lead, but donors and international organizations can help make the business case, offer technical assistance, and, where there is a compelling case, subsidize an initial investment to “make the case” and support longer-term funding from the government, directly.

Sharing lessons. These could derive from working with other countries on digital P2G, provide technical understanding of the infrastructural needs of digital payment systems (i.e., via IT specialists—this proved to be quite helpful in the case of the Philippines), and provide policy-level expertise. They can also provide funding for additional research (discussed below).

Making the case for investing in critical areas. These could be important in such areas as financial education or information security, which governments might not initially buy into, particularly if they are expensive. In some cases, donors and international organizations may consider making direct investments in these areas.

Source: *Global Landscape Study on Digitising P2G Payments*, cit.

5.2.1.2.3 Educating & Informing the public

67. Digital GPPs do not simply happen because government says so (even though governments may mandate their adoption).⁶² Their contribution to NPS modernization and financial inclusion requires more than government setting up dedicated electronic payment channels and ruling that people and businesses at some point use them instead of transferring or receiving cash. The transition to digital GPPs should be part of the authorities’ effort to communicate and explain to the public the objective to modernize the NPS and to facilitate financial inclusion. This effort should aim to inform citizens about the use of new payment instruments, channels, and services, including through the delivery of GPPs, and should involve the government in cooperation with the central bank and with the active participation of the payments industry (Box 5). The exercise should fall within the broader scope of

achieving national financial literacy and should aim at empowering people as users of financial services, which would lead to stronger competition among PSPs (and, hence, more choices and better service quality) and better protection of their rights and interests.

BOX 5. PUBLIC AWARENESS FOR PAYMENTS DIGITALIZATION: THE EXAMPLE OF JORDAN

The growth in the adoption of digital payment services requires efforts to sufficiently inform users on how to use such services responsibly. Without proper access to information, users may not feel confident in using them and may not build trust in their use. In Jordan, Jordan Payments and Clearing Company (JoPACC) focuses its strategy focuses on enhancing knowledge production and dissemination and on awareness efforts using a number of tools and utilizing various communication channels and following the Government's and central bank's announcement of the adoption of mobile wallets for G2Ps and salary payments.⁶³

JoPACC took initiative to facilitate access to reliable and comprehensive information. Together with the central bank, JoPACC developed a booklet on mobile wallets, their uses, and the procedure of opening a wallet to receive salaries and wages, which has been shared by governmental entities and news websites. It has further produced several awareness videos and regular social media posts answering new users' frequent questions.

The Central Bank of Jordan took a key step to facilitate the uptake of mobile wallets by allowing online self-registration. To enable access to information and mobile wallet registration links through one portal, JoPACC launched the Mobile Wallets Gateway. The Gateway acts as a directory of various information for both clients of mobile wallets, as well as for prospective clients. It allows access to self-registration links of all mobile PSPs. It also provides information on their contact details. Furthermore, it details the transaction fees for the different transaction types charged by each mobile PSP. A key feature of the Gateway is the inquiry on existing registered wallets by users directly. The inquiry engine informs users of any wallets registered under their national numbers and with which mobile PSP.

With the increased demand for explicit and comprehensive information on mobile wallets, JoPACC launched a Facebook page (Mahafezna) that serves as a source for all needed information on mobile wallets. The page gives access to a demo wallet, videos, booklets, and answers to frequently asked questions. The page takes visitors' questions and assists in technical issues they face in coordination with mobile PSPs. In addition to Facebook inquiries, JoPACC commenced operating a call center to assist users, address technical challenges, and handle complaints generally. In the same context, and in continuation of JoPACC's efforts to increase awareness, JoPACC collaborated with a number of entities to maximize knowledge dissemination. In addition to providing access to a set of awareness materials – from booklets to videos to a demo wallet – JoPACC conducted trainings to community-based organizations and youth centers in a number of governorates and worked with specific sectors on providing sector related information, such as the agricultural sector.

One unique milestone in financial services that JoPACC takes pride in is the launch of the newest payment system – CliQ – during the pandemic. CliQ is an instant payment system that enables instant fund transfers in Jordan. In the first stage, participation to CliQ will be exclusive to banks in Jordan, with an outlook to connect other financial service providers at a later stage. CliQ aims to increase liquidity in the Jordanian market, offer an attractive alternative to cash payments, and accelerate the cycle of cash flow in the Jordanian economy. Importantly, through CliQ, full interoperability between mobile wallets and bank accounts can be reached in the future. It is equipped with three primary services: Single Credit Transfer, Request to Pay, and Return Payments. The system was launched in June 2020, and four banks have connected to it, with the ultimate goal of connecting all banks in the near future. CliQ supports multiple payment addressing formats, including IBAN, alias, and phone number. Payers can also verify the payment address information before completing the transaction and have the option for notification of the receipt of payment by the payee and confirmation of payee.

Source: Policy in Focus, cit.

68. Educational activities on digital GPPs should consist of public dissemination of basic information to be communicated through appropriate media. These activities should be properly organized through a specific program as part of the strategic framework. Media, messages, and languages used to communicate the information to the public should be customized to the different audiences that

are present in the country. Basic information materials would be made available by the authorities as a “public good” and for public-good purposes; these materials would be supplemented by PSP commercial information to advertise GPP service offerings under individual brands. Public information would, inter alia, help customers to learn about how to acquire digital GPP services, the benefits and risks to be expected from usage of digital GPPs, the safeguards and recourse procedures available for users to protect their interests against risks, and the responsibilities of PSPs and users in case of GPP misuse or abuse. Public information should also cover contract standards for GPP services, disclosure of PSP contract terms and conditions (particularly user fees and service levels), and industry codes of conduct and practices.

5.2.1.2.4 Overseeing GPPs

69. A successful transition to digital GPPs, and their sound performance, require ongoing oversight and strong change management. The GPP authority should monitor GPP operations on an ongoing basis, assess the PDMs periodically, and introduce any change (in policy, regulation, or GPP architecture) that would be necessary to ensure the smooth functioning of GPPs and their timely evolution to satisfy the changing needs of the economy and society. The GPP authority should adopt appropriate standards to oversee the internal systems (such as the IFMIS and other systems) that support GPP delivery, and periodically assess these systems against the standards.⁶⁴ The GPP authority should monitor program operations through regular reporting on activities from the entities involved in the delivery mechanisms and through apposite consultative mechanisms with stakeholders. The authority should thus be able to obtain the necessary information from the concerned entities and should hold a dialogue with relevant stakeholders (see below). The authority may obtain information through regular and ad hoc offsite reporting and should have the powers to complement it, if necessary, with onsite supervision.⁶⁵

70. The GPP authority should periodically assess GPP performance. Periodic assessments should seek to verify that the delivery mechanisms of digital GPPs operate in accordance with the objectives set in the strategic framework, using preselected criteria, benchmarks, and indicators as necessary. Assessments should periodically evaluate the scalability and sustainability of the existing PDMs and identify eventual capacity gaps that need to be addressed. The methodologies adopted to carry out GPP assessments should also draw on the observations collected through the ongoing monitoring activities carried out by the GPP authority and the diagnostics from research, analyses, and surveys run internally by the authority or with the assistance of external partners (see above). Also, on request by the GPP authority, assessments of GPPs could be undertaken as dedicated modules in the context of the assessment programs led by international organizations (e.g., the World Bank and IMF), covering specifically the NPS.

