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The World Bank
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Report No: PAD2042

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 4.5 MILLION
(US\$6 MILLION EQUIVALENT)

TO THE

CO-OPERATIVE REPUBLIC OF GUYANA

FOR A

GUYANA PAYMENTS SYSTEM

March 10, 2017

Finance and Markets Global Practice
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS

Exchange Rate Effective December 31, 2016

Currency Unit = Guyanese Dollar (GY\$)

GY\$207 = US\$1

US\$1.34 = SDR 1

FISCAL YEAR

January 1 – December 31

Regional Vice President: Jorge Familiar

Country Director: Tahseen Sayed Khan

Senior Global Practice Director: Ceyla Pazarbasioglu-Dutz

Practice Manager: Zafer Mustafaoglu

Task Team Leader(s): Jane C. Hwang

ABBREVIATIONS AND ACRONYMS

ACH	Automated Clearing House
AML/CFT	Anti-Money Laundering and Combating the Financing of Terrorism
ATM	Automated Teller Machine
ATS	Automated Transfer System
BoG	Bank of Guyana
CEN	Country Engagement Note
CPMI	Committee on Payments and Market Infrastructures
CSD	Centralized Securities Depository
DvP	Delivery versus Payment
FIRST TF	Financial Sector Reforming and Strengthening Initiative Trust Fund
FMI	Financial Market Infrastructure
FSAP	Financial Sector Assessment Program
GDP	Gross Domestic Product
GCRG	Government of the Co-operative Republic of Guyana
GRA	Guyana Revenue Authority
GRS	Grievance Redress Services
GY\$	Guyanese Dollar
IAD	Internal Audit Department
ICT	Information and Communication Technology
IDA	International Development Association
IFR	Interim Financial Reports
IOSCO	International Organization of Securities Commissions
IPF	Investment Project Financing
LAC	Latin America and the Caribbean
MoF	Ministry of Finance
NBFIs	Non-Bank Financial Institutions
NIS	National Insurance Scheme
NPS	National Payments System
NPTAB	The National Tender & Procurement Administration (NPTA) of Guyana.
OMO	Open Market Operations
PAD	Project Appraisal Document
PAFI	Payment Aspects of Financial Inclusion
PDO	Project Development Objective
PFMI	Principles for Financial Market Infrastructures
PIU	Project Implementation Unit
PPSD	Project Procurement Strategy for Development
PSDG	World Bank Payments System Development Group
RTGS	Real-Time Gross Settlement System
SPD	Standard Procurement Documents
STEP	Systematic Tracking and Exchanges in Procurement
ToR	Terms of Reference
USD	United States Dollar
WB	World Bank



BASIC INFORMATION

Is this a regionally tagged project? No	Country(ies)	Lending Instrument Investment Project Financing
<input type="checkbox"/> Situations of Urgent Need of Assistance or Capacity Constraints <input type="checkbox"/> Financial Intermediaries <input type="checkbox"/> Series of Projects		
Approval Date 31-Mar-2017	Closing Date 31-Mar-2021	Environmental Assessment Category C - Not Required
Bank/IFC Collaboration No		

Proposed Development Objective(s)

The project development objective is to improve Guyana's national payments system by enhancing safety and efficiency of payments.

Components

Component Name	Cost (US\$, millions)
Developing Payments System Infrastructure	4.30
Capacity Building of Bank of Guyana	1.38
Project Implementation Unit	0.32

Organizations

Borrower : Ministry of Finance
Implementing Agency : Bank of Guyana



<input type="checkbox"/> Counterpart Funding	<input type="checkbox"/> IBRD	<input checked="" type="checkbox"/> IDA Credit <input type="checkbox"/> Crisis Response Window <input type="checkbox"/> Regional Projects Window	<input type="checkbox"/> IDA Grant <input type="checkbox"/> Crisis Response Window <input type="checkbox"/> Regional Projects Window	<input type="checkbox"/> Trust Funds	<input type="checkbox"/> Parallel Financing
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Total Project Cost: 6.00	Total Financing: 6.00 Of Which Bank Financing (IBRD/IDA): 6.00	Financing Gap: 0.00
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Financing (in US\$, millions)

Financing Source	Amount
IDA-59660	6.00
Total	6.00

Expected Disbursements (in US\$, millions)

Fiscal Year	2017	2018	2019	2020	2021
Annual	0.00	0.60	2.00	3.00	0.40
Cumulative	0.00	0.60	2.60	5.60	6.00

INSTITUTIONAL DATA

Practice Area (Lead)

Finance & Markets



Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

No

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

No

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

No

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Low
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Moderate
7. Environment and Social	Low
8. Stakeholders	Moderate
9. Other	Moderate
10. Overall	Moderate



COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No

Safeguard Policies Triggered by the Project

Yes

No

Environmental Assessment OP/BP 4.01

✓

Natural Habitats OP/BP 4.04

✓

Forests OP/BP 4.36

✓

Pest Management OP 4.09

✓

Physical Cultural Resources OP/BP 4.11

✓

Indigenous Peoples OP/BP 4.10

✓

Involuntary Resettlement OP/BP 4.12

✓

Safety of Dams OP/BP 4.37

✓

Projects on International Waterways OP/BP 7.50

✓

Projects in Disputed Areas OP/BP 7.60

✓

Legal Covenants

Financing Source

Sections and Description

Subsidiary Agreement: Article V, Section 5.02: The Subsidiary Agreement has been duly authorized or ratified by the Recipient and the Bank of Guyana and is legally binding upon the Recipient and the Bank of Guyana in accordance with its terms.

Financing Source

Sections and Description

PIU: Schedule 2, Section I.A.1: The Recipient shall cause BoG to establish and thereafter operate and maintain throughout Project implementation, a Project Implementation Unit with staff, functions and



	responsibilities acceptable to the Association and set forth in the Operational Manual.
Financing Source	<p>Sections and Description</p> <p>Technical Committee: Schedule 2, Section I.A.2: Prior to carrying out any activities under Part 1 of the Project, the Recipient shall cause BoG to establish, and thereafter operate and maintain throughout the implementation of the Project, a committee (the Technical Committee), with functions, responsibilities and composition, including representatives of NIS, GRA and Ministry of Finance, all acceptable to the Bank and as set forth in the Operational Manual.</p>

Conditions

Financing Source	Type	Description
	Effectiveness	The Subsidiary Agreement has been executed between the Recipient and the BoG.
Financing Source	Type	Description
	Effectiveness	The Operations Manual has been adopted by BoG in a manner and with contents acceptable to the Association.
Financing Source	Type	Description
	Effectiveness	The PIU has been established as set forth in Section I.A.1 of Schedule 2 to the Financing Agreement.

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Jane C. Hwang	Team Leader(ADM Responsible)		OPSPQ



Zoila Catherine Abreu Rojas	Procurement Specialist(ADM Responsible)	Procurement	GGO04
Shonell Jodian Robinson	Financial Management Specialist	Financial Management	GGO22
Daniel Ortiz del Salto	Team Member	Operations Officer	GFM04
Gabriela Grinsteins	Counsel	Legal	LEGLE
Harish Natarajan	Team Member	Payments System	GFM2B
Jacqueline Beatriz Veloz Lockward	Counsel	Legal	LEGLE
Lois Estelle Quinn	Team Member	Payments System	GFM2B
M. Yaa Pokua Afriyie Oppong	Safeguards Specialist	Social Safeguards	GSU04
Monzerrat Garcia	Team Member	Program Assistant	GFM04
Tatiana Cristina O. de Abreu Souza	Team Member	Finance Officer	WFALA
Ximena Rosio Herbas Ramirez	Safeguards Specialist	Environment Safeguards	GEN04
Extended Team			
Name	Title	Organization	Location



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I. STRATEGIC CONTEXT

A. Country Context

1. Guyana is a small, sparsely populated country in South America with 765,000 inhabitants. The country has one of the lowest Gross Domestic Products (GDP) per capita in the Latin America and Caribbean region. Despite overall declining poverty trends, poverty remains entrenched amongst certain geographic and ethnic lines. In 2015, Guyana's GDP per capita was US\$4,127¹. It is the seventh lowest GDP per capita in the Latin American and Caribbean (LAC) region. The economy is heavily dependent upon natural resources, agriculture, and remittances. Thus, it is vulnerable to adverse weather conditions, commodity price fluctuations, and economic conditions in migrant destination countries. Economic diversification beyond natural resources and agriculture remain a challenge. Sugar, gold, bauxite, shrimp, timber and rice represented over 80 percent of the country's exports in 2014. Remittances were equivalent to approximately 11 percent of GDP² mainly sent from the diaspora communities in the United States and Canada. From 1992 to 2006, moderate and extreme poverty figures declined from 43.2 percent and 28.7 percent, respectively to 36.1 percent and 18.6 percent³. The poverty reduction gains were related to consistent economic growth during this period. Based on 2006 data, rural poverty in Guyana reaches nearly 74 percent. The Amerindian population suffers from the highest poverty rates, nearly 78 percent, and includes one-third of the country's extreme poor⁴. The last household survey was conducted in 2006; the absence of more recent data limits a more accurate determination of poverty rates.

