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GUYANA

**ENHANCING THE NATIONAL QUALITY INFRASTRUCTURE FOR
COMPETITIVENESS
REFORMULATION AND ADDITIONAL FINANCING**

(3824/BL-GY; GY-L1082)

REFORMULATION AND ADDITIONAL FINANCING PROPOSAL

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OEL#12	Loan Proposal Enhancing the National Quality Infrastructure for Economic Diversification and Trade Promotion (3824/BL-GY)
OEL#13	Environmental and Social Screening Filter (ESSF)

ABBREVIATIONS	
AOP	Annual Operational Plan
AP	Acquisition Plan
CARICOM	Caribbean Community
CROSQ	CARICOM Regional Organization for Standards and Quality
EA	Executing Agency
EDGE	Excellence in Design for Greater Efficiencies
EDWC	East Demerara Water Conservancy
ESHS	Environmental Social Health and Safety
ESMR	Environmental and Social Management Report
ESPF	Environmental and Social Policy Framework
ESRS	Environmental and Social Review Summary
FPSO	Floating, Production, Storage, and Offloading
GDP	Gross Domestic Product
GNBS	Guyana National Bureau of Standards
ICAP	Institutional Capacity Assessment
IFPG	Innovation, Firm Performance and Gender
ISO	International Standards Organization
LCDS	Low Carbon Development Strategy
MEA	Monitoring and Evaluation Arrangements
MoA	Ministry of Agriculture
MoH	Ministry of Public Health
MSMEs	Micro, Small and Medium Enterprises
MTIC	Ministry of Tourism, Industry and Commerce
NQI	National Quality Infrastructure
NSC	National Standards Council
OECD	Organization for Economic Co-operation and Development
OSC	Operative Steering Committee
PEU	Project Execution Unit
POA	Annual Operational Program
POM	Program Operating Manual
PP	Procurement Plan
PSC	Project Steering Committee
SBB	Small Business Bureau
SMEs	Small and Medium-Sized Enterprises
SPS	Sanitary and Phytosanitary Measures
TC	Technical Cooperation
UIS	Update to the Institutional Strategy
URR	Unit Rejection Rate

PROJECT SUMMARY
GUYANA
ENHANCING THE NATIONAL QUALITY INFRASTRUCTURE FOR COMPETITIVENESS
REFORMULATION AND ADDITIONAL FINANCING
(3824/BL-GY/GY-L1082)

Financial Terms and Conditions				
Borrower			Flexible Financing Facility ^(a)	
Co-operative Republic of Guyana			Amortization period:	25 years
Executing Agency (EA)			Disbursement period:	2 years
Ministry of Tourism, Industry and Commerce (MTIC)			Grace period:	5.5 years ^(b)
Source	Amount (US\$)	%	Interest rate:	SOFR Based
IDB (Ordinary Capital):	8,000,000	100	Credit fee:	(c)
			Inspection and supervision fee:	(c)
Total:	8,000,000	100	Weighted Average Life (WAL):	15.25 years
			Currency of approval:	Dollars of the United States of America
Project at a Glance				
Project objective: The general development objective of the program is to support economic competitiveness. The specific development objective is to improve the National Quality Infrastructure’s (NQI) capacity to promote the adoption of quality standards among Guyanese Micro, Small and Medium Enterprises (MSMEs).				
Special contractual clauses prior to the first disbursement: (i) approval of the updated version of the Program Operation Manual (POM), in accordance with the terms and conditions previously agreed upon between the EA and the Bank (¶3.8); and (ii) see Annex B of the Environmental and Social Review Summary (ESRS).				
Special contractual clauses for execution: See Annex B of the ESRS (¶3.8).				
Exceptions to Bank policies: None.				
Strategic Alignment				
Challenges ^(d) :	SI <input type="checkbox"/>		PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>
Cross-Cutting Issues ^(e) :	GE <input checked="" type="checkbox"/>	and DI <input type="checkbox"/>	CC <input checked="" type="checkbox"/> and ES <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>

^(a) Under the Flexible Financing Facility (document FN-655-1), the borrower has the option to request modifications to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. In considering such requests, the Bank will take into account operational and risk management considerations.

^(b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long as the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded.

^(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with the relevant policies.

^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(e) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and justification

- 1.1 **Background and problems addressed.** Guyana's macroeconomic context is one of a booming economy, with oil production driving growth in exports, Gross Domestic Product (GDP) growth, and government revenues and expenditures in the medium-term. Oil production continues to drive medium-term prospects based on oil production with two Floating, Production, Storage, and Offloading (FPSO) vessels. The value of oil exports increased from US\$1 billion in 2020 to US\$3 billion in 2021 and is expected to continue increasing in the medium-term. The growth of exports of goods and services is expected to average 77% in 2020-2023, falling in 2024, though these estimates would be updated once new FPSOs begin oil production. GDP growth is expected to average 36.3% in 2020-2023 before stabilizing to rate 3.7% in 2024-2027^[1].¹ Government revenues declined by 6.0% in 2020 and are expected to recover to an average annual growth of 24% in 2021-2024. Regarding the non-oil economy, it contracted by 7.3% in 2020 and grew by 4.6% in 2021. In 2022, the non-oil economy is projected to grow by 7.7%, driven growth in agriculture, mining (not including oil), and construction. After agriculture and gold production contracted in 2021, they are projected to grow by 8.9% and 12.2%, respectively. Manufacturing and the construction sector are expected to grow by 14.3% and 10.5%, while the large services sector is projected to grow by 3.8%. The new oil economy has rebalanced as follows: oil and gas represent 40.8% of GDP in 2021, followed by services at 26.7% (down from 40%), agriculture at 14% (down from 25%), and gold production at 5.1% (down from 11%)^[2]. The discovery of offshore oil reservoirs, with oil production in 2020 has brought new economic opportunities and challenges to Guyana, and changes in the economic structure^[3].
- 1.2 Guyana's private sector is small and fragmented consisting of mainly micro, small, and medium-sized enterprises, with many firms operating in the informal sector^[4]. Most firms sell their goods and services only in the domestic market, with only 15% selling to the Caribbean region and 3.8% selling beyond the Caribbean^[5]. In this context, recent evidence suggests that competitiveness is lackluster: 2020 data from Innovation, Firm Performance and Gender (IFPG) indicates that the average Guyanese firm is 45% less productive than the Caribbean average firm.² Associated with this productivity gap, data from the Survey (See [OEL#8](#)) also indicates that while the average Caribbean firm increased the probability of conducting innovation activities by 2 percentual points between 2016 and 2020, Guyanese firms experienced a decline of 13 percentual points in the same period. In terms of efficiency, the ratio of sales over operating costs also declined from

¹ See [OEL#3](#).

² The gaps by firm size are small (0-20 employees) 30%, medium (21-49 employees) 8%, and large (50+ employees) 56%.

24% in 2016 to 20% in 2020 according to IFPG data. These results together point to a problem of competitiveness in Guyana by 2020.³

- 1.3 While the factors behind the deterioration of competitiveness among Guyanese firms can be multiple, the lack of adequate infrastructure for quality certification remains important. This is evidenced by the fact that, according to IFPG, the percentage of firms that had obtained an internationally recognized quality certification declined from 32.5% in 2016 to 29.1% in 2020. This decline in certification was sharper than in the rest of the Caribbean, which experienced a decline of 1 percentual point on average during the same period.
- 1.4 The promotion of regulations and standards (such as quality standards) is linked to increases of GDP between 1% and 2.4% in the short term^[6]. More specifically related to quality certifications^[7], several studies point to the effect of certifications on competitiveness. Certifications like International Standards Organization (ISO) 9001 are associated with larger reductions in product costs^[8]; better financial performance^[9]; and higher rates of corporate survival as well as increasing sales, employment, and wages^[10]. Moreover, literature has shown that certification increases revenues because quality certification allows firms to access new markets and customers^[11], has positive impacts on innovative behavior^[12] or improves the capabilities of human capital^[13].⁴
- 1.5 **The role of National Quality Infrastructure (NQI).** NQI is the ecosystem of public and private institutions, legal and regulatory frameworks that promote: (i) provision of standards; (ii) accreditation; (iii) metrology; and (iv) conformity assessment (testing, inspection, and certification)^[14]. NQI supports the development, adoption, and compliance of standards to promote product quality and safety, access to global markets value chains, reduction of transactions costs and innovation. It is comprised of the institutions, norms and regulations, metrology and testing infrastructure, and public and private stakeholders that develop, supervise, or adopt quality standards. It is comprised of: (i) National Standard Bodies, in charge of developing and adopting standards; (ii) certification bodies in charge of assurance that a product conforms to standards; (iii) testing laboratories (both public and private); (iv) inspection bodies; (v) calibration laboratories; and (vi) accreditation bodies in which an organization or a person is recognized as competent to carry out certain tasks^[15] ([Schematic representation of a NQI](#)). Standards help manufacturers reduce costs, adopt technical requirements, and increase productivity, innovation, and efficiency. An NQI ensures that products are fit for consumption and provides increased safety, decreased environmental impact and more effective delivery of goods and services^[16].
- 1.6 **NQI in Guyana under the new economic context.** The recent new oil and gas discoveries will produce changes in the overall economic structure of the country^[3]. The impact of the additional revenue must be carefully managed to promote inclusive, sustainable growth. The new economic developments have caused an increase of 48.7% in the economy and a 4.8% increase in the non-oil economy in 2021^[17], with expected GDP growth of 47.7% and 7.7% in the non-

³ The last IMF Article IV consultation for Guyana (2019) also recommended reforms to support economic competitiveness in the country as a strategy to buffer the consequences of the fast-growing oil revenues.

