1. Project Data

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>P159512</td>
<td>GY Payments System Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Practice Area(Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guyana</td>
<td>Finance, Competitiveness and Innovation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L/C/TF Number(s)</th>
<th>Closing Date (Original)</th>
<th>Total Project Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA-59660</td>
<td>31-Mar-2021</td>
<td>2,375,710.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank Approval Date</th>
<th>Closing Date (Actual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-Mar-2017</td>
<td>31-May-2022</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IBRD/IDA (USD)</th>
<th>Grants (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Commitment</td>
<td>6,000,000.00</td>
</tr>
<tr>
<td>Revised Commitment</td>
<td>2,031,294.34</td>
</tr>
<tr>
<td>Actual</td>
<td>2,375,710.32</td>
</tr>
</tbody>
</table>

Prepared by Antonio M. Ollero  Reviewed by Ebru Karamete  ICR Review Coordinator Christopher David Nelson  Group IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives
The project development objective of the Guyana Payments System Project was **to improve the national payments system by enhancing the safety and efficiency of payments**.

b. Were the project objectives/key associated outcome targets revised during implementation?
No
c. Will a split evaluation be undertaken?

No

d. Components

The project had three components:

1. **Developing Payments System Infrastructure** (US$4.30 million estimated at appraisal, US$1.754 million disbursed at closing) supported the acquisition of hardware and software by the Government to provide interbank clearing and settlement services for electronic payments. Specifically, the component would support: (a) the acquisition of hardware and software for the real time gross settlement system (RTGS) – the instantaneous and continuous process of settling interbank payments on an individual order basis across the books of a central bank; (b) the acquisition of hardware and software for the central securities depository (CSD) – a specialized financial institution that holds securities, such as shares and bonds, provides for the safekeeping of these assets, and allows for the settlement of securities transactions; (c) the upgrade of the automated clearinghouse (ACH) – the electronic funds-transfer system that facilitates payments between banks; (d) the upgrade of the core systems of the Bank of Guyana, the Ministry of Finance, the Guyana Revenue Authority, and the National Insurance Fund (also called the National Insurance Scheme) as users of the new payments system; (e) the acquisition and installation of interconnectivity hardware and virtual private network to connect the Bank of Guyana, the Ministry of Finance, the Guyana Revenue Authority, and the National Insurance Fund, and all commercial banks operating in Guyana; and (f) the conduct of an information security audit of the payments system infrastructure. The following activities, originally part of this component at approval, were cancelled during the second restructuring: (a)

2. **Capacity Building of the Bank of Guyana** (US$1.38 million estimated at appraisal, US$0.559 million disbursed at closing) focused on strengthening the technical capacity of the Bank of Guyana to operate the modernized payments system infrastructure. A specialized firm would assist the central bank with the procurement process for the RTGS and the CSD and the associated information technology (IT) infrastructure. The advisor would also oversee the knowledge transfer and capacity building services to be extended by the RTGS and CSD systems supplier to the central bank. **Cancelled Activities:** The training activities for the staff of the Bank of Guyana on information technology security, database administration, and systems management, which were originally part of this component at appraisal (Part 2.d of the Project Description in the Financing Agreement), were cancelled at the second restructuring because of mobility restrictions during the COVID-19 pandemic. According to the Bank team, the cancellation of these activities did not compromise the achievement of the project results because: (a) hardware suppliers and software providers extended training to the Bank of Guyana staff; (b) a technical assistance firm hired by the Bank of Guyana provided advisory services on these topics; (c) the Bank of Guyana organized the virtual training sessions which were also delivered to staff of the participating government agencies and commercial banks.