2. Economic growth has recently decreased due to a decline in commodity prices and, in turn, the previous strong credit growth in the financial sector has slowed. Average GDP growth of 4.6 percent from 2005 to 2014 was supported by strong global demand of commodities combined with high commodity prices. From 2009 to 2013, credit expanded at an average rate of 15 percent. However, the real GDP growth decelerated to 3.2 percent in 2015 to 2.6 percent in 2016. Given Guyana's strong economic dependence on commodities, the sharp decline in global non-oil commodity prices and overall less favorable terms of trade have decreased export earnings, most notably from the export of gold, bauxite, sugar. The credit growth has slowed considerably. Private sector credit growth has been 6 percent year-over-year in 2015 and 2016. The falling commodities prices have also affected banks and their customers through credit-dependent related service sectors. Commercial banks dominate the financial sector, accounting for about 70 percent of financial sector assets (equivalent of 68 percent of GDP).

3. The development of the national payments system will support Guyana's economic growth. Development of a national payments system (NPS) supports economic growth through a financial sector that is stable and enables efficient financial intermediation. Payment and securities settlement systems have a strong bearing on financial stability. A sound payment system can mitigate financial crises by reducing operational, credit, legal, liquidity, investment, general business, and custody risks in a system. Improvements in payments infrastructure is critical for efficient provision of financial services. Modernization efforts from paper-based instruments to electronic payments can result in significant cost savings and efficiency improvements. For example, a sample of 12 European countries estimate that bank

¹ World Development Indicators

² World Bank Migration and Remittances Data 2015. Remittances estimated at US\$341 million.

³ Country Engagement Note FY16-18. March 23, 2016

⁴ Country Engagement Note FY16-18. March 23, 2016



operating costs fell by about 24 percent between 1987 and 1999 due to payment system reforms, resulting in savings of US\$32 billion.⁵

4. A safer and more efficient domestic financial system will support economic diversification in Guyana. A well-functioning domestic financial sector is essential for diversification. Guyana is a resource rich economy; mainly dominated by large extractive sectors that are funded from abroad. This includes forecasted large revenues from the oil industry. The national payment system is one of the principal components of a country's financial system and, therefore, crucial to a country's economic development. The development of a robust NPS can reduce overall transaction costs and expand the opportunities for commercial and financial transactions in an economy. For example, improvements in Guyana's NPS would raise economic efficiency through fiscal gains for the Government by reducing usage of paper-based payment instruments and increasing electronic payments. Consumers benefit from more efficient financial intermediation by enhancing the quality and improving the cost-efficiency of all types of payments; wider availability and usage of payments instruments for consumers such as e-money and debit cards. Development of these instruments have great potential to reach the financial excluded.

B. Sectoral and Institutional Context

5. In Guyana, access to financial services appears robust in terms of bank account ownership; however, usage of those accounts and other financial services remains low, partially hampered by the lack of payment infrastructure to support wider usage of financial services. For an adult population of approximately 522,000 Guyanese, there are 563,153 deposit/transaction accounts at commercial banks and an additional 36,400 credit union accounts. The World Bank Enterprise Survey indicated that all surveyed firms had access to a savings or checking bank account. A relatively high percentage of the adult population, 73 percent, own a debit card. Despite the relative high access to accounts in Guyana, nearly 99.9 percent of payments are conducted through paper-based payment instruments – cash, cheques, and vouchers. This presents a striking difference between access to bank accounts and usage of electronic payment services. Infrastructure needed to support electronic financial service usage is largely absent in Guyana. For example, cashless retail payment services are extremely limited as physical access points to financial services in terms of Automated Teller Machines (ATMs) and branches are sparse in Guyana. The recent introduction of e-money offers some promise. Further development of the payments infrastructure is a prerequisite for enabling wider usage of electronic financial services.

6. Considering international experience, national payment systems (NPS) are one of the foundations for financial infrastructure. A robust NPS is comprised of all institutions, information, technologies, infrastructure systems, payment instruments, rules and standards which enable exchange of monetary value. It includes infrastructure systems, legal frameworks, standards, rules and procedures for the system, and strong oversight of the NPS. The quality of a country's NPS supports financial stability and efficiency of economic activity and intermediation as the NPS facilitates the discharge of financial obligations and the safe transfer of funds across distances and institutions. National Payments System development can make risk-sharing among agents more equitable. A robust, well-developed NPS supports financial stability by allowing financial market participants to manage their risks more effectively and efficiently, and, in some instances, reduce or eliminate certain risks. By performing centralized activities,

⁵ World Bank: Financial Infrastructure Policy and Research Series: Financial Infrastructure – Building Access through Transparent and Stable Financial Systems. 2009.



financial market infrastructures (FMIs) concentrate risks and create interdependencies between and among FMIs and participating institutions. Key risks faced by FMIs include: legal, credit, liquidity, general business, custody, investment, and operational risks. Whether a FMI, its participants, or both face a particular form of risk, as well as the degree of risk, will depend on the type of FMI and its design.⁶ By mitigating these risks of the FMIs, resources are distributed more efficiently and thereby greater confidence in the finance system and use of money. The international standards for payment, clearing and settlement systems, including central counterparties were issued by the Bank for International Settlements' Committee on Payments and Market Infrastructures (CPMI) called the Principles for Financial Market Infrastructures (PFMI).⁷ The standards are designed to ensure that the infrastructure supporting global financial markets is more robust and thus well placed to withstand financial shocks.

7. The NPS is at an early stage of development in Guyana and large users, such as the Government, are ready to benefit from a more advanced NPS. Critical needs of Guyana's NPS include the adoption of a Real-Time Gross Settlement System (RTGS), an Automated Clearinghouse (ACH), and a Central Securities Depository (CSD). The three infrastructures provide the transaction ability to clear and settle both large-value payments, retail payments and securities settlement arrangements in a financial system. The infrastructures are typically linked and coordinate settlement processes to better manage liquidity and settlement risks. The coordinated settlement processes for these systems can improve overall cost efficiency in interbank transfers and achieve settlement finality in central bank money. Furthermore, the establishment of rules of operation, governance and participation guidelines for these systems and a well-articulated, payments specific legal and regulatory framework are absent in Guyana.

8. There are significant gaps in the foundations of Guyana's NPS: the overall policy framework and the basic infrastructures need to be aligned with the international norms in payments system development. These gaps limit the ability to transition to electronic payments in order to conduct personal, business, Government and financial transactions, including remittances. The gaps include: (1) a lack of a comprehensive legal and regulatory framework; (2) a lack of a mechanism for a safe and efficient processing of large value payments which a RTGS provides, including those stemming from securities transactions, and money market and foreign exchange transactions; (3) the absence of an automated mechanism to clear and settle interbank retail payments in an efficient manner that an ACH provides; (4) the absence of a CSD prevents electronic record keeping and electronic settlement of securities; and (5) the lack of a policy framework for the NPS. These gaps were identified as part of a Guyana Financial Sector Assessment Program (FSAP), conducted in Guyana in May 2016. Addressing these gaps requires a combination of legal and regulatory reforms; Bank of Guyana (BoG) capacity building; and the acquisition and implementation of the several core functional infrastructures. The aforementioned infrastructures are standard components of NPS across developing and mature countries around the world, including small economies. For example, of the 116 countries surveyed in 2014, 83 percent of all countries, and 77 percent of all small countries (those with a population less than 5 million) have RTGS systems in place. Thus, despite being a smaller economy, Guyana is an outlier in this respect. The project is aligned with the aforementioned Guyana FSAP recommendations which was conducted in relation to the Payment Aspects of Financial Inclusion (PAFI) set forth by the CPMI and the World Bank Group.