⁴ This paragraph is an adaptation of the review presented by Gallego (2017, p. 2).

oil economy for 2022[2]. As a resource dependent economy, Guyana faces the risk of lack of diversification and increasing reliance on the state which can affect private sector competitiveness[17]. The increase in the non-oil economy boosts local demand and sectors such as construction, engineering, tourism, hospitality, food and agriculture, specialized business services and health have emerging needs[3]. For local firms to access these emerging sectors, as well as international markets for non-traditional products, the compliance with quality standards is a necessary condition (See [OEL#7](#)).


- 1.7 Under this economic context, the role of the Guyana National Bureau of Standards (GNBS) in promoting private sector is more relevant, as the demand for its services has increased, including existing services, new services in legal metrology and business development, new sectors requesting services, and training in ISO Standards for Guyanese firms (See [OEL#11](#)).⁵
- 1.8 **Rationale for intervention and main challenges to be addressed.** Services provided by NQI are necessary for economic growth, diversification and targeting new market[7] and access to international markets, product development and industrial upgrading of Small and Medium-Sized Enterprises (SMEs) are usually boosted through the adoption of quality standards[18]. NQI is a public good, as the fixed cost of development of patterns and metrics are relatively high and should be available to all consumers, large and small firms, regulatory bodies SMEs, etc.[19] and NQI is a necessary condition for the functioning of innovation systems[20]. An NQI can: (i) increase the productivity of firms; (ii) support innovation; (iii) reduce transaction costs between suppliers and customers; (iv) allow for entry into new markets; (v) generate synergies and information; and (vi) allow for protection of consumers and the environment[21].
- 1.9 The level of maturity of the NQI in Guyana has improved, but there are still gaps in the levels of services provided. NQI should satisfy priority needs of public and private sector stakeholders, and supply of NQI services should adapt to the demand, as well as government priorities and strategic sectors. The demand and type of NQI services to be provided considers: (i) the local and international markets and their future potential; (ii) increase in productivity and innovation; and (iii) safety and health of people and the environment, among others. Using the toolkit for Ensuring Quality to Gain Access to Global Markets (Kellerman, 2019), the state of the NQI, its performance during the life of the loan and the expected outcomes was assessed[16]. Results from the assessment show that Guyana is evolving from a Basic Level of NQI maturity to Advance in Legal metrology, scientific metrology, provision of standards, accreditation, testing, inspection bodies, certification, and laboratory infrastructure, and from rudimentary to basic in inspection bodies. Figure 1 shows the evolution from the start of the program to the expected outcome (See [OEL#4](#)).

⁵ GNBS reports that the number of new customers utilizing the legal metrology services increased 98% from 2020 to 2021.

Figure 1. Maturity of the NQI in Guyana



 Indicates the status of Guyana when the program started.

 Indicates the expected outcome. Source: World Bank. *Ensuring Quality to Gain Access to Global Markets A Reform Toolkit*. Martin Kellermann 2019 *Ensuring Quality to Gain Access to Global Markets* (worldbank.org) and authors own calculations.

- 1.10 The toolkit was modified to include the status of the legal metrology and industrial metrology infrastructure, as well as the working conditions of the staff. Although the GNBS has obtained a certification on ISO 9001:2015, it has been done in a containerized environment, which is not sustainable in the long run and provides challenges in management. The GNBS in Guyana categorized in Basic to Advance in this new category as well.

- 1.11 **The current laboratory infrastructure of the GNBS is inadequate for the provision of the required services.** The GNBS has the sole responsibility for conducting calibration of measuring devices for mass, electrical measurements and temperature but does not have the physical conditions to control temperature and humidity, vibration, among others. The current laboratory facilities and equipment of the GNBS have severe limitations in terms of space and environmental conditions. In addition, the current facility is not accessible for people with disabilities. The GNBS has grown from 65 to 130 employees and has temporarily accommodated the increased personnel and equipment in a provisional containerized environment. However, this temporary solution is not sustainable as the GNBS has challenges to provide controlled environments (temperature, humidity, and vibration control), and the structures require high energy costs. The state of the current laboratory infrastructure is inadequate to allow the GNBS to perform its role as the sector entity that verifies conformity with the adoption of standards with the aim of supporting economic diversification, innovation, and access to markets.
- 1.12 The main limitations and gaps of the GNBS laboratories in the system are: (i) unsuitable laboratory facilities that lack the proper physical conditions to assure reliability; (ii) limited space to perform tests for consumer protection and certifying production standards; (iii) limited calibration capacity in terms for temperature, moisture, pressure, force, volume and electricity;⁶ (iv) lack of adequate equipment; (v) need to maintain their ISO accreditation; and (vi) insufficient trained staff for performing tests and calibrations and maintenance of the equipment.⁷ Without the proper GNBS' infrastructure, all the other laboratories in the system face challenges for accreditation and compliance with conformity. The already accredited laboratories also need support to maintain their accreditation or to achieve accreditation from additional international boards.⁸
- 1.13 **Gender gaps.** The economic gender gap in Guyana is still wide. The World Economic Forum's Global Gender Gap Report 2021 ranks Guyana 105th out of 156 countries in terms of economic participation and opportunity. One component of this indicator is estimated earned income. In US dollars, at purchasing power parity, female income per capita is given as US\$7,000 and male as US\$17,800, resulting in a female-to-male ratio of 0.39. This situation is coherent with the fact that only 38.5% of senior and middle management positions are occupied by women^[24] and only approximately 25% of firms have a female top manager^[25]. Moreover, women-led firms in Guyana are often of smaller size, younger, and usually operate in low growth segments^[4]. The main constraints for women entrepreneurs relate to sociocultural factors, lack of skills to operate in more knowledge-intensive sectors and reduced access to credit and higher finance costs. In this context, quality certification has been often a way to mitigate some of these constraints and to gain a better access to finance and markets. In 2020, 30% of women-led firms were quality certified in comparison to 27% of men-led.

⁶ Unsuitable type of construction materials to ensure a sterile environment, layouts that may conduce to cross contamination, locations subject to flooding, poor ventilation, humidity, and direct sunlight. Needs Assessment Report, 2014.

⁷ Ibid.

⁸ There are 20 existing laboratories (public and private) that provide testing services. There are only two accredited labs: the Guyana Rice Board Laboratory and the Eureka Medical Lab got accredited on May 2015 and March 2016, respectively. ISO/International Energy Conservation Code-IECC 17025.

However, compared to 2016, female-led firms experienced a reduction in certification of 11 percentage points, while men-led firms experienced a reduction of 1 percentage point. Further expanding certification in women-owned firms is key to contributing to fill these gaps. The activities to be carried out to address these gaps include programs to support women owned firms and businesses with 80% women employees to achieve certification (¶1.35). In addition, the GNBS proactively promotes women firm's certification in quality by partnering with women's organization such as the Guyana Women Chamber of Commerce. In addition, the five-year strategic plan for the GNBS, that is supported by [ATN/FI-15862-GY](#) (¶1.26) will include a gender perspective.