3. **Project Implementation Unit** (US$0.32 million estimated at appraisal, US$0.062 million disbursed at closing) supported the implementation of the project by the Bank of Guyana, including by the Project Implementation Unit, which was responsible for planning, coordinating, implementing, managing, and monitoring all project activities.
e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

**Project Cost, Financing, and Borrower Contribution.** The project was estimated to cost SDR 4.5 million (US$6 million equivalent) at appraisal. The project was financed by a credit of SDR 4.5 million from the IDA to the Co-operative Republic of Guyana. Total disbursements at closing were US$2.376 million (SDR 1.76 million equivalent), after US$3.5 million (SDR 2.47 million equivalent) was cancelled at the second restructuring. The cancelled amount represented exchange rate gains (the exchange rate, which was SDR1.00 = US$1.34 at appraisal, was SDR1.00 = US$1.42 at the second restructuring), savings from procurement activities (actual costs were lower than originally budgeted), and savings from activities that were not implemented due to restrictions during the COVID-19 pandemic (see Section 2.D - Component 2).

**Dates.** The project was approved on March 31, 2017, became effective on September 8, 2017, and closed on May 31, 2022, fifteen months after the original closing date of March 31, 2021.

**Restructuring.** The project was restructure thrice.

- The first restructuring on February 23, 2021, with US$1.94 million disbursed (82 percent of the final disbursement amount), extended the project closing date by six month from March 31, 2021 to September 30, 2021, to allow for technical assistance by the World Bank to the Bank of Guyana to test the functionality of the new system, once deployed, and to monitor the implementation of capacity-building activities to strengthen the Payments System Unit at the central bank.

- The second restructuring on September 29, 2021, with US$1.94 million disbursed (82 percent of the final disbursement amount), extended the closing date by three months from September 30, 2021 to December 31, 2021 to allow the Ministry of Finance, the Guyana Revenue Authority, and the National Insurance Fund to upgrade their core systems to link with the new payments system infrastructure at the Bank of Guyana. The amount of US$3.5 million – representing exchange rate gains, savings from procurement activities, and savings from activities that were not implemented – was cancelled (see Section 2.E - Project Cost, Financing, Borrower Contribution). The restructuring also adjusted two results indicators (see Section 9.B).

- The third restructuring on December 16, 2021, with US$2.14 million disbursed (90 percent of the final disbursement amount), extended the closing date by five months from December 31, 2021, to May 31, 2022, to allow the Ministry of Finance to complete the delivery and installation of critical hardware and software updates. The extension would also allow the project to: make progress with the *Principles for Financial Market Infrastructures* (the international standards for payment systems, central securities depositories, securities settlement systems, central counterparties, and trade repositories issued by the Committee on Payments and Settlement Systems of the Bank for International Settlements and the Technical Committee of the International Organization of Securities Commissions); continue receiving technical assistance; and, implement support from the World Bank.

3. Relevance of Objectives
Rationale

The project development objectives were highly relevant to the country needs and strategies.

Development Constraints. Guyana lacked a modern national payments system – the system used to conduct and settle financial transactions through the transfer of monetary value – that was crucial to finance and to economic activity: (a) the legal and regulatory framework governing payments was deficient; (b) the financial infrastructure was underdeveloped, lacking the basic mechanisms to automatically clear and settle retail interbank payments, to efficiently process large value payments, and to electronically settle and record securities transactions; and (c) the institutional capacity of market participants to operate a modern payments system was weak. Overall, the cost of conducting payments was higher than necessary, the time to settle transactions longer than normal, and the risks to finance and economic activity higher than acceptable.

- According to the IMF Financial Sector Stability Assessment of 2016, based on the work of the joint IMF and World Bank Financial Sector Assessment Program (FSAP) of 2016-18, Guyana needed to develop an effective national payments system with "a robust legal and regulatory framework, and safe and efficient payment infrastructures ... for facilitating account transactions and thus access to finance." The assessment further explained – "These relate to both interbank payment mechanism and retail services. Innovative retail payment services, including bill payment and e-money services, should be further promoted. Execution should be broad-based for interbank currency trades, money market transactions, collateral placements in government securities, and government securities trading. Market infrastructures should develop immediately to electronically record transactions, manage risks, provide market transparency, or enable the Bank of Guyana to monitor developments on a timely basis."