⁶ BIS: CPSS-IOSCO-Principles for Financial Market Infrastructures April 2012.

⁷ <http://www.bis.org/cpmi/publ/d101a.pdf>.



9. Paper based instruments are the predominant form of payments in Guyana. Nearly 99.9 percent of payments are conducted with paper-based instruments in the form of cash, cheques and paper vouchers. The Government alone initiates and receives almost 3.5 million payments annually with 99.9 percent of those conducted in paper-format. Cheque processing still involves some manual handling, which gives rise to inefficiencies and risks. Apart from the cheques, the primary non-cash payment instrument used for retail payments are payment cards. Until recently most banks issued proprietary payment cards that could only be used in the issuing bank's ATM and POS networks. As a group, the commercial banks are working with Visa to establish interoperability in the domestic card market via Visa co-branding of domestic issued cards. Once the process is completed the cards will be processed off-shore in a Visa processing center. One mobile phone operator has introduced mobile money in Guyana thereby leveraging mobile phone based payment services to expand their distribution reach.

10. The securities market in Guyana is nascent and fund settlements are done through cheques resulting in risks and inefficiencies. The Guyana securities market is predominantly composed of Government securities -Treasury Bills– and 15 equity securities. The Treasury Bills (T-bill) auction process and recording of the ownership details are in book-entry form. Non-bank entities, such as pension funds, also participate in the T-bills primary market and they pay for their bids through cheques. The secondary market in Government securities is thin and is entirely over-the-counter. Changes in ownership of Government securities are not recorded in the electronic book-entry system, nor are pledges of Government securities as collateral. For the corporate securities market, trading is based on an open-outcry and is held once a week. 'Cash' settlement is T+5 on a bilateral basis. Corporate securities are issued in paper form. Changes in ownership of corporate securities requires the reissue of the security documents, which are subject to considerable delays. As a result, delivery versus payment (DvP)⁸ is not achieved. There is no established mechanism for addressing settlement failures.

11. In the absence of a more robust payments infrastructure, the cost of conducting payments in Guyana is higher than need be, the time it takes to settle transactions are longer and the risks are higher. Inefficiencies in the clearing and processing of paper-based payment instruments introduce higher costs. Manual processing and delays in settlement introduce more risks in the financial system. For example, longer payment settlement time for cheques can heighten the credit and liquidity risks by raising the risk of payment failures. Reverse liquidity challenges may also rise as a result of the lack of instantaneous, reliable and secure payment transfers; for instance, when enterprises need incoming payments to clear before outgoing payments to their suppliers and employees can be made.

12. The extensive use of paper-based payments instruments and manual processing is highly inefficient, costly, and risk prone and compromises public security. Transition to electronic payments would help mitigate the risks as well as enable efficiency gains by encouraging usage of the transaction accounts. The practice of utilizing high-value cheques settled on a multilateral net basis, without a liquidity support system, presents liquidity and credit risks for the payments system. There is no liquidity support mechanism in place via the BoG. With regard to operational risks, the manual clearing and settlement of paper-based payment instruments is prone to errors and the oversight function needs to be strengthened.

⁸ Delivery versus Payment: A securities settlement mechanism that links a securities transfer and a funds transfer in such a way as to ensure that delivery occurs if and only if the corresponding payment occurs.
<http://www.bis.org/cpmi/publ/d00b.htm?&selection=26&scope=CPMI&c=a&base=term>.



Additional identified risks related to extensive paper-based payment instruments include the high incidence of theft and robbery in Guyana due to intensive cash usage in the economy.

13. The new proposed system would significantly reduce operational, credit and liquidity risk in the clearing and settlement of both large-value and low-value payments, and would facilitate security market transactions. A modernization of the national payments system will decrease operational, credit, liquidity risk by introducing a RTGS, ACH and CSD. The RTGS system will clear and settle large-value payments in real-time reducing risks in the system. An ACH will increase efficiency by enabling more active use of electronic payments by introducing new instruments such as inter-bank direct credit and direct debit transfers and will increase the speed of clearing and settlement of payments. It would enable the use of bulk payments for some large volume payment programs such as wage payments. A CSD would enable recording of the securities ownership in book entry form and also allow for efficient transfers resulting from future secondary market transactions. By integrating the CSD and RTGS, it would enable the settlement process to conform to DvP, and also permit usage of eligible securities as collateral for liquidity needs in the RTGS system. Overall, the new system would also reduce the need for businesses to have multiple bank accounts with several banks to facilitate payment transactions. The implementation of the core NPS infrastructure envisioned in this project would bring about safer, sound and more efficient payments.

14. Furthermore, a conversion from paper based payments instruments to electronic payment environment has the potential to bring significant savings to Guyana. The World Bank conducted a Guyana “Cost of Cash” study.⁹ This project will build upon this previous technical assistance provided by the World Bank to the BoG. The WB worked with the BoG to conduct a survey to measure the cost of retail payments from the demand side for a pre-selected range of payments instruments in Guyana. The study was called: Retail Payments: A Practice Guide for Measuring Retail Payments Costs-Demand Side: Result from the Guyana Surveys. The study concluded the current paper-based payments instruments in Guyana cost consumers nearly GY\$15 billion, approximately US\$73 million, equivalent of 2.45 percent of GDP. For Government, the cost of using cash, cheques and vouchers for making and receiving payments is US\$4.1 million, equivalent of 0.13 percent of GDP. The Government alone could save approximately US\$2 million a year by switching to electronic payments – not counting gains from reduced leakages. Consumers would save close to US\$6.1 million every year by shifting 50 percent of their bill payments via electronic transfers. Likewise, international remittances which are equivalent of 11 percent of the GDP; an increased usage of electronic payments for remittances would reduce the cost of sending remittances to Guyana, which will likely translate into correspondingly higher income flows for remittance recipients. Transitioning to increased electronic payment usage would also decrease theft and robbery and thereby increase public safety and security in Guyana.

C. Higher Level Objectives to which the Project Contributes

15. The Project is a core element of the latest Country Engagement Note (FY16-18)¹⁰ objective of laying the ground for private sector development. Under this objective, the World Bank will continue ongoing financial sector support to Guyana. This operation would support the strengthening of the

⁹ World Bank: Financial Infrastructure Series: Payment Systems Policy and Research. Retail Payments – A Practical Guide for Measuring Retail Payment Costs – Demand Side: Results from the Guyana Surveys. October 2015.

¹⁰ The Guyana CEN was discussed with the World Bank Group Board on May 3, 2016.



payment and settlement aspects of the financial sector infrastructure within the financial sector. As such, the proposed project will support the development of the prerequisites required for Guyana’s economy to transition from a predominantly cash based environment to electronic payments. This transition to a modern payments system is expected to help reduce poverty and boost shared prosperity by generating financial inclusion, promoting formalization, and lowering costs and time to make payments for consumers, positively affecting low-income families living in rural areas. Electronic payments would also provide climate change co-benefits by reducing paper needed for payments and eliminating the need for transportation to make such transactions. The estimated yearly savings for the Government of approximately US\$2 million and consumer savings of US\$6.1 million include climate change co-benefits savings.¹¹ This project is also aligned with Guyana’s National Development Plan – Vision 2020 which speaks to the current payment reforms focused on a comprehensive and strategic modernization of Guyana’s national payment system to advance the use of electronic payments. The World Bank project would support the overall NPS reform in Guyana by providing the operational architecture to conduct interbank electronic payments in a safe and efficient manner.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

16. The project development objective (PDO) is to improve Guyana’s national payments system by enhancing safety and efficiency of payments.