5.2.1.3 Supporting Factors

71. A strategic framework for digital GPPs, built on strong foundations and subject to multiple dynamics (as those discussed above), needs cohesive action and a forward-looking attitude from those involved. Cohesion and looking forward require effective cooperation between the relevant authorities, an open and ongoing policy dialogue between the stakeholders, and a constant disposition from all parties involved in strategy implementation to learn lessons from experience.

5.2.1.3.1 Cooperation

72. The GPP authority and other relevant authorities should cooperate with each other in promoting a successful transition to digital GPPs. Relevant authorities are those agencies holding regulatory, supervisory, and oversight responsibilities over entities that are involved in the delivery of digital GPPs or may affect their safety, efficiency, inclusiveness, and effectiveness in change management. Cooperation should, first of all, take place between the GPP authority (at the central level) and the GPP administrators at government agencies (e.g., line ministries, ministerial departments, peripheral bureaus, etc.) to ensure fully consistent management of GPP service delivery processes. Cooperation is also critical between the GPP authority and the authorities in charge of national ICT infrastructures, including also those supporting the ID system and e-government (see above), to ensure effective implementation of safe and efficient technical platforms and processes for delivery of end-to-end digital GPPs. In the context of the integrated approach proposed in this note, cooperation should involve the authorities in charge of the country's NPS modernization strategy and financial inclusion agenda, in order to ensure mutual consistency of plans at the design, implementation, and operational levels. Cooperation will also be necessary between the GPP authority and the central bank, considering that delivery of digital GPPs involves entities that are under the oversight of the central bank.⁶⁶

5.2.1.3.2 Policy dialogue and stakeholder engagement

73. The GPP authority should maintain an ongoing policy dialogue with all GPP stakeholders (also including users) and engage them as necessary in shaping key decisions. In market environments characterized by knowledge-intensive and fast-changing production processes, as well as by sophisticated products and complex institutions, the policy dialogue between the authorities and stakeholders needs to be truly consultative (one where the government does not just give information but actively seeks information and input from stakeholders) and should represent a learning exercise for all involved. Policy dialogue is necessary where shared infrastructures raise issues of stakeholders' mutual interest and require their cooperative effort to address collective action problems. Policy dialogue helps to align stakeholders around common goals and strengthens their incentives to cooperate and to catalyze support for proposed solutions both by allowing preparation time to the parties involved and by exerting pressure on 'blocking' stakeholders to facilitate the search for compromise solutions. Policy dialogue may assist the GPP authority in monitoring the adequacy of norms and guidelines, and in adapting them over time based on emerging needs and preferences as revealed by stakeholder feedbacks.⁶⁷

74. Policy dialogue should thus secure a fair representation of the public and private interests involved in GPP-related activities. It should aim to create broad consensus of all parties involved around policy choices and solutions of common interest, consistently with the NPS modernization objectives and the national financial inclusion agenda. Consensus would, in turn, lead stakeholders to "buy into" the strategy and develop the "ownership" that would support the transition and make it successful. The dialogue would offer channels for the authorities to inform stakeholders on their policy orientation, for market players and users to contribute inputs to the GPP policy agenda and policy making process, and for stakeholders to assess the quality of the digital GPPs finally delivered.⁶⁸

5.2.1.3.3 Learn & Evolve

75. In order for digital GPPs to evolve in line with the rapid change in the payments ecosystem, the strategic framework should be adaptive. The GPP authority, in cooperation with other relevant

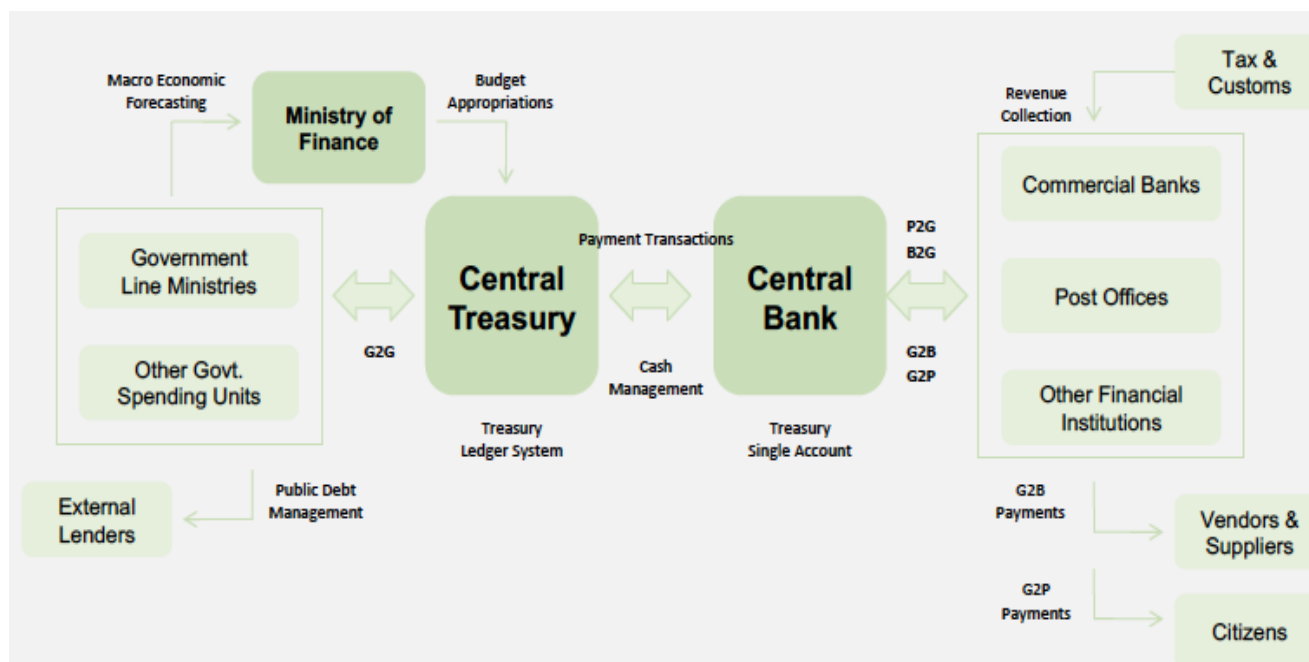
authorities, should seek to instill a culture of awareness whereby the overall GPP strategic and policy approaches adopted are regularly and frequently re-evaluated. This requires continuous learning, whereby lessons are learned from experience and used to induce necessary changes; this also requires acquiring new knowledge to strengthen capacity. Policy dialogue, and the engagement of specialized partners (as discussed above), would help to monitor GPP developments elsewhere and to understand the potential replicability in the Cambodian context of innovations adopted elsewhere. Learning would be especially important for the GPP authority and stakeholders to keep abreast with (and build stakeholder awareness of) developments in the area of risk management, with special emphasis on cyber and fraud risks, to identify common standards, and to take collective action when necessary.