- 1.14 **Climate change.** Guyana's LCDS 2030 seeks alignment with the objectives of the Paris Agreement to achieve net-zero emissions by 2050 and strengthening climate resilience. Therefore, it commits to support diversification of the economy by supporting non-oil sectors including tourism, hospitality, construction, agribusiness, manufacturing, and health. To effectively promote SMEs integration with the new value chain and increase productivity and competitiveness in the context of the transition towards a net-zero emissions and climate resilient economy, the GNBS would need to improve the services provided and expand its work on climate-related standards. The GNBS has already developed climate-related standards, namely national building code, energy efficiency building code, LED lights and air conditioning. Thus, advancing on preparation of new standards and metrology for a diversified economy will be crucial to contribute to the Guyana's LCDS and for SMEs to access existing and new markets in the transition to a global net-zero economy. In this regard, the GNBS will carry awareness campaigns, including climate change awareness (¶1.35) and the design of the laboratory building follows the Excellence in Design for Greater Efficiencies (EDGE) tool, resulting in savings of 33.26% in water, 33.37% in energy and 38.52% in materials (¶1.29, ¶1.37) (See [OEL#9](#)).⁹
- 1.15 **Impact of COVID-19.** Guyana has reported 63,246 confirmed cases since 2020, with the highest average reported on January 2022, forcing the government to take restrictive measures, and disrupting external value chains. However, new sector activities outweighed the negative impact of the disease[2]. While Guyana's impact by the pandemic could be catalogued as relatively milder than tourism-dependent countries of the Caribbean, it had an impact on the country's fiscal sector, as the fiscal deficit widened to US\$436 million and US\$529 million during 2020 and 2021, respectively[22]. Micro, Small and Medium Enterprises (MSMEs) owners in Guyana 87.6% of Guyanese firms in a 2020 Survey (See [OEL#8](#)) identified the overall impact as negative, with a relatively worse perception amongst female owned firms (92% vis a vis 86.5% for male owned enterprises) and among small (89.2%) and large firms (91%). The likeliness to resume normal operations is 85% in Guyana, compared to 75.8% for the rest of Caribbean firms. Only 69% of women-owned Guyanese firms believe their establishments are likely to resume the normal course of their operations, compared to 89% for their male counterparts.

⁹ For example: standards/labels for construction materials and new materials, fertilizers and herbicides, energy efficiency for equipment, among others.

- 1.16 **Reformulation context and justification.** In November 2016, the Bank approved the operation [3824/BL-GY](#) “Enhancing the National Quality Infrastructure for Economic Diversification and Trade Promotion” for US\$9,000,000, with the objective of supporting economic diversification and export through the enhancement of the NQI and through a National Export and Investment Promotion Strategy with the following specific objectives: (i) to enhance the capacity of the NQI; (ii) to improve facilities for the NQI; and (iii) to enhance the capability of the Guyana Office for Investment for export and investment promotion. The program had one Sole Component (Enhancing the National Quality Infrastructure for Economic Diversification and Trade Promotion) with three subcomponents: (1) Modernization of the Institutional Framework of the NQI; (2) Improving Laboratory Facilities and Equipment; and (3) Implementing the National Export and Investment Strategy. Under the new economic context, the demand for services from the GNBS has increased and thus the need to increase the physical scope of the original laboratory facility. Thus, in order to align the government priorities of a more diversified and productive base, Senior Minister of the Office of the President with Responsibility for Finance [requested](#) on May 11th, 2022 additional financing up to US\$8,000,000 to cover the laboratory expansion and supervision costs to accommodate the new priorities. The expansion of construction, manufacturing, agriculture, law enforcement and health services as well as environmental and climate regulations to align with the [Low Carbon Development Strategy](#) (LCDS) require more legal metrology services. In addition to the additional financing, the current proposal reformulates the original program by redirecting savings from Subcomponent 1 and remaining resources from Subcomponent 3 to Subcomponent 2 to cover the additional construction costs. Additional activities on Subcomponent 3, National Export and Investment Strategy are cancelled. These changes are reflected in the reformulated Results Matrix.
- 1.17 **Project status and partial physical targets.** [3824/BL-GY](#) has disbursed US\$2,218,608.88 (24.65%) as of June 30th, 2022, with commitments of US\$2,426,614.16 (24.96%). The project has achieved partial physical targets, as of June 2022¹⁰: (i) all outputs of Subcomponent 1: Modernization of the Institutional Framework of the NQI have been achieved, including the accreditation of five laboratories, training and capacity building activities for stakeholders (laboratories, SMEs and the GNBS), creation and operation of a network of laboratories; (ii) two outputs of Subcomponent 2 Improving Laboratory Facilities and Equipment: the architectural and engineering designs and the provision of equipment for two laboratories; and (iii) the starting of activities in Subcomponent 3: the redesign of the Go Invest Trade and Investment Framework and the Export Investment Strategy. The available funds from Subcomponent 1 and 3 will be transferred to Subcomponent 2, albeit leaving resources for Subcomponent 1 promoting certification and accreditation of stakeholders from the GNBS.¹¹

¹⁰ Delays in Subcomponent 2 were caused by: (i) difficulty in finding the proper space for the laboratory facility; (ii) an increase in the demand for GNBS services requiring a larger laboratory facility; and (iii) a steep increase in construction costs in the country. These issues have been addressed as the location for the laboratory has been defined and the reformulation contemplates the increase in the amount to cover the construction costs (1.19).

¹¹ Following the recommendations from the Midterm Evaluation to (i) increase the amount of the loan to facilitate the completion of Subcomponent 2 (See ¶I.1.19); (ii) use of appropriate indicators and data collection measures as the baseline has been updated (See ¶I.1.40 and [REL#2](#)); and (iii) relevance on supporting firms to achieve standards (See ¶I.1.34).

- 1.18 **Changes in the objectives.** The original objectives are adjusted to reflect the changes in the expected outcomes, including an expanded universe of beneficiaries, SMEs that will access the emerging sectors. The new general objective narrowed the scope of the initial general objective by leaving out the export support aim and focused on competitiveness. This is also reflected in keeping the first specific objective only. Under the reformulated logic, Subcomponent 2 represents 81% of total new budget and therefore the theory of change is aligned to this component.
- 1.19 **Rationale for additional financing and a reformulation.** The additional financing of this operation will provide resources for Subcomponent 2 and to Program Administration, Monitoring and Evaluation and Contingencies, as described below in paragraphs ¶1.36 to ¶1.37. Construction and supervision costs increased from US\$5.8 million to US\$13.4 million.¹² This corresponds to the increase in demand for services that require a larger facility as well as the increase in construction costs in Guyana. The reformulation will reallocate US\$57,031.32 from Subcomponent 1 to Subcomponent 2, US\$129,748.68 from Subcomponent 3 to Subcomponent 2 (for a total US\$186,780.00 being transferred to Subcomponent 2), and US\$457,495.77 from Subcomponent 3 to Program Administration, Monitoring and Evaluation and Contingencies.¹³ Regarding Subcomponent 2, the GNBS already partially purchased the laboratory equipment and will purchase the remaining during the execution period. In Subcomponent 3, the remaining activities of Go Invest will be carried in house under the new governmental priorities and the reallocation of Go Invest under the Office of the Prime Minister. Therefore, this subcomponent will be eliminated from the program with the caveat that some activities were partially completed and US\$572,755.55 have already been spent or committed (See [Detailed Budget](#)).
- 1.20 **Institutional aspects.** The GNBS operates under the Ministry of Tourism, Industry and Commerce (MTIC)¹⁴ and holds responsibility for standardization, by formulation and application of standards, technical regulations, conformity assessment procedures and metrology.¹⁵ The GNBS is responsible for developing national standards and is governed by a National Standards Council (NSC), whose members (Chambers of Commerce, the University of Guyana, the Guyana Manufacturers' Association, regulatory bodies, etc.) are appointed by the MTIC. Also, the Ministry of Agriculture (MoA) and the Ministry of Public Health (MoH) are part of the Guyana NQI. The MoA, through the National Agricultural Research and Extension Institute oversees Guyana's Sanitary and Phytosanitary Measures (SPS). The Guyana Development Corporation is in charge of surveillance functions regarding livestock. The MoH through the Food and Drug Department has the responsibility for issues relating to human health, including food for human consumption and cosmetics (See [NQI in Guyana](#)).

¹² Construction costs of the laboratory facility increase by US\$7.8 million. The remaining resources US\$200,000.00 from GY-L1082 plus the resources resulting from the reformulation were allocated to Subcomponent 1 and to Program Administration, Monitoring and Evaluation and Contingencies.

¹³ US\$644,275.77 will be reallocated as follow: (i) US\$57,031.32 from Subcomponent 1 to Subcomponent 2; and (ii) US\$129,748.68 from Subcomponent 3 to Subcomponent 2, and US\$457,495.77 from Subcomponent 3 to Program Administration, Monitoring and Evaluation and Contingencies (in total US\$587,244.45).

¹⁴ Previously the Ministry of Business. The name was changed when the new government named the new Cabinet members in August 2020.

¹⁵ Conformity assessment bodies include laboratories, inspection, or certification institutions.