- According to the World Bank Guyana Country Systematic Diagnostic of 2020 - A Pivotal Moment for Guyana, the national payments system "lagged far behind the needs of the economy", with the prevalence of cash transactions slowing productivity growth and reducing financial transparency. Paper instruments dominated the payment system, accounting for 99 percent of the 243 million retail payment transactions made annually. The manual processing of paper instruments cost the economy US$74 million annually, or 2.5 percent of GDP. Shifting at least half of retail payments to electronic payments would save consumers around US$6 million annually, and the Government, about US$2 million.

Government Priorities. Guyana articulated a National Payments System Strategy in 2018, which aimed to "build a robust, safe and sound, efficient and inclusive National Payments System that meets the current and future needs of the economy, supports financial activity and financial sector development, advances the use of electronic payments, contributes to financial risk mitigation, achieves compatibility with international systems, and adheres to the relevant international standards, guidelines and codes." To create the enabling legal and regulatory framework for the strategy, Parliament passed the National Payments System Act 2018 (Act No. 13 of 2018), which provided for the establishment, regulation, and oversight of a national payments system. This project would help Guyana develop, install, and operate the new system.

Bank Group Strategy. The project objective was aligned with the country strategy articulated in the Country Engagement Note for the Cooperative Republic of Guyana for the Period FY16-18 (CEN). According to the CEN, the Bank engagement would focus on three objectives: (a) enhancing resilience of selected infrastructure and building disaster risk management capacities, (b) setting up
the foundations for high quality education, and (c) laying the ground for private sector development. On private sector development, the CEN noted that both the legal framework and the financial infrastructure for the payments system were underdeveloped and deficient, posing constraints to private economic activity. To promote private sector development as well as access to finance, Bank would "continue to focus on strengthening the financial sector infrastructure, including the payment system." The Bank listed analytic and advisory services on payments system reform among activities planned over 2016-2018.

**Rating**
High

### 4. Achievement of Objectives (Efficacy)

#### OBJECTIVE 1

**Objective**
Improve Guyana's national payments system by enhancing the safety and efficiency of payments.

**Rationale**

**Theory of Change.** The procurement and installation of a real time gross settlement system, central securities depository, and upgraded automatic clearinghouse would provide Guyana with the basic financial infrastructure for a modern national payments system that would be capable of instantaneously and continuously settling interbank payments across the books of the central bank, electronically settling and recording securities transactions, and facilitating electronic funds transfers and payments between banks. The modern payments system would become operational with the installation of interconnectivity hardware and a virtual private network connecting the Bank of Guyana, the Ministry of Finance, the Guyana Revenue Authority, the National Insurance Fund, and all commercial banks, coupled with upgrades to the software of the central bank and the agencies and the provision of technical assistance and training to a new Payments System Unit in the central bank. Should it meet the international standards set by the Bank for International Settlements and the International Organization of Securities Commissions, the new financial market infrastructure should provide Guyana residents a safer and more efficient electronic-based national payments system.

The theory of change was cogent and adhered to the principles advanced by the Bank for International Settlements, the financial institution that serves as a bank for central banks, and the International Organization of Securities Commissions, the association of organizations that regulates the world's securities and futures markets, for the establishment, operation, and management of national payments systems (BIS, 2006, *Guidance for National Payment System Development* and BIS and IOSCO, 2012, *Principles of Financial Market Infrastructures*). The achievement of the development objectives assumed a credible level of institutional capacity on the part of Bank of Guyana, the Ministry of Finance, the Guyana Revenue Authority, the National Insurance Fund, and commercial banks, to modernize current practices and operate the new system, a topic which was vetted by the Bank at appraisal and would be enhanced by advisory services and training provided during implementation. The degree of achievement of the development objectives would be evidence by seven output indicators focused on the operationalization of the constituent
parts and government use of the system, and two outcome indicators, reflecting commercial bank use of the system and adherence to international standards. The choice of the indicators was consistent with Bank guidance on measures and methods (World Bank, 2008, *Measuring Payment System Development*). The results indicators were specific, measurable, achievable, relevant, and time-bound.

**Outputs.** The project achieved six of seven output targets defined for the objective to improve the national payments system.