5.2.1.4 Operational Arrangements

5.2.1.4.1 Best Practice

76. **A successful transition to digital GPPs depends on the quality of the operational arrangement deployed to deliver digital GPPs.** Quality can be measured against the achievement of the operation objective chosen, and high-quality demands state-of-the-art PDMs capable to deliver safe, efficient, and inclusive GPP services, and with the potential to adapt rapidly to the changing needs of the economy and society. The delivery of digital GPPs entails a number of steps throughout the payments value chain – from the funding of the payments process to the transfer of funds, their clearing, execution, settlement, and final delivery to the ultimate beneficiaries – and involves a range of stakeholders (as discussed below). The delivery of digital GPPs triggers various automated procedures. The number of steps, procedures, and stakeholders involved in the delivery process is determined by the operational arrangements deployed. Through World Bank technical assistance, Cambodia is currently undertaking an action plan for business process change, which includes relevant innovations for government payments processing.⁶⁹

Figure 10 Centralized Payment Delivery Mechanism: Payment Flows



Source: Social Protection Payment Mechanisms, cit.

77. The operational arrangement that currently represents international best practice is centralized, integrated, and automated. It typically consists of a digital PDM run by the Treasury. Accordingly, the Treasury controls all transactions and makes/receives payments on behalf of all government agencies through the TSA (usually held at the central bank), where all government funds and receipts are deposited and from which all payments are made and received (Figure 10). The TSA interacts with the IFMIS, the national ID system, and the MISs at government agencies owning and administering the GPPs. The integrated system records and manages electronically all relevant GPP data and information. The system produces central payment lists (for disbursements and collections) that include the relevant information concerning GPP users (e.g., ID numbers, names, locations, amounts of entitlements or contributions, accounts, etc.). The information, payment instruction files, and requisite funds are then sent/received electronically to/from the PSPs for final delivery or collection. Automated checks ensure the quality and accuracy of the data treated before transfer/collection instructions are issued at each payment cycle. Automated control procedures i) verify that payments are consistent with GPP guidelines and parameters, and that no false liabilities, duplications or ghost beneficiaries are created, and ii) inhibit the payments process in the event of incorrect or mismatched information.⁷⁰ Upon process completion, the PSPs notify users of payment execution or receipt.⁷¹

78. In the digital PDM just described, government payments are made/received directly to/from user accounts at PSPs, using the ACH, without the intervention or intermediation of any other party. In principle, users should be able to select the PSPs of their choice. Under this scenario, there would be a high probability that users would use the store-of-value feature of their accounts as well as the electronic payment features that come with the accounts. Moreover, the portability of accounts would allow users to change their PSPs if they are not satisfied with the service(s) they receive from their current provider.

79. A digital PDM ensures high levels of safety and efficiency of GPP service delivery. Centralization, integration, and automation of GPP systems allow for effective aggregate control of government cash balances, improve the safety and transparency of GPPs, and reduce their transaction costs substantially (vis-à-vis decentralized and not integrated arrangements). However, while the upstream flow of funds of a digital PDM (between the Treasury and the PSPs) is electronic, its last-mile distribution to/or collection from users may be electronic or manual. The transition to digital GPPs aims to digitalize the last-mile stretch, and the pragmatic approach recommended in this note envisages a gradual approach whereby users – especially those located in unserved or underserved areas of the country – would execute and/or receive payments through PSP agents in the interim to the completion of the transition to a fully-fledged digital infrastructure that will reach every individual and business.

5.2.1.4.2 Delivering “last-mile” services

80. In a digital PDM, last-mile electronic payments to/from users are executed through PSPs (e.g., banks, mobile network operators, payment aggregators, etc.). Critical in this regard is the (perceived) existence of a business case that motivates PSPs to offer GPP services, especially to users in remote and sparsely populated places. A study by CGAP identifies five different business cases that a PSP would have to evaluate for justifying its involvement in the provision of digital GPPs.⁷² The first level business case concerns the profitability of individual user accounts, particularly in the short term. Short of this, the second business case concerns profitability from a single client relationship group (e.g., all users of specific GPPs). The business case at this level would be strengthened by the ability of the PSP to cross-sell more profitable services (such as credit and insurance to this client relationship

group). The third business case concerns the profitability of a whole segment of clients (e.g., all retail customers): a large number of small retail accounts with a balance may enhance the PSP's liquidity. The fourth business case concerns the indirect (strategic) benefits of providing non-profitable GPP services in return for other lucrative business opportunities from, or special relationships with, government (e.g., opening of a government account with the PSP, government funding, or relaxation of regulatory or other compliance requirements). The fifth business case is determined by the regulatory environment: If the regulator's willingness to allow a PSP to operate is dependent on implicit contract terms, this could require the PSP to take on loss-making GPP business in exchange for allowing its continued existence.

81. Other motivations may influence PSP choices. State banks may be required to take on government business regardless of financial return considerations. On the other hand, private-sector PSPs may be induced to participate under special subsidy schemes.⁷³ In addition to commercial factors, a PSP's own strong social agenda (or corporate social responsibility) may drive its choices. As part of the strategic framework to manage the transition to digital GPPs, the GPP authority, in cooperation with other authorities and external partners, should engage the PSPs operating in Cambodia, evaluate with them the robustness of their business case for providing digital GPPs and, if necessary, define an appropriate set of incentives to strengthen their motivation to offer digital GPPs.

5.2.1.5 Claim Redressal Mechanisms

82. Addressing claims is for the effective provision of digital GPPs. The role of appropriate claim redressal mechanisms is critical to foster public trust and to encourage acceptance and use of digital instruments, especially among those who are not familiar with them. Network or service downtime, insufficient agent liquidity, poor understanding of contractual terms and conditions, agent fraud, data leaks or misappropriation of client identity and thefts, are all just examples of sources of user grievance that require protection arrangements and procedures. This is particularly relevant in Cambodia, since many GPP beneficiaries are unaware of the nuances of digital products and processes. In 2019, Cambodia promulgated the Law of Consumer Protection and the Law of E-commerce. However, they lack the necessary details needed for an effectual consumer protection regime for digital financial services.⁷⁴ In addition to improving government capacities, there is a need for a more systematic action. The lessons from the COVID-19 experience should be put into the larger context of digital payments and the development of claim redressal mechanisms should be framed within the broader scope of consumer protection policy aimed at all PSPs. Such an effort can be aligned with international global best practices.⁷⁵

ANNEX 1. STRATEGIC GUIDANCE

83. **For the transition to digital GPPs to happen, all the strategy components discussed in this report should be translated into specific actions and reported in detailed master plan.** The master plan would order all actions according to chosen priorities and a timeline, it would set deadlines and identify responsible parties. What follows is a broad outline that can serve as a template for the Government of Cambodia seeking to initiate the transition to digital GPPs. The template is intended to provide general guidance to help the Government take high-level prior actions and to engage relevant stakeholders in the preparation of strategy implementation. The list of actions reported in the template reflect the strategic framework proposed in this report.

84. **The template comprises two parts.** The first part describes the institutional and preparatory actions that set the stage for the detailed action plan to be developed; the second part identifies some key technical actions that lie at the core of the transition to digital GPPs. The second part of the template does not intend to be exhaustive. Although some of the listed actions would come first in the sequence of a prioritized plan, the template does neither identify nor recommend priorities, since these will have to be defined by the authorities according in the process of defining the detailed action plan, after duly consulting stakeholders.