- 1.21 **Strategic context, bank's experience and lessons learned.** Evidence from other experiences in the region show that impacts of standards adoption for developed economies and strengthening of NQI systems are related to growth of production, productivity, and exports. The results of these studies show that there is a positive relationship between the increase in the stock of standards and productivity and economic growth[23]. These gaps bring in a valuable opportunity to contribute with knowledge of the impact of this type of programs in the region. In addition, case studies carried in the region highlight the importance of an adequate infrastructure for the correct functioning of and NQI that allows for the required tests to be carried out[20].
- 1.22 The experiences of studies in Colombia, El Salvador and Peru indicate that entering (and staying) in dynamic value chains requires meeting certain standards such as delivery reliability, compliance with health, labor, and environmental requirements, and that there is a certain standardization in visible characteristics in terms of size, color, etc., that the shelf life of the product is relatively long, etc. (See [OEL#11](#)).
- 1.23 **Government strategy, priorities, and actions.** [2022 Budget Speech](#), prioritizes economic growth under a diversified, competitive, and resilient productive base that translates into employment and entrepreneurship for the Guyanese. It highlights the priorities given to enabling framework for the development and expansion and Guyanese companies and job opportunities for Guyanese Nationals, and to the expansion of local value chains to other countries in sectors such as the wood value chains, the developing of furniture industry for exports, promoting value added opportunities for SMEs and recognizing the importance of agriculture in a non-oil economy. On the other hand, the speech emphasizes economic growth under the principles of the [LCDS](#).¹⁶ The reformulation of this program will support the achievement of this goals as firms need assistance for adoption of quality and standards and public inspection bodies need regulatory standards for promoting clean growth.¹⁷
- 1.24 **Complementarity and sequencing with other operations.** This operation complements the "Sustainable Agricultural Development Program" ([3798/BL-GY](#) approved in 2016 for US\$15 million, 15.07% disbursed), as it targets research, innovation, and technology transfer for farmers of non-traditional crops who could eventually become beneficiaries of the present operation, additionally complements the loan "Establishing a Single Window for Trade Program" ([4659/BL-GY](#) approved in 2018 for US\$6 million, 24.42% disbursed) as some of the SMEs beneficiaries could access international markets. It also gives continuity to "Support for Competitiveness Program" ([1750/SF-GY](#) approved in 2007 for US\$18 million, 100% disbursed) that financed the Gaps and Needs Assessment that recommended a new laboratory facility[26].
- 1.25 **Bank experiences and lessons learned.** Lessons learned from similar projects in the region, "Program to Support Production Development for International

¹⁶ Creates incentives for a low-carbon economy, protects against climate change and biodiversity loss and stimulates clean growth.

¹⁷ A survey carried out in 2021 showed that 90% of surveyed firms indicated that ISO9001 standards and other were most important for their businesses[15].

Integration” ([2583/OC-ES](#))¹⁸ identified the need to carry out the studies that allow for a reliable estimate of construction costs of a laboratory. Lessons learned from similar operations in Guyana, “Support for Competitiveness” ([1750/SF-GY](#))¹⁹ approved in 2007 for US\$18 million, 100% disbursed) and “Micro and Small Enterprise (MSE) Development and Building Alternative Livelihood” ([GRT/GF-13725-GY](#))²⁰ approved in 2013 for US\$5 million, 100% disbursed), show the need for a dedicated monitoring and evaluation system and the need for efficient internal processes and procedures to expedite execution. For implementation, the project will also incorporate lessons learned from the mid-term evaluation report, such as the need for improving stakeholder participation and coordination of the original operation (¶3.3 and ¶3.6) [3824/BL-GY](#). These lessons will be incorporated by including coordination measures, strengthening the monitoring role of the Project Steering Committee (PSC), strengthening the monitoring and evaluation capacity of the GNBS (with the support of the Client Support Technical Cooperation (TC) “Removing Barriers to Growth by Creating More Local Opportunities in the Oil and Gas Value Chains in Guyana” ([ATN/OC-17075-GY](#), approved in 2018 for US\$400,000, 100% disbursed), and establishing internal process within the Project Execution Unit (PEU) for management and monitoring contracts. The program has detailed architectural and engineering designs for the construction of the laboratory facility.

- 1.26 **Value added from the Bank.** The implementation of the operation has been supported with TC resources through Operational Support TC “Institutional Strengthening of the National Quality Infrastructure in Guyana” ([ATN/FI-15862-GY](#), approved in November 2016 for US\$250,000, 100% disbursed), that provided: (i) a roadmap for certification of laboratories; (ii) a pluriannual strategy for the GNBS; (iii) the design of the laboratory networks; and (iv) the legal and institutional analysis of the GNBS. The [ATN/OC-17075-GY](#) supports the current operation by: (i) supporting SME integration in value chains; and (ii) strengthening the capacity of the GNBS in strategic planning, including the drafting of the five-year strategic plan and monitoring and evaluation. Studies in the region indicate that entering (and staying) in dynamic value chains requires meeting certain standards (See [OEL#11](#)).
- 1.27 **Intervention strategy.** The proposed intervention aims at making a shift in the practice of quality standards by supporting and promoting firm productivity under a modern framework, in which the technical and physical capacity of the NQI will be brought to a level commensurate with best international practices and will allow the country to be able to respond in a more cost-effective manner to the requirements of the new Guyanese economy. The design also includes elements for its sustainability and relevance in the long term (¶2.10). The modernization of the NQI includes streamlining and implementing procedures for certification, accreditation, and conformity, improving the laboratory facilities of the GNBS for metrology, calibration and testing²¹ as well as providing support to the main

¹⁸ [PCR 2583 OC-ES](#).

¹⁹ [PCR 1750/SF-GY](#).

²⁰ [PCR GRT/GF-13725-GY](#).

²¹ Some tests that are required to be carried out under controlled conditions are being currently carried out in the same room as others.

stakeholder related to NQI. The modernization of the NQI includes actions that promote the adoption of a culture of quality in local firms.

- 1.28 **Donor coordination.** The team coordinated with the Caribbean Community (CARICOM) Regional Organization for Standards and Quality (CROSQ). In this regard, the proposed intervention is aligned with the draft regional guidelines that are being prepared by CROSQ and complements their work in the region on improving the NQI.
- 1.29 **Strategic alignment.** The program is aligned with the Second Update of the Institutional Strategy (UIS) (AB-3190-2), through the development challenge of Productivity and Innovation by supporting Guyanese firms' accreditation process which will lead them to engage in new, more productive economic activities and to innovate in their outputs and processes; and the cross cutting areas of: (i) Climate Change, according to [the joint methodology of the Multilateral Development Banks](#), 68.27% of total IDB funding for this operation will result in climate finance as the Laboratory Facility construction and design comply with the requirement of the green building EDGE certification standards, contributing to energy savings, water savings and operational CO2 savings (§1.14); (ii) Environmental Sustainability through the construction of the Laboratory Facility which design contributes to energy savings, water savings, and operational CO2 savings; (iii) Gender Equality by supporting women owned firms and businesses with 80% women employees to achieve certification (§1.13, §1.35); and (iv) Institutional Capacity and the Rule of Law, as it supports strengthening of the GNBS by providing training and capacity building activities. It is also aligned with Vision 2025. Reinvest in the Americas: A Decade of Opportunity (AB-3266), in the strategic opportunity of supporting SMEs as it supports enhancing quality and standards in SMEs; and in the pillar of strengthening value chains and nearshoring and SMEs as NQI is a necessary condition for both. It will contribute to the IDB Group Corporate Results Framework (CRF) 2020-2023 (GN-2727-12) with the following output indicators: (i) MSMEs financed; (ii) enterprises provided with technical assistance; and (iii) agencies with strengthened digital technology and managerial capacity. The program is consistent with the Innovation, Science, and the Technology Sector Framework (GN-2791-10), as it promotes science and technology by the introduction of standards and certifications that are a necessary condition for innovation and is aligned with the Update of the Gender Action Plan for Operations 2020-202 (GN-2531-19) through the line of action of supporting the participation of women-led businesses in the economic recovery post COVID-19, as it has specific programs to support women owned firms and businesses with 80% women employees to achieve certification. The program is aligned with the strategic objectives of the IDB Group Country Strategy with the Cooperative Republic of Guyana 2017-2021 (GN-2905),²² by supporting investment in infrastructure for private sector growth.
- 1.30 **Innovation and technology considerations.** NQI is a necessary condition for the functioning of innovation systems^[20]. An NQI can increase the productivity of firms, and standards can be used to promote innovation, technology transfer and enable research^{[27][12]}. Standards promote innovation by codifying technological

²² The current strategy is in transition period until November 2022. The new Country Strategy with the Republic of Guyana is expected to be approved in Q4 2022.

experience and forming a baseline in which new technologies can emerge (¶1.4). In addition, the supervision of construction works will be supported using the Captudata tool that introduces innovative technologies for supervision.²³ The PEU is planning the activation of the tool before construction starts.