B. Project Beneficiaries

17. Final users of payment services are the ultimate beneficiaries of this Project. Consumers, Government agencies, tax payers, national insurance scheme recipients, and the private sector will benefit from an improved and modern NPS. The Project will facilitate the provision of safe and efficient electronic payment instruments to end users. The expected streamlining of the new payments systems will have a salutary effect on the work efficiency of both men and women; including public sector employees of which 44 percent are estimated to be women.¹² Once the improved systems are up and running, the Bank may consider commissioning a study to assess their impact on employees with gender disaggregated analysis.

18. The BoG will benefit by increased knowledge and capacity for the operation of the core payments infrastructure and the governance of the NPS. Additional technical assistance is being provided to the BoG to conduct a comprehensive reform to design a strong legal and policy framework to support safe and efficient electronic payments. In addition, this Project will provide financial and technical support to the BoG for developing the payments system infrastructure and to improve capacity of BoG staff.

¹¹ World Bank: Financial Infrastructure Series: Payment Systems Policy and Research. Retail Payments – A Practical Guide for Measuring Retail Payment Costs – Demand Side: Results from the Guyana Surveys. October 2015. According to World Bank estimations, climate co-benefits for this Project is approximately 70 percent. The calculation is an estimation of benefits derived from Component 1 of the Project (\$4.3 million USD).

¹² International Labor Organization. 2001. Guyana: National Employment Report.



19. Financial institutions will also benefit from the Project. The core payment infrastructures - the RTGS, ACH and a linked CSD, will provide a number of advantages to financial institutions: 1) safer and more efficient processing of electronic payments and 2) banks and other eligible institutions will be able to offer more efficient payment services such as credit transfers and direct debits that can be used for a variety of retail payment needs, such as salary payments, bill payments and tax payments.

C. PDO-Level Results Indicators

20. There are two PDO results level indicators: 1) Percentage of large-value payments processed through the RTGS (GDP Turnover), and 2) The new National Payments System observes or broadly observes all applicable Principles for Financial Market Infrastructures.

III. PROJECT DESCRIPTION

A. Project Components

21. A National Strategy for Payments System Development is being completed during the project preparation phase. The BoG, along with other private and public sector stakeholders, to develop a National Strategy for the Payments System reform; which is also supported by a FIRST Trust Fund executed by the World Bank. The Strategy establishes a strategic approach to the development of the NPS and includes a vision of the future national payments system and the implementation plan. The vision articulates the strategy for the development of the NPS in Guyana. It provides general information on the current NPS, sets out the BoG's strategic approach to NPS development, and outlines the envisioned future state of the Guyana NPS in terms of its specific elements. Throughout the document, the internationally accepted principles and practices are highlighted and elaborated from the perspective of specific circumstances in Guyana. The implementation plan is complementary to the vision and contains practical details on the execution of individual development projects that are required to achieve the envisioned NPS. The Strategy will contain both the vision and the implementation plan. It is being led by the BoG and carried out with extensive and ongoing consultation across the sector and with all affected stakeholders.

22. The project has the following 3 main components: (1) Developing Payments System Infrastructure, (2) Capacity Building of the Bank of Guyana, and (3) Project Implementation Unit.

Component 1. Developing Payments System Infrastructure (US\$4.30 million)

23. This component will focus on financing the required hardware and software infrastructure by the Government in order to provide interbank clearing and settlement services for electronic payments. Component 1 will finance the hardware and software for the RTGS and CSD. It will also support the upgrade of the core systems of the Bank of Guyana, Ministry of Finance, the National Insurance Fund (referred to as the National Insurance Scheme (NIS) in Guyana), and the Guyana Revenue Authority to enable their direct participation in the new infrastructures.

24. The component would finance the hardware and software for the RTGS to be operated by the Bank of Guyana. The RTGS system would serve as the system for settlement of all large-value (large-value



payments will be defined within the operational rules and policy framework of the system) and systemically important payment transactions. The introduction of a RTGS system in Guyana would enable final settlement of interbank funds transfers on a continuous, transaction-by-transaction basis throughout the processing day.

25. The introduction of an RTGS would substantially reduce payments risks; more specifically credit, liquidity and settlement risks. Due to their continuous intraday final transfer capability, RTGS systems are able to minimize or even eliminate the basic interbank risks in the clearing and settlement processes by reducing the limit of credit and liquidity exposures. Credit risk is present in a system when a counterparty is unable to meet full-value payment obligations resulting in either partial or full default. Liquidity risk is present when the counterparty cannot settle a payment obligation for full-value when due but at later point in time. This would adversely affect the expected liquidity position of the payee. The delay may force the payee to cover its cash-flow shortage by funding at short notice from other sources, which may result in a financial loss due to higher financing costs or to damage to its reputation. Settlement risk may be used to refer to the risk that the completion or settlement of individual transactions or, more typically, settlement of the interbank funds transfer system as a whole, will not take place as expected. Settlement risk comprises both credit and liquidity risks.¹³ The functionality of the RTGS permits real-time, transaction-by-transaction settlement; as such, it would mitigate the aforementioned risks as final settlement is effected immediately within the system. Should the RTGS be linked to other systems, the real-time transfer of irrevocable and unconditional funds from the RTGS system to the other systems would also be possible.

26. The component would also finance the hardware and software for the CSD to be operated by the Bank of Guyana. The Central Securities Depository allows registration, safekeeping, settlement of securities in exchange for cash and efficient processing of securities transactions in financial markets through electronic means.

27. The introduction of a CSD would bring efficiency gains for the securities market. The introduction of a CSD would allow a change of ownership through a simple account transfer versus transferring paper ownership that is vulnerable to human errors. Efficiency gains can materialize as the cost of performing transactions through a CSD is more cost effective than performing transactions with certificates of ownership. The electronic recording of securities ownership would enable smooth processing of securities transactions to achieve DVP. The recording of securities ownership in electronic form would also enable efficient usage of these securities as collateral for liquidity support in the RTGS system and also for repo and other Open Market Operations (OMO) of BoG.

28. The ACH will be acquired by the BoG to conduct the retail payment transactions in Guyana. The ACH would enable electronic clearing and settlement of retail-value payments. It is expected that the ACH would enable the banks and other eligible institutions to offer credit transfers and direct debit services that can be used for a variety of retail payment needs, such as salary payments, bill payments and tax payments. It is envisioned that the RTGS, CSD and ACH will be interconnected.

29. Connectivity infrastructure, hardware and software systems required by Government institutions to conduct and facilitate electronic Government payments through the new payments

¹³ <https://www.bis.org/cpmi/publ/d22.pdf>



infrastructure will also be purchased and implemented for: **1) Bank of Guyana 2) Ministry of Finance, 3) National Insurance Scheme, and 4) the Guyana Revenue Authority.** Government payments tend to account for a sizable portion in an economy. Generally, government payments are measured in terms of government expenditures as a share of GDP, and/or tax collections as a share of GDP. In a majority of country cases, such ratios tend to range from 15 percent to 45 percent of GDP.¹⁴ In 2015, Guyana's tax revenue was 23.9 percent of GDP and expenditures were 29.9 percent of GDP. Thus, improvements to Guyana's Government payments is likely to bring amount large efficiency and fiscal savings for the economy. In this context, the hardware and software of relevant Government institutions will be upgraded in order to connect to the reformed NPS. For the Bank of Guyana, the core banking system will need software modifications to include interfaces for the connecting to the new systems. At Treasury, modernization of the financial management information (FMIS) through a new software interface will be necessary to create and receive electronic payments. The National Insurance Scheme (NIS) will need hardware and software to collect and distribute social welfare electronic payments: social security, insurance, disability, sickness, maternity, and pension payments. The Guyana Revenue Authority (GRA) will need hardware and software investments to facilitate electronic tax collection and payments. The project will also finance connectivity between, inter alia, the BoG, the MoF, the GRA, the NIF, private sector entities and other relevant entities.

30. The project would also finance an information security audit of the payments systems' technical infrastructure and will finance activities to promote the engagement of the private sector's usage of electronic payments. The project would finance an information security audit of the payments systems technical infrastructure prior to the system becoming fully operational. In addition, the project will finance private sector usage of electronic payments through securing connectivity.