85. **The World Bank stands available to support the Cambodian authorities in the implementation of the recommendations provided in this report, compatibly with management approval and availability of funding.**

TEMPLATE

STRATEGIC AREAS	STRATEGIC ACTIONS
Institutional and Preparatory	
Establish the authorities	<p>Establish the central GPP authority (and the local GPP authorities, depending on the national context). The authority should be given responsibility for setting up a strategy effort, formulating a strategy framework and initiating discussions with relevant stakeholders.</p> <p>Establish GPP administrators at government agencies owning and administering GPPs. GPP administrators should be instructed to cooperate with the GPP authority as necessary.</p>
Stocktaking	<p>The GPP authority, assisted by external partners as necessary, should take stock of the foundational elements for the transition to digital GPPs, identify areas to be addressed and gaps to be filled.</p>

Strategy plan	Based on the stocktaking, the GPP authority, assisted by external partners as necessary, should start preparing a strategy plan for the transition to digital GPPs. Preparation should be supported by ongoing policy dialogue with relevant stakeholders.
Cooperation and policy dialogue	The GPP authority, in cooperation with the relevant authorities for e-government, NPS, and financial inclusion, should set up an appropriate forum that is conducive to cooperation and policy dialogue with relevant stakeholders.
Strategy decisions and planning	The GPP should lead efforts and coordinate stakeholders to discuss and evaluate alternative technical options and to develop a strategy action plan (defining priorities, identifying responsible parties, and setting a timetable).
Strategy implementation	<p>The GPP should lead and coordinate efforts to implement the strategy action plan.</p> <p>The forum for cooperation and policy dialogue should monitor implementation progress and ensure respect of timetable.</p>
Organization structure and capacity building	Based on the strategy, the GPP authority can better identify its future functions as well as the resources and organization necessary to fulfil its responsibilities and should start building up the required capacity.
Technical	
Infrastructures and technical solutions	Based on stocktaking and policy dialogue, the strategy should identify all infrastructure components (from legal basis to technical platforms) that are critical for the transition to digital GPPs and decide on technical solutions to adopt for delivering digital GPPs.
Identify PSPs	The GPP authority, in cooperation with other relevant authorities, should identify that would be interested in delivering digital GPPs, discuss with them the business case, and plan for extending access to digital GPPs to all users. Due the lack of banking infrastructure in

some parts of the country, enabling the operation of PSP agents strengthen the viability of digital GPP delivery.

To promote competition in the provision/collection of digital GPPs, all PSPs should gain direct access to the ACH.

Initiate transition

The GPP authority should deliberate and coordinate migration of all GPPs (starting from retirement pensions, social assistance programs, and tax collection) from cash to electronic funds transfers to user accounts at PSPs, based on the technical solutions adopted.

The GPP authorities, in cooperation with relevant stakeholders, should consider developing a transactional e-portal for payment of government services, like school tuition fees, health care fees, driver and business licenses, construction permits, etc.

The GPP authority should make the e-filing of taxes, customs, and other major fiscal contributions mandatory over the short to medium-term.

The GPP authority, in cooperation with relevant stakeholders, should assess the structure of transaction fees for government collections with a view to incentivizing the use of electronic instruments and channels by differentiating the fees for those options vis-à-vis cash.

Taxpayers with limited access to computers and/or the Internet should be able to file taxes electronically with assistance from government agencies, PSPs, and PSP agents (e.g., physically at branches or via telephone).

Government should make/receive payments to/from PSP accounts as the default option and manage exceptions in the short run (though always with the long-term vision of reducing or eliminating cash). These accounts should represent little or no cost to

beneficiaries. All users should be able to make/receive payments from/to the account of their choice, at the PSP of their choice.

ANNEX 2. CHALLENGES TO THE TRANSITION TO DIGITAL GPPS

Challenges typically relate to the level of maturity of the underlying economy and financial system. These may reflect in low income and financial literacy levels, underdeveloped technology ecosystems, and weak infrastructure (such as for power, telco, and internet coverage; payments; digital identity; laws and regulations; etc.). Other challenges include the lack of adequate financial infrastructure, whereby reaching the last-mile user remains a problem in many countries, which causes beneficiaries to have to travel miles to reach their bank and withdraw their payments or have to carry cash and travel distances to pay their fiscal dues. Similarly, nonbank PSPs may lack the core system that supports activities conducted by the customer (e.g., mobile transactions) as well as the activities of agents, or lack the ability to interface with other payment infrastructures (e.g., payments switches). Such weaknesses can be major impediments to the delivery of digital GPPs.

Other challenges may hamper GPP modernization. Applied solutions may be ad hoc and not linked to a national strategy, and there may even be instances of multiple, separate and uncoordinated initiatives taking place within a single country. Government capacity may be limited when it comes to setting up payment schemes, and this may relate not only to the knowledge required to deal with the complex technicalities involved (e.g., computer and payment literacy), but also to the skills necessary to handle change management, define policies, and allocate responsibilities between central offices (e.g., ministries) and local units (e.g., field offices) (Box 1). Major hampering factors can be the inadequate preparation of government staff to change management, staff unawareness of electronic payments, and staff unrecognition of the importance of stakeholder involvement. As plans to introduce digital GPPs are not clearly communicated within and across government, no uniform attitude to change takes shape and some government employees may even pursue conflicting agendas. Also, unawareness of payment system innovations may induce government employees to see electronic payments as causing them to lose control of the revenues collected rather than a tool to simplify their work. Finally, unclear understanding of the concept of stakeholder involvement may fail to induce wide and genuine participation of stakeholders in the transition to digital GPPs and to ensure their needed “buying in” into the new payment methods.⁷⁶

Other challenges yet may affect the demand side of digital GPPs and weaken their potential for financial inclusion. Examples are poor design and functionality of the electronic payment solutions adopted is one of them (in particular, issues relating to the lack of resilience in light of poor connectivity, limited usability, problems with receipts, and pricing hurdles); lack of consumer awareness (especially in the face of people’s distrust in electronic payments), which make the value proposition unclear to consumers and limits the consumers’ ability to use digital payment products; security concerns; and the lack, or the inadequacy, of grievance redressal mechanisms. All these factors can turn consumers away from using digital payments altogether and act as major impediments to a successful transition to digital GPPs.⁷⁷

A major challenge to a successful transition to digital GPPs is whether they make a good business case for PSPs.⁷⁸ In other words, is delivering digital GPPs a profitable activity for banks or nonbanks providing payment services? The issue here is that the amount per payment is small and, in the case of banks, very little of each payment is left behind in the form of savings. However, compared with other small value accounts, GPP payors and payees have a regular (and in many cases even dependable) cash inflows ensuring that they stay active. Small transactions are difficult to make GPPs profitable at the individual account level; yet a business case may be sustained even at a small transaction scale if governments are willing to pay a regular fee to the PSPs. Without this fee, the business case would be much harder to sustain.⁷⁹ The real question for PSPs is whether there is a robust business case in between two extremes – at the level of the client (i.e., cross-selling other products) or at the level of the portfolio of clients as a whole. The outcome depends on the combination of large scale (which may reduce the fixed costs per transaction) and the

availability of an appropriate distribution system (so that most transactions take place in low-cost channels). Over time, a combination of increasing balances, more customer-initiated payment transactions, and cross-selling may support a strong business case. But even then, an efficient widespread agent distribution network is a key factor to reduce the cost of opening accounts and servicing client transactions.