B. Objective, components, and cost

- 1.31 **Objectives.** The general development objective of the program is to support economic competitiveness. The specific development objective is to improve the NQI's capacity to promote the adoption of quality standards among Guyanese MSMEs.
- 1.32 The additional financing of this operation will provide resources for Subcomponent 2 described in paragraphs ¶1.36 to ¶1.37 and for the Administration, Monitoring, Evaluation and Contingencies Costs. It is expected then that such components will contribute so that the GNBS: (i) meets the increased demands from stakeholders; (ii) improves the services provided; (iii) provides greater accuracy in testing and measurement; and (iv) provides the required services with more timeliness and responsiveness.
- 1.33 **Sole component. Enhancing the National Quality Infrastructure for Economic Competitiveness (US\$14,912,004.23: GY-L1082-US\$7,800,000.00; 3824/BL-GY-US\$7,112,004.23).** While the amount assigned to this operation focuses on Subcomponent 2, the whole operation GY-L1082 works in conjunction with initial operation [3824/BL-GY](#). Therefore, paragraphs ¶1.33 to ¶1.39 refer to the entire list of subcomponents that sustain the vertical logic formed by programs [3824/BL-GY](#) and GY-L1082. Table 1 shows how the budget addition enters in the new logic of the program.
- 1.34 **Subcomponent 1: Modernization of the Institutional Framework of the NQI (3024/BL-GY-US\$557,968.68).** This subcomponent will support the capacity building of the GNBS to support all the stakeholders in the NQI, strengthening the areas of technical regulations, compliance, conformity, accreditation and training, and capacity building of public and private stakeholders, as well as enhancing coordination measures through the network of laboratories. The reformulated budget for this subcomponent is US\$557,968.68 and originates from already existing funds from [3824/BL-GY](#).
- 1.35 This subcomponent has already financed and committed: (i) accreditation process of existing laboratories with best practices and international standards; (ii) training and capacity building for laboratories in the network and for the GNBS including awareness campaigns for stakeholders; (iii) creation and operation of a network of laboratories, including the development of a website in which information can be shared among the participants of the network, and a platform for the organization of workshops, knowledge sharing and awareness events about standards, certification and accreditation requirements; (iv) capacity-building activities for firms and SMEs in application of standards in order to promote a quality culture among the private sector; and (v) strengthening the institutional capacity of the

²³ CAPTUDATA is a tool that allows for easier monitoring of construction works, through an online platform available for both executing agencies actors, supervisors, and Bank personnel.

GNBS including the development of National Quality Policy for GNBS that aligns with both the regional and national policy framework, allows for a more efficient management of the facilities and incorporates the required mechanism to promote sustainability of the NQI for US\$277,759.25. The reformulation will include financing support for SMEs in certification, including targeted certification support for women-owned firms or firms who employ at least eighty percent (80%) women and awareness campaigns, including climate change awareness; and to finalize the National Quality Policy for a total of US\$557,968.68. The remaining US\$57,031.32 will be transferred to Subcomponent 2.²⁴

- 1.36 **Subcomponent 2: Expanding Laboratory Facilities and Equipment (US\$13,781,280.00: GY-L1082-US\$7,800,000.00; 3824/BL-GY- US\$5,981,280.00).** The objective of this subcomponent is to expand the existing facilities for the GNBS to allow them to provide adequate, accurate and timely services for the NQI in a sustainable manner. The new laboratory facility will house metrology, testing, chemistry and microbiology, and legal metrology. The reformulated budget for this subcomponent is US\$13,781,280.00, of which US\$7,800,000.00 come from GY-L1082, and the remaining US\$5,981,280.00 originate from already existing funds from [3824/BL-GY](#) (US\$5,794,500.00 from the original budget and US\$186,780.00 from transfers from Subcomponent 1 and 3) (See [OEL #2](#)).
- 1.37 This subcomponent has already financed: (i) architecture and engineering designs of the new laboratory facility for the GNBS; and (ii) as specific gaps in other laboratories by providing equipment for the then MoH and MoA for US\$301,280.00. The reformulated program and the supplementary resources, for a total of US\$13,781,280.00 will finance: (i) construction of the laboratory facility for the GNBS, consisting of a two-story green building that will accommodate two (2) laboratories (industrial metrology and legal metrology) an administrative area, a service building, and a truck building;²⁵ (ii) construction works' supervision; and (iii) furniture and equipment of the new laboratory facility. The laboratory facility will be located in the Sophia Exhibition Complex, where the GNBS is currently housed and will be built according to international standards, and following all environmental and social requirements and mitigation activities described in the Environmental and Social Management Plan ([ESMP](#)), the COVID-19 measures and the National Energy Code; and EDGE Green building certification.²⁶ The new laboratory facility will be fully accessible for people with disabilities.²⁷
- 1.38 **Subcomponent 3: Implement the National Export and Investment Strategy (3824/BL-GY-US\$572,755.55).** The objective of this subcomponent is to enhance the ability of Guyana to connect with regional and global value chains through the

²⁴ Initial budget of US\$615,000 of which US\$277,759.25 have been committed, and US\$557,968.68 will be allocated to the National Quality Policy and support for SMEs certification activities.

²⁵ The original estimated budget considered one building of approximately 1800 m², accommodating two (2) laboratories. The scope of the works was increased to include administrative areas for 150 GNBS personnel. This has increased the built surface from 1800 m² to approximately 3360 m² for the main building, 260 m² for the service building and 250 m² for the truck building, summing 3,870 m².

²⁶ For additional information on the Laboratory Facility, refer to [OEL#9](#) Infrastructure Technical Analysis and Climate Change.

²⁷ Initial budget of US\$5,794,500.00, of which US\$301,280.00 have been committed and US\$6,700.00 have been transferred from Subcomponents 2 and 3. In addition, US\$202,613.86 were transferred to Program Administration, US\$51,475 and US\$367,028 were transferred to contingencies.

promotion of exports and foreign direct investment. This subcomponent already financed the Export and Investment Strategy and the Go-Invest Trade and Investment Framework for US\$572,755.55 originated from already existing funds from [3824/BL-GY](#). The available funds from this subcomponent, US\$587,244.45, will be transferred to Subcomponent 2 (US\$129,748.68) and to Program Administration, Monitoring and Evaluation and Contingencies (US\$457,495.77).

- 1.39 **Administration, monitoring and evaluation and contingencies (US\$2,087,995.77: GY-L1082-US\$200,000.00; 3824/BL-GY-US\$1,887,995.77).** The reformulated budget for management, monitoring and evaluation and contingency costs amount to US\$2,087,995.77, of which US\$1,430,500.00 derive from the initial project budget [3824/BL-GY](#), US\$457,495.77 from transfers from Subcomponent 3 and US\$200,000.00 originate from the new operation GY-L1082.

C. Outcome indicators

- 1.40 **Key results indicators.** The impact of the reformulated project is the increased competitiveness of local MSMEs. The achievement of the general development objective will be measured with two indicators: (i) increase in labor productivity of certified MSMEs; and (ii) increase (two years after the construction of building) in average sales, among certified MSMEs that acquired quality certification. The specific development objective of improving NQI will be measured also with two outcomes indicators: (i) increase in the percentage of firms with an internationally recognized quality certification; and (ii) increase of the proportion of firms that receive training for quality certification.
- 1.41 **Beneficiaries.** The main beneficiaries of a well-functioning NQI are the MSMEs who benefit from economies of scale, access to foreign markets, integration in global value chains, reduction of information asymmetry, diffusion of technology, fair competition, and support for innovation. Consumers also benefit with information, better quality products, environmental protection, and consumer protection. The main beneficiaries of this program are defined as: (i) the treated laboratories of the NQI, both public and private; and (ii) the user of standards, mainly MSMEs that are trying to reach new markets with their products. The results matrix focuses its monitoring of results on final beneficiaries, MSMEs. The group of potential firm beneficiaries is based on the universe of firms in Guyana, which according to 2018 business registry data is constituted by 162,050 firms. The program expects to reach 4% of firms with no certification. According to estimates from the Analysis of Project Cost and Economic Viability [OEL#1](#), the potential number of firms beneficiaries is 2,501.
- 1.42 **Economic evaluation.** The cost-benefit analysis monetized the expected impact on sales for the group of potential beneficiaries along a 10-years period and yielded an IRR of 15%. Additionally, using a 12% discount rate, the project is estimated to have a Net Present Value of US\$1.83 million. Results are robust to a sensitivity analysis that considers both pessimistic and optimistic scenarios that alter the expected impact and firm survival rate (See [OEL#1](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 This operation will be executed as an investment loan under the modality of Specific Investment Loan (ESP) as the main financing will consist of a laboratory facility for the GNBS and will provide the additional financing for the expansion of the laboratory facility. The total amount of the additional financing is US\$8 million, to be financed from the Bank's Ordinary Capital resources. The disbursement period will be of 2 years.²⁸ Table 1 presents the summary of project costs. The disbursement calendar is presented in Table 2, and it is based on the preliminary implementation plan.