Component 2: Capacity Building of the BoG (US\$1.38 million)

31. This component is mainly focusing on the capacity building of BoG staff in the specific technical areas required for ongoing operation and management of the infrastructure systems. Staff of the BoG and the PIU do not have experience operationalizing or overseeing a RTGS, ACH or CSD. This project brings together multiple Information and Communication Technology (ICT) activities and would hence require the support of consultants and entities that would assist the new Project Implementation Unit (PIU) in managing the implementation aspects of the ICT activities. It is expected that one entity focusing on IT aspects and a few functional/business consultants would be required for this. Capacity building would include, inter alia: i) PIU operational technical advisory support for the RTGS and CSD; ii) technical advice for electronic payments through the payment infrastructure; iii) peer study tours for the PIU; and iv) training.

32. The entity with support of the consultants would be responsible for supporting the PIU in overall project implementation. The key responsibilities for this entity would be: (i) working with the PIU in clearly defining the scope of the individual systems and a high level project plan and supporting the PIU in the IT project management; (ii) defining technical specifications of hardware and software investments (iii) analyzing the hardware and network requirements and identifying opportunities for leveraging existing systems components and developing the overall IT system and network architecture; (iv) finalizing

¹⁴ <http://documents.worldbank.org/curated/en/883951468000286016/pdf/96463-WP-Box391445B-PUBLIC-ADD-TOPIC-payment-systems-remittances-and-other-related.pdf>.



the bidding documents for the various components in coordination with the PIU and with support from additional consultants, if required; (v) supporting the PIU in the evaluation of the bids and selection of vendors, with support from additional consultants, if required; (vi) working with chosen vendors and coordinating the implementation of the systems; (vii) supporting the PIU in conducting the user acceptance tests and operational acceptance tests; and (viii) enhancing the capacity of the PIU in the areas of IT management, IT governance and IT risk management through focused training to key BoG staff during the course of the project. Through the advisory service, it is envisioned that capacity would be strengthened as knowledge and know-how is imparted to the BoG staff and the PIU.

33. Completion of relevant training and study tours would also further strengthen the capacity of the relevant Bank of Guyana staff and would be financed under this component. Capacity building would include obtaining the required training and professional certification of IT security, database administration and systems management. This would also include study tours of the NPSs of peer countries which have recently undertaken NPS reforms and/or studies of other countries’ NPSs which would benefit the knowledge and know-how of the nascent Payments System Department of the Bank of Guyana. Participation in international seminars and forums in relation to NPS development is also included.

Component 3: Project Implementation Unit (US\$0.32 million)

34. This component would focus on supporting the efforts of the implementing agency to effectively execute the Payments System Project. Specifically, the support under this component would be provided directly to the PIU. The PIU will be in charge of planning, coordinating, implementing, managing, monitoring, and finalizing all the activities established for this Project. More specifically, the Project would finance: (i) the recruitment and training of the PIU team members including specialists responsible for procurement procedures financial management, information technology, and the overall execution of the project; (ii) equipment and furniture for the PIU; (iii) monitoring and evaluation activities; (iv) dissemination activities; and (v) the project’s financial audits.

B. Project Cost and Financing

35. The total project cost is equivalent to US\$6 million. The project’s allocations to the three components are summarized in this table.

Project Components	Project cost	IDA Financing	% IDA
Component 1: Developing Payments System Infrastructure	US\$4,300,000	US\$4,300,000	100%
Component 2: Capacity Building of Bank of Guyana	US\$1,380,000	US\$1,380,000	100%
Component 3: Project Implementation Unit	US\$320,000	US\$320,000	100%
Total Costs	US\$6,000,000	US\$6,000,000	100%
Front End Fees	US\$ 0	US\$ 0	-



Total Financing Required	US\$6,000,000	US\$6,000,000	100%	-
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C. Lessons Learned and Reflected in the Project Design

36. Based on extensive World Bank experience in supporting payment system reform in more than 100 countries, the following lessons can be drawn that are currently being reflected in the project design:

- (a) **National Payments System Strategy:** In the absence of a vision and/or a strategy, payment system reform tends to follow a piecemeal approach leading to a suboptimal use of resources and lack of a strategic, longer-term approach to payment system development. Typically, a comprehensive approach to payment system development would include the following pillars: (i) legal and regulatory framework; (ii) large-value funds transfer systems; (iii) retail payment systems; (iv) government payments; (v) interbank money market; (vi) securities settlement systems; (vii) cross-border payments and international remittances; (viii) payment system oversight; and (ix) framework for payment system cooperation. This approach also allows exploiting synergies, integration and opportunities for policy coordination. On the other hand, where a strategy exercise has not taken place, technology-driven decisions are likely to determine the outcomes of payment system reform, rather than the business and users' needs, thus leading to possible cost-efficiency and usage issues, and possibly obsolescence in time.
- (b) **Central Bank leadership:** The Central Bank is the best positioned to lead NPS development, and ensure that the core infrastructures of a robust NPS are in place. Typically, this requires the Central Bank to build and operate those core infrastructures. Market forces alone are not sufficient to achieve the efficiency and safety objectives of robust payment systems, due mainly to the utility aspects of the infrastructure (i.e., economies of scale and scope). The roles of the central bank as (i) operator, (ii) overseer, (iii) user, and (iv) catalyst agent for innovation must be played and calibrated based on market dynamics and according to payment needs.
- (c) **Government Payments: The Government is one of the single largest user of the payments system.** As the Guyana Cost of Cash Study notes, Government transactions account for a significant portion of the volume of total transactions in Guyana. This is the case in most economies. Enabling direct participation of the National Insurance Scheme, Tax Authority and Ministry of Finance in the core payment infrastructures would significantly facilitate the Government's transition to electronic payments.

IV. IMPLEMENTATION



A. Institutional and Implementation Arrangements

37. Bank of Guyana will be the implementing agency for this project. The PIU will be located within BoG. The BoG PIU will be responsible for coordinating, managing, implementing, supervising, finalizing, and documenting all the activities related to the Project.

38. The PIU will be staffed with full-time, capable and qualified personnel for the implementation of the project. A team will be recruited, trained and equipped to coordinate, manage, implement, and supervise project activities. The PIU team will be composed of at minimum of: (i) a project coordinator; (ii) a procurement specialist; (iii) a financial management specialist; (iv) an IT officer; and (v) an assistant. In addition, a technical team from BoG (IT Department) and other key stakeholders such as Ministry of Finance, National Insurance Scheme, and the Guyana Revenue Authority will provide technical support to the PIU.

39. The PIU will be responsible for implementing the project. In order to do so, the PIU will need to: (i) manage the implementation of project activities; (ii) manage the procurement and financial management aspects; (iii) coordinate the preparation, adjustments, and use of the project management tools, including the operational manual, working annual plan, procurement plan, and disbursement projections; (iv) monitor the progress of project development indicators and the intermediate indicators of the Results Framework; (v) prepare project reports; and (vi) act as the main point of contact for the World Bank.

40. In addition, The BoG will transfer goods and services following the local asset transfer procedures to other relevant Government entities. GRA, Ministry of Finance, NIS, and other relevant entities will provide technical support to the PIU team during implementation.

B. Results Monitoring and Evaluation

41. The PIU at the BoG will be responsible for the monitoring and evaluation (M&E) of the PDO-level and intermediate results indicators. The project indicators are defined in the results framework and monitoring (see section VII). The project indicators will benefit from the Global Payment System Survey (GPSS) framework. The GPSS surveys national and regional central banks and monetary authorities on the status of payment systems. The GPSS is the only global survey that combines quantitative and qualitative measures of payment system development and covers all aspects of national payment systems – from infrastructure and the legal and regulatory environment to technological and business model innovations, international remittances, and oversight framework. The GPSS also has questions pertaining to the development RTGSs and CSDs worldwide. In this manner, the PDO indicators will benefit from the GPSS.

42. This Project also has baseline information from the results of the World Bank's Guyana Cost of Cash study which the PIU could leverage towards the end of project implementation. The Cost of Cash study indicates the annual cost for consumer and for Government agencies associated with payments using cash and other paper-based payment instruments. The BoG, with the support of the WB, could use the same methodology prepared by the PSDG World Bank in order to evaluate the overall results of this project. The survey could be repeated as a measure of citizen engagement indicator to understand if beneficiaries feel project activities and results reflected their needs. A repeated survey could also be a



baseline for comparability. Finally, the PIU will be responsible for preparing semi-annual progress reports which will be used as a monitoring and evaluation tool.