- The RTGS became operational on March 31, 2021, achieving the target that it be operational by closing. All commercial banks in the country, the Bank of Guyana, the Ministry of Finance, and the Guyana Revenue Authority were connected to the RTGS by closing. Commercial banks processed US$1.77 billion of large value transactions through the RTGS from March 2021 to May 2022, and Bank of Guyana, US$1.3 billion (including transactions made on behalf of the Ministry of Finance and Guyana Revenue Authority).

- The CSD became operational on March 31, 2021, achieving the target that it be operational by closing. A total 44 Treasury bills, with a nominal value of US$993 million (GY$199 billion), were issued using the CSD from March 2021 to May 2022, and 27 Treasury bills, with a nominal value of US$493 million (GY$99 billion), were redeemed. In addition to processing the auction and recording as well as transferring the ownership of government securities in electronic form, the CSD could hence be used for the repo and other Open Market Operations of the Bank of Guyana, the securities that are used as collateral for liquidity support in the RTGS, and for changes in the ownership of corporate securities.

- The Ministry of Finance was connected to the RTGS, the CSD, and the ACH, meeting the target. In addition to issuing and redeeming Treasury bills using the CSD (see above), the Ministry of Finance processed 589,733 low value transactions (payments less than US$25,000) from July 2021 to May 31, 2022, through the Electronic Funds Transfer of the ACH. Meanwhile, the Ministry of Finance is expected to process large value payments directly though the RTGS in 2023, after previously channeling large value payments through the Bank of Guyana (see above).

- The Guyana Revenue Authority was connected to the RTGS and the ACH, meeting the target. The Guyana Revenue Authority processed 18,019 low value transactions through the Electronic Funds Transfer of the ACH from July 2021 to May 31, 2022. Like the Ministry of Finance, the Guyana Revenue Authority is expected to process large value payments directly though the RTGS in 2023, after previously channeling large value payments through the Bank of Guyana (see above).

- The National Insurance Fund was connected to the ACH, meeting the target. The National Insurance Fund was supposed to be connected also to the RTGS, but this plan was scrapped because the National Insurance Fund processed only small value payments and not large-value payments (which would require the RTGS). The National Insurance Fund, however, had not started processing payments through the ACH by closing.

- The percentage of Government payments channeled through the RTGS or the ACH was 20.57 percent by closing, failing to meet the original target (set in May 2017) of 100 percent (the 100 percent target was retained during the second restructuring in September 2021 and remained unchanged through closing). Between July 2021 and May 31, 2022, the Ministry of Finance processed 54 percent of its 1,091,439 low-value payments through the ACH and the Guyana Revenue Authority, 2 percent of its 900,950 low-value transactions.

- The Payments System Unit (part of the Banking Division under the Operations Department) was established and functioning at the Bank of Guyana, with trained staff, meeting the target that an organizational unit focused on the payments system and with trained personnel be created and
functioning at the central bank. This unit, with responsibility over the RTGS, CSD, and ACH, received training and technical assistance during project implementation.

**Outcomes.** The project achieved the two outcome targets defined for the objective to improve the national payments system.

- Large-value payments processed through the RTGS reached 14.98 percent of GDP by closing, exceeding the revised target of 7 percent (revised in September 2021) as well as the original target of 12 percent (set in March 2017). The number of large-value payments (payments greater than US$250,000) processed by commercial banks through the RTGS was 2,857 from April 2021 (the month after the RTGS became operational) to May 31, 2022 (the closing date), with an aggregate value of US$1.11 billion (GY$ 232 billion), amounting to 14.98 percent of GDP. Additional data after closing indicate that the number of large-value payments processes by commercial banks through the RTGS reached 4,974 by September 2022, with a value of US$2.48 billion (GY$ 519 billion). Meanwhile, the Guyana Revenue Authority was expected to start processing payments through the RTGS by the end of 2022, and the Ministry of Finance, by the second quarter of 2023.