Table 1. Summary of project costs (US\$)²⁹

Investment Category	Initial Budget (3824/BL-GY)	Actual through to June 30th, 2022 (3824/BL-GY)	Transferred	Reformulated ³⁰ Budget (3824/BL-GY)	Additional Funds (GY-L1082)	Total (3824/BL-GY; GY-L1082)	Final Share in Total Budget (3824/BL-GY; GY-L1082)
Enhancing the National Quality Infrastructure for Economic Competitiveness	7,569,500.00	1,151,794.80	-457,495.77	7,112,004.23	7,800,000.00	14,912,004.23	88%
Subcomponent 1: Modernization of the Institutional Framework of the NQI	615,000.00	277,759.25	-57,031.32	557,968.68	-	557,968.68	3%
Subcomponent 2: Expanding Laboratory Facilities and Equipment	5,794,500.00	301,280.00	186,780.00	5,981,280.00	7,800,000.00	13,781,280.00	81%
Subcomponent 3: Implement the National Export and Investment Strategy	1,160,000.00	572,755.55	-587,244.45	572,755.55	-	572,755.55	3%
Program Administration	1,280,000.00	1,048,364.08	202,613.86	1,482,613.86	-	1,482,613.86	9%
Monitoring and Evaluation	50,000.00	18,450.00	61,475.00	111,475.00	-	111,475.00	1%
Contingencies	100,500.00	-	193,406.91	293,906.91	200,000.00	493,906.91	3%
Total	9,000,000.00	2,218,608.88	-	9,000,000.00	8,000,000.00	17,000,000.00	100%

Table 2. Disbursement schedule - GY-L1082 (US\$)

Source IDB	Disbursed up to June 2022	Estimated 2022	2023	2024	Total
3824/BL-GY	2,218,608.88	2,246,614.16	4,196,491.57	790,523.91	9,000,000.00
GY-L1082	-	-	2,340,000.00	5,660,000.00	8,000,000.00
Total	2,218,608.88	2,246,614.16	6,536,491.57	6,450,523.91	17,000,000.00
%	10	13	38	38	100

²⁸ Since the two main activities to be carried out (¶I.1.16 and ¶I.3.14), i.e., construction of the laboratory facility and supervision, are finalizing their bidding processes and are expected to be awarded shortly, it is estimated that two years will be sufficient time to execute the program.

²⁹ Costs by subcomponent are indicative.

³⁰ This column refers to the total cost of the original operation (3824/BL-GY), as a result of the reallocation of funds among the subcomponents.

B. Environmental and social safeguard risks

- 2.2 In accordance with the Environmental and Social Policy Framework (ESPF) (GN-2965-23), the Environmental and Social Impact Classification (ESIC) of the operation is “Category B”, as the operation is expected to generate adverse impacts that are moderate in scope and temporary in duration and that may be readily managed through available and typical mitigation measures associated to building construction. The most important impacts are mainly related to: temporary pollution such as noise, localized gas emissions, and potential sediment discharge in nearby streams and canals (due to increase of run-off); the generation of traditional and hazardous waste, including those related to chemical storage; temporary impacts related to vehicle and pedestrian access during construction; and temporary disturbance of other users of the Sofia Exhibition Complex (for exhibitions and celebrations held at the site). Solid and liquid waste management measures have been included in the ESMP in order to dispose of hazardous waste from construction and operation of the laboratory facilities.
- 2.3 The Environmental and Social Risk Rating (ESRR) of the operation is “Moderate”, largely related to the risk of the localized impacts. The Disaster Risk and Climate Change Risk Rating has been classified as “Moderate”, since while there is a high risk of drought, heat wave, and water supply scarcity in the broader geographical area, the project poses only a moderate risk of exacerbating vulnerability to these risks in nearby communities. An existing Environmental and Social Analysis (ESA) has been updated during preparation of the operation to confirm these impacts and risks and to include the requirements of the Bank’s ESPF. Similarly, an existing Environmental and Social Management Plan has been updated to include all ESPF requirements. Together, the ESA and ESMP form part of an Environmental and Social Management System (ESMS) that will guide the execution of the operation.
- 2.4 A stakeholder engagement plan was included as a part of the updated ESA and ESMP preparation including an initial, meaningful consultation which was held on May 21, 2022. The main comments and questions retrieved from the consulted stakeholders were related to: (i) increased potential for flooding during periods of heavy rainfall, due to overtopping of the East Demerara Water Conservancy (EDWC) dam and from water logged soils; (ii) disturbance of residents from works at night; (iii) dust generation; (iv) obstruction of drainage works; (v) risk of exposure to harmful substances; (vi) traffic congestion and damages to existing roads; (vii) risk of contamination of nearby drainage systems; (viii) timeline for the project; (ix) constructive details (foundation type, etc.); (x) noise and vibrations; and (xi) disruption to other events held at the complex (due construction and reduced parking places), and these comments were addressed by the updated ESA and ESMP.
- 2.5 A fit for disclosure ESA and ESMP were disclosed on the Bank’s external web page before the Analysis Mission and a final version including a Consultation Report will be submitted to the IDB and disclosed as part of the final ESA and ESMP prior to the submission to the Board of Directors.

- 2.6 In the procurement processes that include the supply and/or installation of solar panels,³¹ the Borrower, directly or through the Executing Agency (EA), shall ensure that all bidding documents and contracts include provisions that require applicants, bidders, contractors, consultants, representatives, staff members, subconsultants, subcontractors, goods suppliers and their representatives, contractors, consultants, staff members, subcontractors, subconsultants, service providers, concessionaires, and supervising entities, among other aspects, to comply with the Environmental Social Health and Safety (ESHS) Plans and the environmental and social instruments referred to therein, including procedures to prevent child labor and forced labor. Specific criteria will be defined on a case-by-case basis, considering market conditions and industry standards. Procurement processes that include silicon-based solar modules will be subject to ex ante review and centralized monitoring to ensure that the EA performs due diligence on the bidders' compliance with criteria related to prevent child labor and forced labor and mitigate reputational impact.

C. Fiduciary risk

- 2.7 An Institutional Capacity Assessment (ICAP) of the MTIC, the GNBS and the PEU was completed in May 2022 using the ICAP methodology. The EA has the necessary financial management capacity and control systems for that purpose. The fiduciary risks associated with this operation have been identified as medium-low.
- 2.8 The fiduciary risk is considered medium-low and is being addressed through: (i) the updating of the Program Operation Manual ([POM](#)) which seeks to provide guidance and mitigation measures to discharge all fiduciary duties in accordance with the Bank's rules and procedures; (ii) continuous support to streamline the timely execution of all fiduciary activities (i.e. Financial Management and Procurement); and (iii) providing continuous technical supervision and training in financial management and procurement staff who will be responsible for fiduciary activities under the present loan (See Annex III).

D. Other risks and key issues

- 2.9 A risk analysis workshop was held with the participation of key stakeholders involved and these risks were updated as the project evolved. Because global value chains are having issues with timely delivery of products, construction, and equipment inputs, they could be delayed causing delays in construction. This medium-high risk, under the economic and financial environment taxonomy, will be transferred to the constructor as it will be incorporated in the construction price. If the firms that receive training on standards and certification do not have the financial capacity to implement the requirements for certification, the number of certified firms may be smaller than envisioned. This medium-high risk, under the economic and financial environment taxonomy, is mitigated by providing support to certification with the program and by the collaboration between the Small Business Bureau (SBB), that provides grants for certification and the GNBS. If the capacity of the constructor is not examined before awarding the contract, the constructor's capacity will not suffice to do the construction on time, causing delays

³¹ With an expected photovoltaic capacity of 60kv.

in construction. This Medium-high risk, under the Technical Design Taxonomy, will be mitigated by including requirements in the bidding documents to disclose all ongoing projects.