C. Sustainability

43. Project sustainability is supported through three main mechanisms: 1) BoG and payment industry ownership of the National Payments System Development Strategy, 2) the expected passage and enactment of the NPS Act which provides a legal foundation for the NPS, and 3) the establishment of a robust Payments System Department at the BoG supported by a technical team that would include members of the PIU that will be absorbing the knowledge transferred by the technical advisors on payments systems, financed under component 2, during Project implementation.

44. The high degree of public and private sector demand and support for NPS reform will bolster project sustainability. The project is designed to establish a core building block of the NPS Development Strategy, the RTGS and CSD infrastructures. The NPS Development Strategy was designed in consultation with the public and private sectors. The NPS Act will provide the legal foundation for the development of the NPS and has also been shared with the public and private sector for consultation and wider support. The public and private sectors will be launching internal efforts to facilitate the use of the new infrastructures, as thus, will have a vested interest in seeing the project completed in a timely manner.

45. The formulation of a Payments System Department at the Bank of Guyana will ensure project sustainability. Part of the project will entail the creation of a formal payments system department at the Bank of Guyana. The payments system department would be expected to oversee the national payments system both from an operational and policy perspective ensuring safe and efficient payments. Throughout the course of project implementation, the department is expected to develop the operational and international knowledge to continue operating and overseeing the national payments system in a safe and efficient manner for all system participants.

D. Role of Partners

46. A complementary partner of this project is the Financial Sector Reforming and Strengthening Initiative Trust Fund (FIRST TF) housed at the World Bank. FIRST TF is a multi-donor grant facility that provides short and medium-term technical assistance (TA) to promote sounder, more efficient, and inclusive financial systems. In November 2016, FIRST TF approved the Guyana Payments System – Policy, Legal and Regulatory Framework project for a total of US\$259,974 with FIRST contribution of US\$244,974.

47. The FIRST Initiative is financing assistance to the BoG to finalize the draft NPS Act. At the same time, it is supporting the development of the body of regulations necessary to support the implementation of the NPS Act. Currently, Guyana is missing the policy, legal and regulatory support required to undertake a comprehensive payments system reform. There is currently no comprehensive legal framework governing the payment system in Guyana. The legal provisions that currently ‘govern’ the NPS derive from various pieces of legislation that address broader issues, such as the Bank of Guyana Act, or address very narrow elements of the NPS, such as the Money Transfer Agencies (Licensing) Act. As a result, in the absence of legal certainty for the NPS, including for specific operational procedures used in payment systems like netting; (i) the absence of provisions to protect the finality of payments and rights



over collateral from actions resulting from bankruptcy and insolvency proceedings; (ii) the lack of recognition of dematerialization/immobilization of securities; and (iii) the scope of BoG authority with regard to payment service providers, system operators, and various payment instruments. Similarly, the recent FSAP technical note calls for the development of the necessary body of regulations to implement a NPS Act and highlights the need for the strengthening of the policy and oversight framework that governs the NPS.

48. The FIRST initiative is also supporting Guyana’s NPS development by providing technical assistance for the development of the broader NPS policy and oversight frameworks. These frameworks will be developed in accordance to the international principles and guidance, including – Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (ISOCO) Principles for Financial Market Infrastructures, World Bank/CPMI Payment Aspects of Financial Inclusion, Financial Action Task Force (FATF) guidance, and the WB/CPMI General Principles for International Remittance Services.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

49. The overall risk rating of the proposed Project is assessed as Moderate. There is a moderate likelihood that political and governance factors, such as possible changes in political leadership, could adversely impact the project development objective (PDO). Similarly, economic downturns, if materialized, would only moderately affect the achievement of the PDO. De-risking in the banking sector has effected local banks mostly because U.S. banks have been reconsidering their correspondent banking relationship with Guyanese banks. As a result of the de-risking issue, there could be less appetite by the local private sector banks to connect to the new RTGS and CSD. In order to mitigate these risks, the Guyana authorities are working with the World Bank to conduct an AML-CFT national risk assessment and developing a NPS Strategy in broad consultation with the Guyanese financial sector, including the banks. Moreover, through project supervision mission, the WB team will monitor developments and coordinate closely with the PIU.

50. The institutional capacity risk for implementation is moderate. The main risks relate to capacity of the BoG to effectively discharge its responsibilities for the new payment infrastructures and operating as a PIU for the Project. In order to mitigate these risks, Project Component 2 is financing technical advisors to support the BoG. Inter alia this would include: operational management of RTGS, CSD, IT components and system integration by the Government of Guyana. The Project will train PIU specialists on procurement and financial management policies. The World Bank specific financial management training will be an additionality to the well-established internal control environment already existing at the Bank of Guyana, confirmed by the WB financial management assessment. As these systems will offer new payment functionalities, there will be a learning curve for both the authorities and banks.



VI. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

51. The development impact is expected to be a net positive for the economy of Guyana. As the WB Guyana Cost of Cash noted, there are a number of efficiency gains from transitioning Guyana's economy from a primarily paper-based payment economy to an electronic payments economy. Guyana, by investing US\$6 million in this National Payments System Project, could generate for the country about US\$16 million in savings during the life of the Project (4 years), if 50 percent of cash payments made by consumers and 70 percent of cash payments made by Government agencies are substituted with fully electronic credit transfers in 2020 and 2021.

52. The current scenario suggests significant cost savings for Government and private sector. Accordingly to the Cost of Cash Study survey, approximately 94 percent of Guyanese adult population have access to a transaction account and nearly 73 percent of the adult population own a debit card. Despite this high percentage, nearly 99.9 percent of consumer payments are conducted in cash. Likewise for Government agencies, in which 99.9 percent of all Government transactions occur in cash, cheques and paper vouchers. The sheer volume of paper based payment instrument should be considered with the time and opportunity cost for conducting paper based transactions. Guyanese adults spend almost 1.07 billion minutes annually at the point of interaction to initiate and collect payments. This translates into annual opportunity costs of approximately GY\$ 3.2 billion. Guyanese adults spend approximately 194.6 million minutes annually to travel to access points to make transactions associated with deposits and withdrawals at a bank branch. This is equivalent to annual opportunity costs and transportation costs of approximately GY\$ 1.4 billion. Several other variable factors are outlined in the study some which include the following but are not limited to: reconciliation time for costs for bank account statements, reconciliation time cost other than bank account statements, annual fees, and foregone interest. In order for these cost savings to materialize, the prerequisite financial infrastructure must be in place in order to convert to electronic payments in Guyana.

53. Corporate savings and Government Payments related to Procurement are not considered for the estimated savings; therefore, total savings for society is expected to be even higher for the use of a modern payment system. Beyond the life of the Project the conversion rate from cash to fully electronic credit transfer is expected to keep increasing as well as the annual savings for society.

B. Technical

54. The rationale for public financing of the payments systems lies in the fact that the core payment infrastructures are public goods. A vast majority of RTGS and CSD infrastructures are either owned, operated or managed through the involvement of the country's central bank. Failures within the payment infrastructure can result in inefficient use of financial resources, inequitable risk sharing among agents, losses for participants and in a severe case it can result in the loss of confidence in the financial system. More generally, the safety and efficiency of the entire NPS is important for the development of the economy and in many cases this trust is placed with the central bank of a country as its foremost priority is to ensure confidence in the central bank, the currency, and for overall financial stability. As the guardian



of the NPS, the BoG can neutrally assure the safety and efficiency gains derived from electronic payments, increased transparency for electronic payments to support efforts towards improved an improved AML/CFT environment, and support wider access of payments to improve financial inclusion in Guyana.

55. The value-added of the World Bank is both financial and technical. On the financial side, budgetary constraints have been identified as a relevant impediment to the development of the infrastructure foundation of a modern national payments system in Guyana; in light of the forecasted growth slowdown due to a less favorable external environment. On the technical side, the proposed Project would support the BoG's technical expertise by drawing from the needed technical and implementation support from the WB's extensive and global experience in working with over 142 countries to develop their national payments system in line with international standards.