- The new National Payments System "broadly observes" all applicable standards under the *Principles for Financial Market Infrastructures*, meeting the target that the system either "observes" or "broadly observes" the standards set by the Bank for International Settlements and the International Organization of Securities Commissions. The system is supported by a strong legal and policy framework and has been modernized with new hardware and software, allowing for greater operational efficiency, reduced costs, and better management of credit, liquidity, and operational risks across the payments system. The assessment was made by the Bank of Guyana, using templates provided by the Bank for International Settlements. The findings and conclusions of the Bank of Guyana, and the attendant documentation, were verified by the Bank (specifically, the World Bank Payments System Development Group, the unit which helps member countries adopt international best practice and standards for payments systems and financial market infrastructure and which publishes the biennial *Payment Systems Worldwide - Outcomes of the Global Payments System Survey*).

The achievement of the objective is rated high. The real time gross settlement system, central securities depository, and upgraded automatic clearinghouse were all operational more than a year before closing. The Ministry of Finance was connected to the RTGS, CSD, and ACH, the Guyana Revenue Authority, to the RTGS and ACH, and the National Insurance Fund, to the ACH. Total large value payments processed by commercial banks through the RTGS were double the target, although the percentage of government payments processed through the RTGS or ACH was lower than expected. The Payments System Unit at the Bank of Guyana, responsible for payments system regulation, supervision, and oversight, was established and functioning. The new system was determined to broadly observe international standards for financial market infrastructures, according to the Bank of Guyana and the World Bank.

**Rating**

High
OVERALL EFFICACY

Rationale
The project achieved the objective to improve the national payments system by enhancing the safety and efficiency of payments. Guyana had an operational real time gross settlement system, central securities depository, and upgraded automatic clearinghouse. The Ministry of Finance were connected to the RTGS, CSD, and ACH, the Guyana Revenue Authority, to the RTGS and ACH, and the National Insurance Fund, to the ACH. Total large value payments processed by commercial banks through the RTGS were double the target, although the percentage of Government payments processed through the RTGS or ACH was lower than expected. The Payments System Unit at the Bank of Guyana was established and functioning. The new system broadly observed international standards for financial market infrastructures. The efficacy is rated high.

Overall Efficacy Rating
High

5. Efficiency

Economic Efficiency. The ICR did not compute a formal cost-benefit analysis of the project, but argued that the project earned economic benefits far greater than the project cost of US$2.38 million: (a) the continuous, real-time, large-value payments processed through the RTGS sped up the velocity of money in the economy – involving payments worth 15 percent of GDP; (b) the use of the CSD opened the opportunity to use government securities (about US$1.5 billion in Treasury bills) for the repo and other Open Market Operations of the Bank of Guyana – a well-functioning repo market would also support liquidity in other markets, contributing to the efficient allocation of capital in the real economy; (c) the Ministry of Finance and Guyana Revenue Authority reduced their costs by about US$424,000 by processing 1.8 million low-value payments through the Electronic Fund Transfer of the ACH from July 2021 to May 2022 (the processing fee was US$0.24 per transaction for an electronic payment versus US$1.00 for a check payment). Post-closing, additional cost reductions of US$148,000 was estimated for actual transactions from June to September 2022, and US$3.6 million was projected for future transactions from 2023 to 2025. Based on the foregoing, the economic efficiency of the project is rated high.

Operational Efficiency – Project Cost. The project completed all the project activities at 40 percent of the original project cost estimated at appraisal (i.e., a cost underrun): (a) Payments System Infrastructure – US$1.754 million versus original cost of US$4.3 million; (b) Capacity Building – US$0.559 million versus original cost of US$1.38 million; and (c) Project Implementation – US$0.062 million versus original cost of US$0.32 million. The amount of US$3.5 million was cancelled, representing exchange rate gains, savings from procurement activities with actual costs lower than originally budgeted, and cancellation of some capacity-building activities that could not implemented as originally designed because of restrictions during the COVID-19 pandemic. In addition, the Bank of Guyana absorbed the costs of project management under the third project component.