- 2.10 **Sustainability.** The increase in demand for services from the GNBS will provide increased revenue for this institution. Furthermore, there is an increased realization of the importance of quality and standards in the new economic context of Guyana, which provide for the long-term sustainability of the intervention. Moreover, the new laboratory building has been designed incorporating energy efficiency criteria and low water appliances that decrease the energy and water consumption needs, minimizing operations costs. Additionally, the building will incorporate a photovoltaic system expected to cover a high percentage of the remaining energy consumption. This, in addition to low maintenance materials use, and resiliency measures, will minimize the operations costs of the building, that will be covered by the GNBS, through its profitable activities. Regarding the implementation of the National Export and Investment Strategy, the inputs from this consultancy will be part of the National Development Strategy that is being developed by the Ministry of Finance and by Go Invest that now reports to the Office of the Prime Minister.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 The EA will be MITC with the current PEU (See ¶3.2). The MITC (formerly named Ministry of Business) has recent experience executing Bank projects through a PEU and arrangements to ensure that there is enough knowledge transfer and interface within the PEU and from the PEU to the Ministry and the GNBS. The ICAP found certain areas in which staffing, systems and manuals needed reinforcement, and as part of the risk mitigation response, these have been considered in the design of the program (see Annex III). In this sense, the ICAP recommended that the PEU increases participation of the GNBS in execution, that a streamlined Operative Steering Committee (OSC) is created for strategic monitoring with the Ministry of Finance, the MTIC and the GNBS, and that internal controls for management of contracts, milestones and timely communication are introduced into the PEU management.
- 3.2 The main functions of the existing PEU are to ensure timely and effective project planning, management, coordination, procurement, financial controls, monitoring, and reporting. In this regard, systems, policies, and procedures will be implemented towards ensuring that efficient financial management as well as accurate and timely reporting and accounting will be achieved.
- 3.3 **Strategic coordination for the program.** The program will be overseen by an OSC comprised of the Ministry of Finance, the MTIC, and the GNBS. The OSC will constitute an advisory and oversight body and will provide strategic leadership and management of the project. The Project Manager will be accountable for project outcomes to the OSC. The functions of the OSC are: (i) ensuring the coordination of the program's activities with the ongoing activities and policies of the MTIC and other members of the OSC, and with the private sector; (ii) supervising project

progress and taking steps to ensure strategic objectives are achieved; (iii) periodically reviewing fulfillment of the strategic objectives of the program; (iv) deciding upon project implementation proposals presented by the Project Manager; (v) continuously supervising and evaluating the progress in execution; (vi) advising on problem solving on issues that may arise during project execution; (viii) coordinate and consult with other existing coordinating bodies such as the NSC and the network of laboratories when needed; and (viii) reviewing the mid-term and final evaluations and ensuring recommendations are integrated in project execution. The OSC will be chaired by the MITIC and the Program Manager will act as Secretary of the group.

- 3.4 The structure of the current PEU for the reformulated program will comprise, among others: (i) a project manager, who will be directly responsible for the allocation and use of resources, leading the PEU staff and liaising with key program stakeholders; (ii) a financial management specialist; (iii) a procurement specialist; (iv) an administrative assistant; (v) an engineer to provide technical support during construction and initial operation; (vi) an environmental and social expert to carry out environmental and social monitoring; and (vii) a monitoring and evaluation specialist.³²
- 3.5 Administrative responsibilities of the PEU include: (i) preparation, implementation and updating of the annual operating plan; (ii) preparation of the annual Procurement Plan ([PP](#)) and procurement of goods and services; (iii) financial administration, accounting and preparation of budgets and disbursement requests; (iv) preparation of technical reports, including regular updating of the information relevant for the project's monitoring report; (v) selection and hiring of the external audit firm and implementation of its recommendations; (vi) hiring of consultants to conduct the intermediate and final evaluations of the program; and (vii) act as the government's focal point for the Bank in all matters related to execution.
- 3.6 **Coordination mechanisms in the framework of the NSC.** The GNBS is governed by NSC, whose members are appointed by the MTIC and are drawn from organizations such as the Chambers of Commerce, the University of Guyana, the Guyana Manufacturers' Association, and regulatory bodies.³³ The NSC ensures coordination among stakeholders in matters related to quality and standards and, the GNBS has created a platform for coordination and information sharing, the network of laboratories. The execution coordination of the program will be carried out by the OSC, which will ensure coordination with the relevant NQI bodies ([¶3.3](#)).
- 3.7 **Program Operating Manual.** The updated version of the [POM](#), which establishes standards and procedures for the EA regarding the programming activities, procurement audits, environmental and social specifications, and monitoring and evaluation, among others, will govern program execution. The updated [POM](#) includes, among others, the following: (i) the updated budgets and PP Plan; (ii) the updated description of the subcomponents and activities; (iii) an annex including

³² Beyond the core structure, the PEU may be supported by consultants, experts, and technical advisors, as required by the needs of implementing and monitoring the project components. The financial specialist, procurement specialist and monitoring and evaluation specialist are shared resources with GY-L1060 and the MTIC.

³³ MoA for SPS measures, MoH for Food and Drug.

an ethics code of conduct that the EA shall comply with during the execution of the project; (iv) the operationalization of a OSC by the MTIC (¶3.3) in accordance with the terms and conditions previously agreed upon between the Bank and the EA; and (v) the mechanisms to increase the GNBS participation in the program.

- 3.8 **Special contractual clauses prior to the first disbursement: (i) approval of the updated version of the [POM](#), in accordance with the terms and conditions previously agreed upon between the EA and the Bank** as the updated [POM](#) will ensure all the additional operational aspects required for the successful implementation of the program (¶3.7). This condition is critical because the [POM](#) will include the code of ethics, measures to improve the coordination of the program, and the updated [ESRS](#) requirements. In addition, see environmental and social special contractual conditions in Annex B of the [ESRS](#).
- 3.9 **Disbursements.** Advances will be disbursed based on the liquidity needs of the program within a 6-month period. The EA will have to present a justification for the use of at least 80% of the total cumulative balances pending justification, and the Bank approve such justification prior to the next disbursement.
- 3.10 **Modifications.** The loan contract [3824/BL-GY](#) will be amended to include, among others: (i) the application of the ESPF in accordance to the ESRS; (ii) the application of the Policies for the Procurement of Goods and Works (document GN-2349-15) and the Policies for the Selection and Contracting of Consultants financed by the IDB (document GN-2350-15); (iii) the change in the name of the operation; (iv) the change in the general and specific objectives (¶I.1.18); (v) the updated component description (¶I.1.33); and (vi) the cost tables (¶2.1). Other modifications will ensure consistency in the execution arrangements³⁴ and other instruments for monitoring and evaluation.
- 3.11 **Procurement policies.** The procurement of goods, works, and services, and the selection of consultants financed by the Bank will be carried out in accordance with the Policies for the Procurement of Goods and Works financed by the IDB (document GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-15), respectively.³⁵ The [PP](#) includes details on program procurement. The procurement agreements and fiduciary requirements are included in Annex III.
- 3.12 The PEU will follow procurement processes of the program as described in the [PP](#) to be approved by the Bank, which will cover the entire duration of the program, in accordance with the applicable loan agreements. The [PP](#) will be updated through the semi-annual progress report, or whenever necessary or as required by the Bank.
- 3.13 In the procurement processes that include the supply and/or installation of solar panels, the Borrower, directly or through the EA, shall ensure that all bidding documents and contracts include measures to comply with the ESHS Plans and the environmental and social instruments referred to therein, including procedures to prevent child labor and forced labor (¶2.6, ¶3.14).

³⁴ Such as the change in the name of the EA and the execution arrangements such as the introduction of the OSC.

³⁵ The updated procurement policies will apply for any new process to be launched under the totality of the funds.

3.14 **Retroactive financing.** The Bank may retroactively finance from the resources of the loan, up to the sum of US\$1.6 million representing a percentage of 20% of the proposed loan amount of eligible expenses incurred by the Borrower prior to the date of approval of the loan. The eligible expenses may include: (i) construction costs of the laboratory facility; and (ii) supervision of works, provided that all requirements are substantially like those set out in the loan contract. The retroactive financing is justified by the fact that the two main activities are in the final stages of the bidding process and the construction pace may require additional resources before the eligibility of the new operation (¶I.1.16). Such expenses must have been incurred on or after the date of approval of the Project Profile (May 20th, 2022), but under no circumstances will expenses incurred more than 18 months before the loan approval date be included (See GN-2349-15, GN-2350-15 and the Policy on Recognition of Expenditure, Retroactive Financing and Advance Procurement (GN-2259-1). To ensure that there are no environmental and social liabilities, the retroactively financed activities will be carried out in accordance with all provisions from environmental and social legal requirements set out in the loan contract and including those established in the [POM](#), the Environmental and Social Action Plan (ESAP), the operation's Environmental and Social Management System (ESMS) and the ESMP. In addition, the Bank will rely on best practices for integrity risk management to assess any integrity red flags that may have a negative impact to the Bank's and the program's reputation.