Additional challenges can be considered by governments planning the transition to digital GPPs.⁸⁰

Aligning all relevant government agencies. Launching digital GPPs can require approvals from a host of government entities (e.g., federal or local agencies, budget and administrative offices, regulatory bodies) It may not be immediately clear which government agencies wield the requisite authority, the approval process can take a long time, and even require legislative change. The political calendar can extend the process and complexity further: in the time needed to secure the necessary approvals, entire administrations can cycle out of power and the transition to digital GPPs can quickly vanish from the priority list.

Investments and integration. Designing digital GPP solutions requires governments to make investments in back-end processes. These include new servers (or upgrades to existing servers) holding consumer data, firewalls to ensure data security, upgrades to Internet connectivity, and integration with a end-to-end solution via an API [application programming interface] designed either by the PSP or a third party. The API could be “open” to spur greater innovation or “closed” if oversight and technical maintenance are serious concerns. The exact technical specifications of the solution, however, as well as how much money a government spends on the solution, can vary widely. A key challenge is that governments are not always able to plan long term for such type of investments. A separate but equally important consideration for governments is that government agencies planning for investment may not be aware of other government needs that the system could meet, and so tailor the investment for their specific initiative rather than for broader use. In doing so, they may miss the opportunity to share costs across agencies. Even when the case for investment is compelling, government agencies may lack technical staff on their teams to inform the necessary design decisions.

Designing a sustainable business model. Many consumers view digital GPPs more as a public good than a valuable convenience. A key challenge, therefore, in launching digital GPP solutions has been the answer to a fundamental, yet complex question: “Who pays for it?” Businesses are keen to find a sustainable business model. In some cases, they may be willing to absorb the expense of administering digital payments in order to acquire consumers, but in most cases, these losses are unsustainable, at least beyond the short term. On the other hand, governments are often reluctant to make an investment without a clear business case for what they will get in return. Additionally, operational savings are difficult to calculate, and in some cases, difficult to realize (e.g., by reducing staff or closing a facility). Some governments are amenable to passing on the costs of a digital GPPs services to the consumer or to phasing costs in over time. Other governments are unwilling or unable to do so (the government may be prohibited from levying a convenience fee on consumers or from allowing business partners to do so). Also, there may be concerns that additional costs will make the service inaccessible to poor people or may generally disincentivize its adoption.

NOTES

¹ Over the past two decades, Cambodia has undergone a significant transition, reaching lower middle-income status in 2015 and aspiring to attain upper middle-income status by 2030. While the pandemic has abruptly interrupted the country's celebrated growth story and the society continues to suffer from its impacts, there are signs that economic activity is beginning to pick up and the economy is expected to bounce back robustly in 2021, according to *Restrained Recovery*, the World Bank's latest economic update for Cambodia, published on November 2020.

² See *Cambodia Policy Note: Benefitting from the Digital Economy*, The World Bank, Washington, DC, 2018.

³ Numerous institutions across the Government are tasked with implementing these policies and strategies. These agencies include: MEF, Ministry of Post and Telecommunications, Ministry of Commerce, Ministry of Information, and Council for the Development of Cambodia.

⁴ The strategy in fact goes beyond digital infrastructure to include the use of technology to accelerate digital transformation for inclusive development throughout the economy. The areas identified that will be covered in the strategy include: e-commerce, e-Government, digital entrepreneurship (such as digital solution firms, including innovative startups and private digital platforms, and digitally enabled firms, including traditional business activity which benefits from adopting digital technologies), digital skills, digital infrastructure, digital services delivery in education and health, and digital value chains including in agriculture and manufacturing. The major policy objectives of the framework are the following: (1) laying out digital infrastructure with sufficient capacity, affordability and country-wide coverage to support seamless service delivery, (2) using digital technology as a tool to bring equal access to public services of all citizens, (3) promoting the growth of the innovative business which utilizes digital technology, (4) building digital skills and digitalizing business practices to compete successfully in the digital economy, and (5) increasing national GDP with a portion of contribution from digital industries.

⁵ See The World Bank – 2017 Global Findex.

⁶ The ability to pay online may drive the uptake of a digital economy. The use of financial technology, in particular mobile money, to expand access to and use of transaction accounts, has become increasingly relevant for many emerging economies, including lower middle-income states such as Cambodia. Digital payments help to facilitate the transactions involved in other financial products and services (e.g., to deposit savings or make a loan payment). Transaction data produced by digital payments can also reduce informational asymmetries between borrowers and lenders and serve as a useful input into credit decisions. Alipay, Tenpay and other payment products provided by third-party payment providers, have facilitated the provision of digital credit, digital insurance, and digital wealth management in the Chinese market.

⁷ Government payments cover a wide array of economic sectors and activities, and in most cases their overall amount is very relevant, typically ranging between 15 percent and 45 percent of gross domestic product (GDP).

⁸ According to a McKinsey study of India's social benefits system, the Indian government could save an estimated US\$22.4 billion a year, almost 10 per cent of payment flows between the government and households, by transitioning to electronic payments (see *Inclusive Growth and Financial Security: The Benefits of E-Payments to Indian Society*, McKinsey & Company, November 2010). Some recent estimates, also, indicate that up to one-third of direct cash subsidies and US\$110 billion globally are lost to leakage and corruption each year (see *Digital Finance for All: Powering Inclusive Growth in Emerging Economies*, McKinsey Global Institute, 2016).

⁹ See *Payments for the Digital Economy in Cambodia*, Diagnostic of the Cambodian National Payments System capability to support the Digital Economy in Cambodia, Cambodia Financial Sector Development TA (P171621), The World Bank, June 2020.

¹⁰ See *General Guidelines for the Development of Government Payment Programs*, The World Bank Group, July 2012.

¹¹ With specific regard to financial inclusion, the World Bank and the Committee on Payments and Market Infrastructures specifically recommend that GPPs, as a form of large-volume, recurrent payment streams, be leveraged to advance both the NPS modernization agenda and the financial inclusion objectives (see *Payment aspects of financial inclusion*, cit. Efforts to encourage digital GPPs must be seen as part of a larger movement to encourage consumers to use electronic channels and move away from cash-based behavior.

¹² See *Payments for the Digital Economy in Cambodia*, cit.

¹³ See World Bank's 2017 Global Findex Database.

¹⁴ Mekong Strategic Partners Co Ltd has indicated that Cambodia’s adoption of financial technology has shown rapid growth recently, despite the current low rate. MSP estimates that the country’s digital payment market is set to be worth \$2.215 billion in 2019 – a 37 per cent increase over 2018 – and will be worth \$3.469 billion in 2020.