The large differential between estimated and actual project cost raises questions about the precision of the appraisal estimates. This ICR Review calculates the cost differential – representing the US$3.5 million amount
cancelled – as consisting roughly of: (a) exchange rate changes – the appreciation of the SDR from SDR1.00=US$1.34 at appraisal to SDR1.00=US$1.42 at the second restructuring resulted in lower US$ costs of US$0.36 million; (b) cancellation of some capacity building activities – costs for the second project component were US$0.82 million lower than planned; (c) absorption by the Bank of Guyana of some project implementation costs – costs for the third project component were US$0.26 million lower than planned; and (d) the residual – US$2.06 million – would represent lower procurement costs for the first project component. The ICR (page 22) contends that the cost of the RTGS and CSD estimated at appraisal was "based on industry benchmarks and historic prices of similar projects." If international prices for technology products and services were roughly unchanged between appraisal and implementation, the cost difference could only be explained on the "quantity side." This would appear to be the case – for example, for the modification and upgrade of the software for the National Insurance Fund, "the scope of the activity needed to connect the entity with the Electronic Funds Transfer [of the ACD] was relatively less complex; therefore, the actual cost was about US$0.6 million lower," according to the ICR (page 22). This ICR Review concludes that more a detailed specification of the technology requirements at appraisal would have produced more conservative estimates of the project cost. On this basis, this aspect of the operational efficiency of the project is rated moderate.

Operational Efficiency – Project Completion Time. The project was extended for 15 months from March 31, 2021, to May 31, 2022, but there were extenuating factors, according to the ICR: (a) the political environment was unstable in 2019 and 2020 when a new government was installed; and (b) the COVID-19 pandemic resulted in economic uncertainty, activity lockdowns, and mobility restrictions. On this basis, this aspect of the operational efficiency of the project is rated substantial.

Overall, the efficiency of the project is rated substantial.

Efficiency Rating

Substantial

<table>
<thead>
<tr>
<th>Rate Available?</th>
<th>Point value (%)</th>
<th>*Coverage/Scope (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apraisal</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Not Applicable</td>
</tr>
<tr>
<td>ICR Estimate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Not Applicable</td>
</tr>
</tbody>
</table>

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The relevance of objectives is rated high. The project development objectives were highly relevant to the country needs and strategies (see Section 3).
The efficacy is rated high. The project achieved the objective to improve the national payments system by enhancing the safety and efficiency of payments. All parts of the system were operational, and all four key Government agencies were connected to the system. Government use of the system was still lower than planned at closing, when measured as a percentage of all Government payments, but commercial bank use of the system for large value payments was double the target. The unit at the central bank responsible for system regulation and supervision was functional and the system broadly observed international standards for national payments systems and financial market infrastructures (see Section 4).

The efficiency is rated substantial. The project earned economic benefits far greater than the project cost. The project completed all the project activities at 40 percent of the original project cost estimated at appraisal. The project was extended for 15 months, but there were extenuating factors (see Section 5).

The outcome is rated highly satisfactory.

a. Outcome Rating
   Highly Satisfactory

7. Risk to Development Outcome

Operational Risk. The risk to the sustainability of the development outcome achieved by this project is considered low. With the national payments infrastructure (hardware and software) in place and the systems operational, and with the participants having gained experience with the system, it is unlikely that the transition to the modern payments system will be derailed. From June 2022 to September 2022 (the project closed in May 2022), use of the new system has grown further: (a) the commercial banks processed 1,372 large-value payments through the RTGS worth US$714 million; (b) the Ministry of Finance and the Guyana Revenue Authority processed 195,718 low-value payments through the Electronic Fund Transfer of the ACH; and (c) the National Insurance Fund processed 7,500 pension payments through the Electronic Fund Transfer of the ACH, covering 10 percent of all retirees.