C. Financial Management

56. The PIU within the Bank of Guyana (BoG) will be responsible for the project fiduciary functions. Although BoG is inexperienced in implementing World Bank financed projects, it appears to have a well-established internal control environment. The Bank performed a financial management assessment of this proposed project in accordance with OP/BP 10.00 and the Financial Management Practice Manual (issued by the Financial Management Sector Board in March 1, 2010). It was concluded that the BoG has the capacity to ensure that an adequate financial management system for the project will be in place, which can provide, with reasonable assurance, accurate and timely information on the status of the funds as required by the Bank.

57. Staffing. The Accounts and Budgets Department is comprised of 18 staff members, of which an Accounts and Budget Principal will be assigned to the project as the Project Accountant. In addition to the Accounts and Budget Principal's responsibilities under BoG operations, he will also be responsible for all the financial management related areas of the project. The Accounts and Budget Principal is a Chartered Accountant with 11 years of accounting experience which has been gained at BoG. However, the overall department lacks experience in implementing World Bank finance projects as such training and continued support will be provided on World Bank's financial management guidelines.

58. Budget. A budget for the entire life of the project will be based on the project's procurement plan. The budget will be prepared by the PIU in consultation with the Bank's task team, in which annual budgets will be derived. The budget for the life of the project will be revisited periodically and updated as needed to reflect implementation progress. Variance analysis will be performed on a quarterly basis, in which explanations for variances will be discussed, documented and acted on.

59. Internal Controls. BoG has a well-established control environment with proper approval and payment procedures in place. The daily operations of the project will be guided by an operations manual which will incorporate the financial management procedures. The manual will be updated throughout the life of the project as needed to reflect the current procedures. The control environment is further enhanced by internal audit department (IAD) headed by the Director of Internal Audit. The IAD reports directly to an Audit Committee which convenes at the end of each quarter. Risk-based audit plans prepared by the IAD are reviewed and approved by the Committee as well as the audit reports and findings. The project will be audited by the IAD in which their current audit processes and procedures will be applied.



60. Disbursement & Flow of Funds. The World Bank will disburse the proceeds of the credit into a segregated Designated Account (DA), denominated in US dollars, at the Bank of Guyana. A segregated local currency account, to finance local currency expenditure, will also be opened at BoG within the Banking Department (see table below). Following the general practice of the current portfolio, the following disbursement methods may be used to withdraw funds from the loan: (i) reimbursement, (ii) advance, and (iii) direct payment, being the advances the primary method of disbursement. The maximum amount that may be advanced to the Designated Account will be based on project’s expenditures forecast as provided in the Interim Financial reports. Overall disbursement arrangements will follow standard disbursement policies and procedures established in the Disbursement Guidelines for Investment Project Financing and in the Disbursement Letter of the Project.

Figure 1: Flow of Funds and Disbursement Arrangements

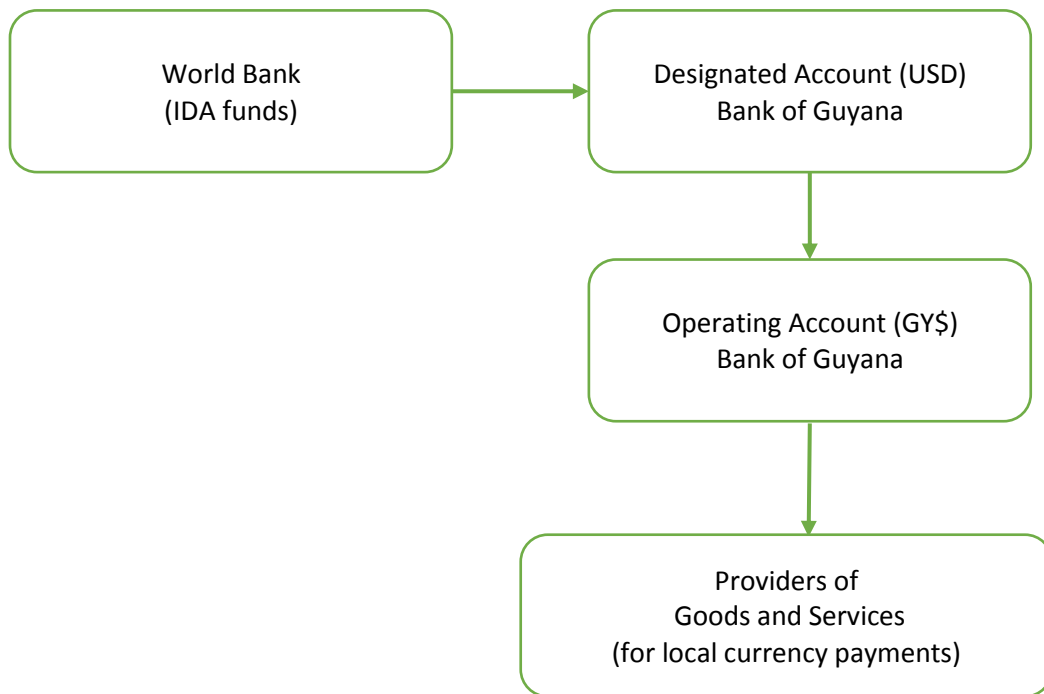


Table 1: Categories of Eligible Expenditures

Category	Amount of the Financing Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, non-consulting services, consulting services, and Training for Part 1 of the Project.	3,210,000	100%
(2) Goods, non-consulting services, consulting services and Training under Part 2 of the Project.	1,040,000	100%



(3) Goods, non-consulting services, consulting services, Training and Operating Costs under Part 3 of the Project.	250,000	100%
TOTAL AMOUNT	4,500,000	100%

61. Accounting. The project’s accounts will be recorded and reported using the cash basis of accounting. The accounting software, Sun System version 6.1 is currently being used to record, monitor and report on all financial transactions of BoG. Sun System will also be used for the same purposes on the Project. A separate company will be created in Sun System for the project, in which the chart of accounts will be set-up by project component, sub-components, categories and activities to ensure the provision of accurate and reliable financial information.

62. Unaudited Interim Financial Report. BoG will be required to prepare quarterly unaudited Interim Financial Reports (IFRs) for the project. The IFRs will cover each calendar semester in line with the BoG’s fiscal year, and will be due within 45 days of each semester end.

63. External Audit. Annually, a project specific external audit will be conducted by the Audit Office of Guyana, covering the period up to December 31st, of each fiscal year end. The project specific audited financial statements and the management letter will be due for submission to the Bank, within six months after the fiscal year end, June 30. The financial statements will be prepared in conformity with the International Financial Reporting Standards and audited in accordance with General Accepted Auditing standards.

D. Procurement

64. Procurement will be carried out in accordance with the “World Bank Procurement Regulations for IPF Borrowers” (July 2016) (“Procurement Regulations”). The various items under different expenditure categories are described below. For each contract to be financed by the Credit, the applicable procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Government of Guyana and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity. The procurement procedures and standard procurement documents (SPDs) to be used for each procurement method, as well as standard forms of contracts are posted on the web site worldbank.org. In accordance with paragraph 5.9 of the Procurement Regulations, the Bank’s Systematic Tracking and Exchanges in Procurement (STEP) system will be used to prepare, clear and update the Procurement Plans and conduct procurement transactions for the Project. This textual part along with the Procurement Plan tables in STEP constitute the Procurement Plan for the Project. The following conditions apply to all procurement activities in the Procurement Plan. The other elements of the Procurement Plan as required under paragraph 4.4 of the Procurement Regulations are set forth in STEP.

65. The Bank’s Standard Procurement Documents shall be used for all contracts. The procurement documents are subject to international competitive procurement and those contracts as specified in the Procurement Plan tables in STEP.



66. When approaching the national market, the country's own procurement procedures may be used in accordance to the National Procurement Arrangements (paragraph 5.3) of the Procurement Regulations. This will be specified in the Procurement Plan tables in STEP. When the Borrower uses its own national open competitive procurement arrangements as set forth in the Procurement Act of 2003, such arrangements shall be subject to paragraph 5.4 of the Procurement Regulations and its following conditions. When other national procurement arrangements other than national open competitive procurement arrangements are applied by the Borrower, such arrangements shall be subject to paragraph 5.5 of the Procurement Regulations.