¹⁵ The materials for this box draw on “Cashless Cambodia,” by Sokunpanha You, in *Cambodia 2040: Culture and Society*, edited by Deth Sok Udom, Bradley J. Murg, Ou Virak, and Michael Renfrew, pp.173-201, Cambodia and Future Forum, Konrad-Adenauer-Stiftung, Phnom-Penh, July 2020; and *G2P and International Digital Remittances During COVID-19: Early Lessons from Cambodia*, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

¹⁶ The World Bank Findex - <https://globalindex.worldbank.org/sites/globalindex/files/countrybook/Cambodia.pdf>

¹⁷ See *Benefitting from the Digital Economy*, Cambodia Policy Note, No. 6, The World Bank, 2018.

¹⁸ A recent study on e-government in Cambodia notices that, in spite of the recent developments, there are four key challenges that hamper Cambodia’s digital transformation: i) the persistence of digital illiteracy, despite the wide use of mobile internet; ii) the limited infrastructure, whereby in spite of the significant progress in regard to mobile internet access, fixed broadband internet is still not widely available and many parts of the countryside are still isolated from fixed broadband internet; iii) the lack of resources and capability to test all the available technologies (e.g., from IoT to AI, from 4G to 5G, and from iPhones to Huawei) and make the right choice; and iv) the inadequacy of the legal framework to support the needed digital transformation. See “E-government: What Can Cambodia Learn From E-Estonia?,” by Sun Kim and Raimund Weiß, Foundation Office Cambodia, Konrad-Adenauer-Stiftung, Phnom-Penh, July 2019. It must be noted that since the time of study publication, and in particular on the legal front, important steps have been taken by the Government of Cambodia, as noted below.

¹⁹ For example, the Ministry of Economy and Finance is developing multiple data centers to support the Financial Management Information System as well as tax applications. Cambodia does not have an overall government data center or cloud services policy framework.

²⁰ An end-to-end process available online is the issuance of single-entry tourist visas. Visitors can apply for the visa online and pay with a credit card. The approval letter is emailed to the recipient, who can then present the letter upon entry into Cambodia.

²¹ See *Realizing the Promises of Social Assistance*, Cambodia Policy Note No. 4, The World Bank, July 2018.

²² The Government has been working on different e-government initiatives to improve efficiency and capacity in public services delivery, and as a result it has moved up in the UN Electronic Government Development Indicator (EGDI) from the middle group in 2018 to the high group in 2020.

²³ In 2018 the Minister of Transportation and Public Works and Pi Pay signed an agreement to allow citizens to use cashless payment technology to pay for a variety of transport-related services, including registering a vehicle, passing technical vehicle inspections, taking a driving test, applying for a commercial license and purchasing a ticket for Phnom Penh’s new water taxi service. Pi Pay has become one of the most recognizable local brands with its distinctive pink logo and a merchant network encompassing thousands of restaurants, coffee shops, stores and other establishments.

²⁴ Though initially introduced as a two-month program, it has been extended multiple times. Currently, the relief transfers are expected to continue till March 2021 and could potentially be extended beyond the current deadline, depending on circumstances.

²⁵ The United Nations Development Programme (UNDP), the United Nations Children’s Fund (UNICEF) and the German Development Agency (GIZ), on behalf of the Australian and German governments, financed two tablets for each commune to respond to the large number of interviews being conducted during the crisis.

²⁶ Development Policy Letter from Dr. Aun Pornmoniroth, Deputy Prime Minister and Minister of Economy and Finance of the Kingdom of Cambodia, to the President of the Asian Development Bank, 16 June 2020.

²⁷ In Jordan, for instance, the Government and some of its key institutions seized the opportunity to shift financially excluded individuals to the realm of digital finance, increasing financial inclusion, the acceptance, and the spread of digitalized services. In the early days of the pandemic, the Government announced its adoption of digital payment channels to replace cash, encouraging citizens and employers to use mobile wallets to conduct financial transactions. The Ministry of Labor called on employers to digitize the payment of salaries that were paid in cash before the pandemic. What made this transition to digital finance relatively smooth is the solid digital payments infrastructure in the country. Two key national institutions (the National Aid Fund and the Social Security Corporation) announced that aid and other types of payments will be made through bank or mobile wallet transfers only. Digital financial services, more specifically mobile wallets, took prominence in mid-March 2020, especially given the growing fear of contagion through contaminated cash. Jordan resorted to mobile payments. Many governmental and non-

governmental entities introduced mobile payments to beneficiaries to replace previously cash-based payments. As a result, the number of active mobile wallets in the Kingdom doubled across 4 months, growing to over 1 million users. See *Lockdown but Not Shutdown: The Impact of the Covid-19 Pandemic on Financial Services in Jordan, October 2020*, JOPACC.

²⁸ In Thailand, people could apply online and verify themselves using their national ID, subject to cross-checks from the Ministry of Finance to ascertain whether the national ID numbers submitted were active in other registries, indicating that the applicants should be excluded because they were formal workers or received other benefits. Government payments were made in the PromptPay national e-payment system to the accounts linked to the national ID numbers. This information is preliminary and based on a World Bank internal study still in progress.

²⁹ BIS and World Bank. 2016.

³⁰ In rounds 2 and 4 of the survey, 10 and 11 percent of households, respectively, indicated they were interested in saving some of the funds received through the program. In round 5, the percentage dropped to only 3 percent, perhaps due to a worsening of the pandemic in the country. However, this makes the case for adequate product offerings even stronger, as some households could have saved in e-wallets some of the benefits received during better times. (Source: Cambodia COVID-19 High-Frequency Phone Survey, World Bank, European Union, and Australian Aid, 2020–2021.)

³¹ “Digitizing” or “digitalizing”? The difference between the two expressions is profound and generally misunderstood; this note will use the latter. To *digitize* a business is to render analogue records, processes, and actions in digital form, such that they will eventually improve its efficiency and effectiveness. To *digitalize* a business, on the other hand, is to reengineer it in a way that is cognizant of contemporary technologies built to suit modern customers and delivered, at least in part, through digital means and channels. Thus, while “digitizing” is about business efficiency and effectiveness, “digitalizing” concerns business transformation and implies the transition to a digital environment. The latter is in fact the subject of this policy concept note as it applies specifically to GPPs. The broader meaning of the term “digitalization” seems especially appropriate in the context of the strategic framework proposed in this note, whereby the transition to digital GPPs should be integral to NPS modernization and financial inclusion.

³² For a comprehensive discussion of these challenges, and how they have been addressed in select country cases, see *Global Landscape Study on Digitising P2G Payments*, Karandaa Pakistan, 2016.

³³ Such structural weaknesses such as poor connectivity (causing numerous instances of dropped or failed transactions), the lack of account-to-account interoperability (reducing the space of payments across the economy), or an insufficient network of cash-out points across the country may severely diminish the value proposition of digital GPPs.

³⁴ In the case of G2Ps, a party is an individual or legal person; in the case of P2G, a party would be a government agency.