8. Assessment of Bank Performance

a. Quality-at-Entry

Analytic Underpinnings. The design of the project was informed by the Financial Sector Assessment Program (FSAP) jointly conducted by the International Monetary Fund and the Bank in 2016-2017. On the national payments system, the FSAP recommended that the authorities: adopt a robust law to govern the national payments system, enable the safe and efficient use of electronic payments, strengthen the associated regulatory framework, and grant the Bank of Guyana enforcement powers. The design of the project also benefitted from the Practical Guide for Measuring Retail Payment Costs - Results from the Guyana Surveys prepared in 2015 which estimated the potential efficiency gains from the transition from a primarily paper-based payment economy to an electronic payment economy. The design of the M&E was informed by Measuring Payment System Development prepared by the Bank in 2008.
Lessons from Past Operations. The project incorporated lessons learned from the Bank’s work supporting national payments system development and reforms globally. The Bank, which had conducted five Global Payments System Surveys covering 142 countries since 2007, had provided both project financing and technical assistance to help client countries develop their national payments systems, following international standards set by the Bank of International Settlements and the International Organization of Securities Commissions. The Bank adequately covered the technical, operational, safeguards, and fiduciary aspects of the project at appraisal, according to the ICR. Stakeholders from the government (Bank of Guyana, the Ministry of Finance, the Guyana Revenue Authority, and the National Insurance Fund) and private sector (commercial banks) participated in project design.

Operational Risks. The Bank assessed the operational risks of the project as moderate overall. Political and governance risk, arising chiefly from changes in political leadership, was considered moderate. Macro-financial risk could arise from U.S. and other global banks reconsidering their correspondent banking relationship with local banks - a rupture would reduce the appetite of the local banks to connect to the RTGS and the CSD. However, the ongoing effort by the authorities and the Bank to complete an anti-money laundering and countering the financing of terrorism (AML/CFT) assessment and strategy would mitigate this risk. Institutional capacity risk involving the ability of the Bank of Guyana to operate the new payments system would be addressed by the extension of technical advisory services to the central bank, the training of specialists, and the establishment of a credible internal control system.

Quality-at-Entry Rating
Highly Satisfactory

b. Quality of supervision
The Bank fielded five project supervision missions before the outbreak of the COVID-19 pandemic and conducted periodic virtual review meetings since. The Bank produced nine Implementation Status and Results Reports (ISRs) over the five-year duration of the project, or about two a year, the average for investment project financing operations.

According to the ICR, (a) the Bank interacted extensively with the officers and staff of the Bank of Guyana, the Ministry of Finance, the Guyana Revenue Authority, and the National Insurance Fund and those of the commercial banks; (b) technical, operational, procurement, financial management, and disbursement specialists provided close support to the Project Implementation Unit and were available on a regular and on-call basis; (c) the low staff turnover rate ensured the consistency of the support services extended by the Bank to the project.

Quality of Supervision Rating
Highly Satisfactory

Overall Bank Performance Rating
Highly Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The Project Appraisal Document defined seven output and two outcome indicators to measure the achievement of the project objective. The choice of the results indicators was consistent with Bank guidance on measures and methods (World Bank, 2008, Measuring Payment System Development). The results indicators were specific, measurable, achievable, relevant, and time-bound.

The Financing Agreement required the Government to prepare and submit to the Bank biannual Project Reports detailing the progress of the project. A Project Implementation Unit would be responsible for M&E activities.

b. M&E Implementation
At the second restructuring, some refinements were introduced in the results framework: (a) the outcome indicator "Percentage of large-value payments processed through the RTGS (turnover of GDP)" was adjusted to better reflect the results of using the new payments system for nine months instead of 12 months (considering that the closing date at that time was December 31, 2021) and to make the target consistent with international data based on the World Bank Global Payment Systems Survey (the Sixth Survey would cover data through end-2021), and (b) the output indicator "National Insurance Fund is connected to the RTGS and ACH platform" was adjusted to clarify that the National Insurance Fund would be connected only to the ACH since the institution managed low-value and not large-value payments.