67. As identified by the Procurement Plan tables, contracts for leased assets, procurement of second hand goods and domestic preference will be bound by the procurement regulations. Procurement regulations will be applicable as specified under paragraph 5.10 for leased assets and paragraph 5.11 of the procurement regulations for procurement of Second Hand Goods. Domestic preference will be specified under paragraph 5.51 of the Procurement Regulations (Goods and Works). Goods is applicable for those contracts identified in the Procurement Plan tables.

68. An assessment of the PIU was conducted in preparation of the Project regarding the client capacity. The main findings were:

- (a) *Experience:* The Bank of Guyana does not have experience in similar projects, they previously executed an IDB financed project but the project staff is no longer in the institution. The project shall have a Procurement Specialist with relevant experience in the Bank's procurement procedures.
- (b) *Contract management capability and capacity:* According to the information provided by the Bank of Guyana, they have procurement and project management capacity. Further, the technical evaluators for Evaluation Committees, which are required to be appointed by NPTAB, are often not familiar with the procurement procedures of the Bank. The project will need to ensure that the technical evaluators appointed for the evaluation of activities under the Project, have extensive technical experience and are familiar with the Bank's procurement procedures.
- (c) *Complaints management and dispute resolution systems:* NPTAB and the Protest Committee are used by complaining firms. As part of the procurement policy dialogue in the country, an expedited system for complaints to Bank's financed contracts should be agreed upon.
- (d) *Conclusions:* It is important that the Procurement Specialist has relevant experience in Bank procurement procedures and that all relevant technical teams and evaluators receive a general procurement training to ensure the quality of evaluation reports. As part of the procurement policy dialogue, the Bank will (i) ensure financed processes will follow certain local procurement requirements and procedures, not contradictory to the Bank's Procurement Regulation (such as the appointment of Evaluation Committees by NPTAB), (ii) discuss the interaction between Guyana's national procurement regulations and the Bank's guidelines; and (iii) will discuss the handling of complaints received in Bank's financed contracts.



69. Since the project involves procurement of IT systems, it is expected that the Standard Procurement Document for Design, Supply and Installation of Information Systems is used when relevant.

70. **Frequency of procurement implementation support.** Contracts subject to post review will be reviewed by the Bank once a year and, based on the findings of these reviews and the proposed ratings, the Bank may determine the revision of the prior review requirements.

71. Thresholds for procurement methods and prior review are as described in table 2.

Table 2: Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold) (US\$, thousands)	Procurement Method	Market Approach	Bank Prior Review or as Indicated in the Procurement Plan
1. Goods	> 500	Request for bids RFP	Open, limited, international, single stage	All
	100 – 500	Request for bids RFP	Open, limited, national, single stage	Post review
	< 100	Request for quotations	Open, limited, international national, single stage	
	Regardless of value	DC	Direct, single stage	All
2. Consultant Services	> 300	QCBS	Open, International, short list	All
	< 300	QCBS, QBS, CQS, FBS, LCS (according to Procurement Plan)	Open, national, short list	All ToRs First Contract Selection process yearly (ex post)
	Regardless of value	Direct Selection	Direct	All
	Regardless of value	IC	Open, limited	All ToR. Selection Process reviewed once yearly (Ex Post).
	Regardless of value	Direct Selection	Direct	All

Note: CQS = Selection Based on the Consultants' Qualifications; DC = Direct Contracting; FBS = Selection under a Fixed Budget; IC = Individual Consultant; LCS = Least-cost Selection; QBS = Quality-based Selection.

E. Social (including Safeguards)

72. **No social safeguards are triggered in this project.** The project does not entail any impacts on or acquisition of land or private assets and the project area does not imply a physical, tangible, geographic area and therefore does not implicate indigenous populations, as it is working at the macro level (setting up the back-end system) and not on building any customer interface.



F. Environment (including Safeguards)

73. The project is classified as Category C. It does not include construction or rehabilitation of infrastructure, therefore the OP/BP 4.01 on Environmental Assessment is not triggered.

G. Other Safeguard Policies (if applicable)

74. No other safeguards policies are triggered for the Project.

H. World Bank Grievance Redress

75. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Guyana
Guyana Payments System Project

Project Development Objectives

The project development objective is to improve Guyana's national payments system by enhancing safety and efficiency of payments.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Percentage of large-value payments processed through the RTGS (Turnover of GDP)		Percentage	0.00	120.00	Annual	Bank of Guyana	Project Implementation Unit
Description: Total value settled in RTGS/ Value of GDP = Turnover of GDP. The number of times an amount equivalent to the value the GDP is settled in a year by the Real-Time Gross Settlement System.							
Name: New system observes or broadly observes all applicable PFMI		Text	Not Observed	Observed or Broadly Observed	Project Conclusion	Bank of Guyana (Self Assessment) or External Assessment	Project Implementation Unit - Self Assessment/External



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
							I Assessment

Description: Principles for Financial Market Infrastructures (PFMI). Observed or Broadly Observed as defined in the Operational Manual.

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Organizational unit focused on payments systems and staff with trained personnel at the Bank of Guyana established and functioning		Yes/No	N	Y	Annual	Bank of Guyana	Project Implementation Unit

Description: Organizational unit focused on payments systems and staff with trained personnel at the Bank of Guyana established and functioning.

Name: Real-Time Gross Settlement System is Operational		Yes/No	N	Y	Annual	Bank of Guyana	Project Implementation Unit
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Description: This indicator will measure the conversion rate of Guyanese consumers from cash payments to fully electronic credit transfers using the new and modern national payments system.



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Central Securities Depository is Operational		Yes/No	N	Y	Annual	Bank of Guyana	Project Implementation Unit
Description: This indicator will measure the conversion rate of government agencies from cash payments to fully electronic credit transfers using the new and modern national payments system.							
Name: Treasury/Ministry of Finance is connected to the RTGS, ACH and CSD platform.		Yes/No	N	Y	Annual	Bank of Guyana	Project Implementation Unit
Description: Treasury/Ministry of Finance is connected to the Real-Time Gross Settlement System (RTGS), an Automated Clearinghouse (ACH), and a Central Securities Depository (CSD).							
Name: Guyana Revenue Authority is connected to the RTGS and ACH platform		Yes/No	N	Y	Annual	Bank of Guyana	Project Implementation Unit
Description: Guyana Revenue Authority is connected to the Real-Time Gross Settlement System (RTGS) and the Automated Clearinghouse (ACH).							
Name: National Insurance Scheme is connected to the		Yes/No	N	Y	Annual	Bank of Guyana	Project Implementation



Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
RTGS and ACH platform							Unit
Description: National Insurance Scheme (NIS) is connected to the Real-Time Gross Settlement System (RTGS) and the Automated Clearinghouse (ACH).							
Name: Government payments channeled through the ACH or RTGS (# of payments)		Percentage	0.00	100.00	Annual	Bank of Guyana	Project Implementation Unit
Description: Percentage of Government payments channeled through the ACH or RTGS (# of payments). Government payments from Treasury, Guyana Revenue Authority, and the National Insurance Scheme.							



Target Values

Project Development Objective Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	End Target
Percentage of large-value payments processed through the RTGS (Turnover of GDP)	0.00	0.00	0.00	105.00	120.00	120.00
New system observes or broadly observes all applicable PFMI	Not Observed	Not Observed	Not Observed	Partially Observed	Observed or Broadly Observed	Observed or Broadly Observed

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	End Target
Organizational unit focused on payments systems and staff with trained personnel at the Bank of Guyana established and functioning	N	N	N	Y	Y	Y
Real-Time Gross Settlement System is Operational	N	N	N	Y	Y	Y
Central Securities Depository is Operational	N	N	N	Y	Y	Y
Treasury/Ministry of Finance is connected to the RTGS, ACH and CSD platform.	N	N	N	Y	Y	Y
Guyana Revenue Authority is connected to the RTGS and ACH platform	N	N	N	Y	Y	Y



Indicator Name	Baseline	YR1	YR2	YR3	YR4	End Target
National Insurance Scheme is connected to the RTGS and ACH platform	N	N	N	Y	Y	Y
Government payments channeled through the ACH or RTGS (# of payments)	0.00	0.00	0.00	50.00	100.00	100.00