³⁵ As noted, this is the approach currently recommended or adopted by the World Bank Group in the context of its advisory and technical assistance activities. Specifically, Guideline 10 of the World Bank’s General Guidelines for the Development of Government Payment Programs, cit., recommends governments to “**Leverage on government payment programs to promote financial inclusion: the large volume of payments issued by governments, as well as the nature of some specific programs like social spending programs, represents an opportunity to promote or facilitate financial inclusion on a large scale.**”

³⁶ The actual transfer of funds is only part of a GPP transaction. If the full process is not fully digitalized, the digital GPP payment is unlikely to be transformational. For example, annual business registration and tax payments may require long lines. Also, there may be separate lines for handing over documents for a tax assessment, for obtaining forms that must be filled out to make payments, for receiving an official signature/stamp on the form, and another for making the actual payment. Digital GPP service can solve only the very last part of the process, causing consumers to still have to stand in multiple lines. In this scenario, the ability to make a digital payment does not save the consumer that much time. A process that allowed users both to execute payments electronically and to receive validated documents online would offer considerable time and cost savings.

³⁷ A fully digital experience brings greater value to the system than GPP delivery mechanisms that, while partly automated, still feature similar characteristics of cash-based system (e.g., involvement of agents and physical presence).

³⁸ While new accounts at banks or other PSPs can be created relatively easily, the viability of delivering GPPs through these accounts is dependent on the availability of a sufficient number of access points for the new accountholders. Many remote and isolated areas of the country still lack these facilities. While electronic access points (e.g., ATMs, POSs) would be highly desirable, over the short to medium-term the service point network can only be expanded reasonably rapidly by allowing town shops, gasoline stations and other merchants to act as agents of PSPs to provide basic account-related services.

³⁹ This section draws and elaborates on *Innovative Digital Payment Mechanisms Supporting Financial Inclusion. Stocktaking Report*, report by the World Bank Group's Payment System Development Group, the Better Than Cash Alliance, and the Alliance for Financial Inclusion for the G20 Global Partnership for Financial Inclusion, 2015 Turkey G20.

⁴⁰ As Guideline 1 of the World Bank's *General Guidelines for the Development of Government Payment Programs*, cit., recommends, governments should "**Ensure proper program governance and risk management: governance arrangements should ensure accountability, transparency, and effectiveness in managing the risks associated with government payment programs.**"

⁴¹ Government agencies would identify and enroll GPP users, based on the predefined policy parameters specific to each GPP, and should maintain registries or systems to record user information.

⁴² Lack of regular power supply, especially in remote places, is one of the reasons most often cited by PSPs for not deploying ATMs more widely.

⁴³ See, for instance, *South Africa gets first solar powered ATMs*, Kiosk Marketplace, Businesstech, 2014; Jetley, N., *Solar ATMs changing the face of banking in India*, CNBC, 2014; and Vortex (<http://www.vortexindia.co.in>).

⁴⁴ Many companies are working on products based on kinetic or solar energy.

⁴⁵ See Sharing networks, driving growth, ITU News Magazine, 06, 2017. For a discussion of the challenges of tower sharing, see Koumadi, K. M., R. Folley, K. Quist-Aphetsi, and A. Acakpovi, Technical Challenges of Tower Sharing in Multi-Operator Mobile Communication Environments, International Journal of Informatics and Communication Technology, Vol.2, No.3, December 2013.

⁴⁶ See, for instance, Ferrie, J., *SIM sales soar as Myanmar races to catch up in telecoms*, Reuters, 2015, and Hammond, C., *Bad reception Telenor and Ooredoo pick new tower firms*, Myanmar Times, 25 May 2015.

⁴⁷ For example, the use of "pay as you go" tariffs for data consumption by prepaid users has become increasingly popular in Asia and Latin America. Another model is "sponsored internet," in which the content provider, instead of the end- user, pays for connectivity.

⁴⁸ For example, a program for the digitalization of payments for replacement driver licenses should be accompanied by the digitalization of the administrative processes to validate the drivers' identity and to prove the loss of a license, through the establishment of the appropriate e-government infrastructure. The lack or the inadequacy of the latter would render minimal the time savings from the digitalization of the only payment process. On the other hand, a process that validated users' digital identity and proof of license loss and allowed users to request replacements and make payments online would offer considerable time and cost savings.

⁴⁹ These systems create regular payrolls using information on GPP users' names, locations, ID number, and amounts to be paid or received by the PSPs. They verify which users are eligible or liable for which type of GPP is essential. Once payments to/from users are made, the PSPs can then send electronic updates for the automatic reconciliation with the GPP information.

⁵⁰ The degree of (de)centralization and the exact allocation of functions and controls between the government and agency systems, as well as their hierarchical relationships, are a matter for policy decisions and may differ from the cases exemplified in the text.

⁵¹ For an overview of the current and projected state of digital identity and authentication, as they apply to digital finance, see *Identity and Authentication*, report by the report by the ITU-T Focus Group Digital Financial Services, International Telecommunication Union, 01/2017.

⁵² The Financial Action Task Force (FATF) recognizes the importance of digital IDs and e-KYC for customer due diligence and to facilitate the enforcement of Anti-Money Laundering/Countering the Financing of Terrorism (AML/CFT) regulations, and it has issued a guidance for their implementation. See *Guidance on Digital Identity*, FATF, Paris, 2020.

⁵³ See *The Digital Economy in Southeast Asia: Strengthening the Foundations for Future Growth*, The World Bank, 2019.

⁵⁴ See *National Strategic Plan of Identification 2017-2026*, Kingdom of Cambodia, Phnom Penh on June 2016, available at <https://getinthepicture.org/sites/default/files/resources/NSPI%20ENGLISH%20VERSION%2010-01-2017.pdf>

⁵⁵ See *Principles on Identification for Sustainable Development: Toward the Digital Age*, The World Bank Group, 2017.

⁵⁶ See *Payments for the Digital Economy in Cambodia*, cit.

⁵⁷ For an extensive treatment of access points, see *Payment aspects of financial inclusion*, cit., and *Innovative Digital Payment Mechanisms Supporting Financial Inclusion. Stocktaking Report*, cit.

⁵⁸ In a market economy, private-sector PSPs seek to maximize their profit and may therefore focus on those geographic areas and customer segments that promise to yield the largest margins and neglect the less promising ones. In several countries, post offices have traditionally offered certain financial services and rely on very large branch networks that can be used for financial inclusion purposes. Also, in the attempt to expand access to payment services cost-effectively, bank and nonbank PSPs use local entities, such as small shops, as agents to provide basic payment and banking services on their behalf. Interoperability between access points enhances considerably their potential to service the NPS and their contribution to financial inclusion.

⁵⁹ The models are the following: (i) the Treasury controls all transactions and makes/receives payments on behalf of all government agencies through a single account (see below); (ii) government agencies make/receive payments by sweeping balances across accounts held at commercial banks and send instructions to the Treasury to consolidated the government's cash position at the end of each day; and (iii) same as (ii) except that the Treasury maintains central control of the cash and sweeps balances across accounts held at commercial banks.

⁶⁰ For a list and clear description of PSPs in the context of GPPs, see *Social Protection Payment Mechanisms*, Inter Agency Social Protection Assessments (ISPA) Partnership, The World Bank Group, 2015.

⁶¹ As catalyst, the GPP authority should also promote some important supporting activities. Among these: stocktaking and assessments that allow government and stakeholders to design policies or products; policy diagnostics to identify challenges and follow-up action; technical studies to assess the technology landscape, identify barriers, and design solutions; consumer surveys to better understand demand and user behaviors; where feasible, small scale pilots to test new solutions.