The Bank of Guyana and the World Bank systematically reported on the progress toward the achievement of the project outputs and outcomes. The Bank of Guyana prepared semiannual project reports that were shared with the World Bank. The reports included a summary of the project activities executed during the reporting period, the status of each project component, and updates on the milestones listed in the M&E plan. Both the Bank of Guyana and the World Bank adapted their M&E activities to the restrictions arising from the COVID-19 pandemic.

c. M&E Utilization
The M&E data was reported in the ISRs, was used to guide operational management, and informed decisions made to restructure the project.

M&E Quality Rating
High

10. Other Issues
a. Safeguards

Environmental Safeguards. The project was classified as a Category C (no environmental review required) at appraisal and did not trigger any safeguards policy. The category remained the same at closing.

b. Fiduciary Compliance

Procurement. Procurement was conducted in accordance with Bank procurement regulations and following the terms of the Financing Agreement, according to the ICR (pages 21-22). The project experienced delays in obtaining authorizations from the National Procurement and Tender Administration Board. However, the Bank procurement team worked closely with the Bank of Guyana, providing the Project Implementation Unit extensive support in the procurement process. Although procurement was initially rated as moderately satisfactory at the beginning of the project (which reflected the Bank of Guyana's unfamiliarity with Bank procedures), the rating was upgraded to, and maintained at, satisfactory throughout project implementation, including in the last ISR of January 2022.

Financial Management. Budgeting, accounting, internal control, funds flow, financial reporting, and auditing adhered to the standards set by the Bank as general conditions for credits and followed the terms of the Financing Agreement, according to the ICR (page 21). Interim financial reports were submitted on time and were of satisfactory quality. Annual audits received unqualified audit opinions. Financial management was rated as satisfactory throughout project implementation, including in the last ISR of January 2022.

c. Unintended impacts (Positive or Negative)

---

d. Other

---

11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Highly Satisfactory</td>
<td>Highly Satisfactory</td>
<td></td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Highly Satisfactory</td>
<td>Highly Satisfactory</td>
<td></td>
</tr>
<tr>
<td>Quality of M&amp;E</td>
<td>High</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Quality of ICR</td>
<td>---</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
12. Lessons

Two lessons are drawn from the ICR, with adaptation.

**A comprehensive set of interventions, starting with a national strategy that addresses the needs of the government and the private sector for clearing, settlement, and recording of monetary and financial transactions, helps to ensure the successful development and implementation of a modern national payments system.** The Government adopted a *National Payments System Strategy* in 2018 to guide its efforts to build a robust, safe, and efficient national payments system. Parliament enacted the *National Payments System Act 2018* to provide the enabling legal and regulatory framework for the creation, operation, and oversight of the new system. The project funded both the acquisition and installation of hardware and the procurement and upgrading of software for the new infrastructure and extended technical assistance and training to the central bank to lead the development and operation of the new system. The project catered to both the government and the private sector requirements for the system, serving not only interbank payments and retail services but also agency payment transactions and government securities trading. Finally, the project required observance of the international standards for financial market infrastructures as a results target.

**The participation of all key government agencies in a project promoting electronic payments strengthens the viability of a nationwide electronic payment innovation.** In this project, the Ministry of Finance, the Guyana Revenue Authority, and the National Insurance Fund were chosen as key participants and users of the modern payments system with targets set for the percentage of Government payments processed through the real time gross settlement system and the automated clearinghouse. The three key agencies were directly connected to the new payments infrastructure, including to the system's virtual private network, and their software were upgraded to enable them to channel payments through the new infrastructure. An Inter-Participant Working Group established by the Bank of Guyana served to coordinate the participation of these key agencies in the design and implementation of the project. In a complex system undertaking of this nature, harnessing the participation of all stakeholders created a collaborative environment that proved critical to the success of the project.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is consistent with OPCS guidelines on ICRs for investment project financing operations.

The document is concise.

The efficacy assessment is outcome-oriented and based on the degree of achievement of the results targets.
The ICR presents ample evidence to support its assessment of the Bank’s performance at design and implementation and M&E design and implementation.

The assessment of the efficacy of the program is candid.

The ICR draws lessons that would be valuable to modernizing national payments systems elsewhere.

a. Quality of ICR Rating
   High