⁶² In fact, governments should take a cautious approach to mandating the adoption of digital GPPs. While mandatory rules might sound like providing a compelling and effective way to implement digital GPPs, using them might be risky and counterproductive, possibly with undesired consequences in terms of financial risks, user inconvenience, and infringement of public trust. A transition should be gradual enough to allow stakeholders to become prepared to it and to know what to expect from it. This requires gradualism, information, and in some cases even incentives (such as, for instance, fiscal subsidies and tax discounts) to induce change in long-established payment habits and to encourage people to use electronic instruments and channels. Once awareness has been built, mandatory rules can be adopted that indicate government resolve to transition while providing time for systems to phase out the availability of traditional methods and phase in new convenient alternatives and for people to make the necessary adjustment at affordable and safe conditions.

⁶³ JoPACC is a private company established in 2017 and based in Amman, Jordan. It has three main areas of work: operating and enhancing payment systems, investing in innovative solutions to enhance financial services, and knowledge management and business analytics.

⁶⁴ In light of the systemic or systemwide importance of the IFMIS and other critical systems operated by the GPP authority, appropriate standards might comprise a relevant subset of those today applying to financial market infrastructures (see *Principles for financial market infrastructures*, report by the Committee on Payment and Settlement Systems and International Organization of Securities Commissions, Bank for International Settlements, Basel, Switzerland, April 2012). As an alternative, standards could be adapted from those introduced by the European System of Central Banks for the oversight of payment schemes (see *Harmonised oversight approach and standards for payment instruments*, ECB, Frankfurt, Germany, February 2009).

⁶⁵ In the context of outsourced arrangements, there must be sufficient oversight of the PSP(s) involved in the arrangement to ensure a high quality of service delivery. Oversight requirements should include, inter alia, the provision to clearly define service levels at the point of contracting and then continually monitoring adherence to them. To the extent that PSPs are overseen by the central bank, the GPP authority might rely on the central bank's oversight activity to make sure that GPP oversight requirements are enforced, instead of duplicating tasks and in order to avoid overlapping. However, neither outsourcing of service provision nor the reliance on indirect oversight relieve the GPP authority of its responsibility to ensure GPP compliance with regulatory and policy requirements.

⁶⁶ Inadequate cooperation (or lack thereof) between the authorities indicated above could raise considerable risks and challenges. These range from overlapping and duplication of institutional functions, to inter-agency conflicts, regulatory and policy inconsistencies, distorted signaling to the market and the public, higher compliance costs for operators and providers and, ultimately, poor quality GPP service delivery, with consequences for the credibility and reputation of the authorities themselves and public trust.

⁶⁷ Policy dialogue is especially important to support cooperative initiatives, such as those for setting technical and operational standards, and to create among stakeholders the level of trust and commitment that is necessary to achieve digital GPP development. The dialogue should be complemented by assessment exercises discussed earlier to evaluate the costs, benefits and tradeoffs of the alternative options available.

⁶⁸ National payments system councils, payments associations, and national committees for financial inclusion would be appropriate fora for such dialogue to take place. Such fora could provide for subgroupings and sessions specifically dedicated to GPP issues, under co-chairing by the GPP authority and the central bank.

⁶⁹ In normal payment processing, there are many offline processing steps in parallel with add (request submission) and confirm (approval) in FMIS. For example, simple utility payment processing for a ministry may involve more than 40 processing steps, most of which are redundant non-value-added checking processes by different actors. This has made payment processing lengthy. The effort to improve business process involves reducing the number of offline processing steps outside of FMIS. The government's approach to improving payment processes follow three simple principles. For low-risk transactions, all offline processes are eliminated, leaving only FMIS related processes only 1 add (request) and 1 confirm (approval) within the FMIS. For medium risk transactions, only one offline review is maintained: 1 add (request) into FMIS, 1 review outside FMIS, and 1 confirm (approval) within FMIS. For high risk, only two offline reviews in between add and confirm are maintained: 1 add (request) into FMIS, 2 reviews outside FMIS, and 1 confirm (approval) within FMIS. The MEF is taking the lead in the streamlining efforts and established a plan for other ministries to follow. Utility payment for the MEF has been streamlined following the low-risk principle. Payroll at MEF processing has been reduced to 13 steps with the use of FMIS as opposed to the original 46 steps. Process streamlining also began in a number of other ministries following the plan put in place by MEF. The following World Bank documents bear information on the FMIS in Cambodia: Hughes, Caroline; So, Sokbunthoeun; Ariadharma, Erwin; April, Leah (2017), *Change Management That Works: Making Impacts in Challenging Environments*, Policy Research Working Paper, No. 8265; So, Sokbunthoeun; Woolcock, Michael; April, Leah; Hughes, Caroline; Smithers, Nicola (2018), *Alternative Paths to Public Financial Management and Public Sector Reform : Experiences from East Asia*, International Development in Focus; and Hashim, Ali; Piatti-Funfkirchen, Moritz; Cole, Winston; Naqvi, Ammar; Minallah, Akmal; Prathna, Maun; So, Sokbunthoeun (2019), *The Use of Data Analytics Techniques to Assess the Functioning of a Government's Financial Management Information System : An Application to Pakistan and Cambodia*, Policy Research Working Paper, No. 8689.

⁷⁰ The GPP administrators would remain responsible for the accuracy of the GPP-related information transmitted to the central systems.

⁷¹ Straight-through-processing linking the TSA-IFMIS to the MISs of government agencies would allow automated reconciliation of data and reduce errors significantly.

⁷² See Bold, C., D. Porteous, and S. Rotman. *Social Cash Transfers and Financial Inclusion: Evidence from Four Countries*," Focus Note 77, Consultative Group to Assist the Poor (CGAP), Washington, DC., 2012.

⁷³ See *Incentives for the Introduction of Agents by Banca de las Oportunidades in Colombia*, CGAP, February 2013.

⁷⁴ See *G2P and International Digital Remittances During COVID-19: Early Lessons from Cambodia*, United Nations Economic and Social Commission for Asia and the Pacific (ESACP), Macroeconomic Policy and Financing for Development Division Project report, 2021.

⁷⁵ See *Consumer Protection for Digital Financial Services: A Survey of the Policy Landscape*, report by the AFI [Alliance for Financial Inclusion] Digital Financial Services Working Group and the Consumer Empowerment and Market Conduct Working Group, Alliance for Financial Inclusion, January 2021.

⁷⁶ See Asiligwa, B. I., and E. I. Omwenga, *A Roadmap for the Adoption of Government E-payments in Kenya*, International Journal of Computer Applications, Vol. 144 , No.1, June 2016.

⁷⁷ In the case of a payment for fines or taxes, a failed transaction or a digital receipt that is not accepted as proof of payments, could even result in penalties or punishments for the consumer.

⁷⁸ This paragraph draws on Porteous, D., *Is There a Business Case for Offering Services to G2P Recipients?*, CGAP, Blog, 14 March 2012.

⁷⁹ Nonetheless, banks may still offer account services for strategic reasons (other profitable government business may be sold as a result of a good record) or to satisfy regulatory requirements.

⁸⁰ These final considerations draw on *Global Landscape Study on Digitising P2G Payments*, cit.