3.15 **Audit.** The EA will be required to submit annual audited financial statements of the program, within 120 days following the closing of each fiscal year. The last of these audited financial statements shall be presented by the EA no later than 120 days following the date stipulated for the final disbursement of the financing. The audit of the financial statements will be conducted by the Audit Office of Guyana.

B. Summary of arrangements for monitoring results

3.16 **Monitoring.** Monitoring of the program is based upon annual reviews and updates of the physical and financial execution of the outputs specified in the RM of the program. The execution of the monitoring and evaluation activities will be the main responsibility of the PEU, that will coordinate with other actors involved in the execution of the Program. The PEU will be responsible for: the preparation of the Annual Operational Program (POA), the periodic updating of the management and results indicators in the semiannual reports, as well as the preparation of terms of reference and the supervision of consultants hired for evaluation purposes (See [REL#2](#)).

3.17 **Evaluation.** The report of the before and after impact evaluation of the program will be delivered by the end of the execution period of the operation. Intermediate progress reports will be delivered at the end of each year with the following information: baseline values for firms surveyed at baseline. For the intermediate follow up, a report with the short-term impacts of the program will be produced. The information of the exit line will be processed to conduct the before and after evaluation of the program, that will be reported at the end of the program.

Development Effectiveness Matrix		
Summary		GY-L1082
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Productivity and Innovation -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Micro / small / medium enterprises financed (#) -Enterprises provided with technical assistance (#) -Agencies with strengthened digital technology and managerial capacity (#)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2905	Support Investment In Infrastructure for Private Growth
Country Program Results Matrix	GN-3087-2	The intervention is included in the 2022 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		8.9
3.1 Program Diagnosis		2.3
3.2 Proposed Interventions or Solutions		3.5
3.3 Results Matrix Quality		3.1
4. Ex ante Economic Analysis		7.5
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		0.0
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		8.0
5.1 Monitoring Mechanisms		2.9
5.2 Evaluation Plan		5.2
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium Low
Environmental & social risk classification		B
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting, External Control, Internal Audit.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	The Technical Cooperations ATN/FI-15862-GY and the ATN/OC-17075-GY

Evaluability Assessment Note: The Reformulation of the program for Enhancing the National Quality Infrastructure for Competitiveness in Guyana has a general objective to support economic competitiveness. The specific development objective is to improve the National Quality Infrastructure's capacity to promote the adoption of quality standards among Guyanese MSMEs. The diagnosis identifies, as an obstacle for the competitiveness of Guyanese firms, the lack for adequate infrastructure for quality certification that is behind the decline of quality certification adoption. As a solution, the program aims to improve and increase the scope of the laboratory infrastructure of the Guyanese National Bureau of Standards to respond to increasing demand for services under a new economic context. It also supports SMEs' certification efforts and build on the previous operation's efforts to contribute towards maintaining laboratory accreditation.

The program has mostly SMART results indicators, although the timing and definition of some outputs could be improved. Although there is evidence of the usefulness of efforts of increasing quality certification among firms, this evidence is based on broader policy changes, and not entirely comparable to the current intervention.

The economic analysis yields a return of 13%, with assumptions that are based on evidence that is, as noted, based on a broader policy change. The monitoring and evaluation arrangements propose a difference in difference analysis with matching for one of the indicators, but there are remaining questions regarding budget and data availability for this technique.

RESULTS MATRIX

Original Project Objective	The program's objective is to support economic diversification and exports through the enhancement of the NQI and through a National Export and Investment Promotion Strategy. Specific objectives are: (i) to enhance the capacity of the NQI; (ii) to improve facilities for the NQI; and (iii) to enhance the capability of the Guyana Office for Investment for export and investment promotion
New Proposed Objective	The general development objective of the program is to support economic competitiveness. The specific development objective is to improve the NQI's capacity to promote the adoption of quality standards among Guyanese MSMEs.
Justification	To (i) reflect the changes in the expected outcomes, including an expanded universe of beneficiaries; (ii) narrow the scope by leaving out export support and focus on competitiveness; (iii) keeping only original specific objective (1).

GENERAL DEVELOPMENT OBJECTIVE

Indicators	Unit	Baseline		Goals		Means of verification	Observations	Changes to the Original Matrix
		Value	Year	Value	Year			
General Development Objective. To support economic competitiveness								
Non-traditional exports as a percentage of total exports per year	%	0.65	2014	0.75	2022	-	-	Indicator Excluded Justification: The general objective changed to competitiveness
Labor productivity of certified MSMEs (2 years after construction of building)	Index	100	2022	108	2027	SBB administrative records and baseline/endline surveys	Labor productivity is defined as the ratio of sales minus expenditure on personnel, physical capital, utilities, and depreciation over number of full-time employees. Evaluation will be reflexive based on double difference between certified and non-certified firms before and after the construction of the laboratory. Final baseline will be updated after baseline survey is collected. Impact comes from Gallego (2017) that finds 16% increase in value added for Colombian firms with certification. Target for the project	Indicator Added in 2022 Justification: Since the general objective changed to competitiveness, this indicator was added to connect to the new logic.

Indicators	Unit	Baseline		Goals		Means of verification	Observations	Changes to the Original Matrix
		Value	Year	Value	Year			
							is assumed 50% smaller. Underlying annual productivity measured with 2020 IFPG is US\$11,498 per worker.	
Average sales of certified MSMEs (2 years after construction of building)	Index	100	2020	108.5	2027	SBB administrative records and baseline/endline surveys	<p>Evaluation will be reflexive based on double difference between certified and non-certified firms before and after the construction of the laboratory.</p> <p>Final baseline value will be updated after baseline survey is collected. Impact comes from Gallego (2017) that finds 17% increase in sales for Colombian firms with certification. Target for the project is assumed 50% smaller. Underlying annual sales measured with 2020 IFPG is US\$95,556.</p>	<p>Indicator Added in 2022</p> <p>Justification: Since the general objective changed to competitiveness, this indicator was added to connect to the new logic.</p>

SPECIFIC DEVELOPMENT OBJECTIVES

Indicators	Unit	Baseline		Goals		Means of verification	Observations	Changes to the Original Matrix
		Value	Year	Value	Year			
Specific development objective 1. To improve the NQI's capacity to promote the adoption of quality standards among Guyanese MSMEs								
Average annual flow of US\$ exports of non-traditional products per exporter	Ratio (US\$/exporter)	11,667	2015	14,000	2022	-	-	Indicator Excluded Justification: The original three specific objectives became one, limited to the improvement of the capacity of NQI
Average annual flow of Tons of exports of non-traditional products per exporter	Ratio (Ton/exporter)	18.04	2015	21	2022	-	-	Indicator Excluded Justification: The original three specific objectives became one, limited to the improvement of the capacity of NQI
Average testing cost faced by exporters of non-traditional products (as a percentage of total operational costs per year)	%	N.A.	N.A.	N.A.	N.A.	-	-	Indicator Excluded Justification: The original three specific objectives became one, limited to the improvement of the capacity of NQI
Unit Rejection Rate (URR) for fruits and vegetable exports to the United States	Ratio	6	2010	4	2022	-	-	Indicator Excluded Justification: The original three specific objectives became one, limited to the improvement of the capacity of NQI
Percentage of firms obtaining an internationally	Index	100	2022	103	2027	SBB administrative records and baseline/endline surveys	Final baseline value will be updated after baseline survey is collected. Impact comes	Indicator Added in 2022

Indicators	Unit	Baseline		Goals		Means of verification	Observations	Changes to the Original Matrix
		Value	Year	Value	Year			
recognized quality certification.							from Gallego (2017) that documents 5.9 percentual points fincrease in certification among Colombian firms 5 years after the approval of CONPES 3446. Target for the project is assumed 50% smaller. Underlying percentage of firms obtaining certifications is 28.39% according to 2020 IFPG.	Justification: Since the specific objective changed to improvement of NQI, this indicator was added to connect to the new logic.
Percentage of firms trained for internationally recognized quality certification that obtain an internationally recognized certification.	Index	100	2022	123	2027	SBB administrative records and baseline/endpoint surveys	Final baseline value will be updated after baseline survey is collected. Impact comes from Tan and Lopez-Acevedo (2005) that documents a 23% increase in adoption of adopting quality-control practices among Mexican firms receiving training from the Comprehensive Quality and Modernization Programme. Underlying percentage of firms obtaining certifications is 28.39% according to 2020 IFPG.	Indicator Added in 2022 Justification: Since the specific objective changed to improvement of NQI, this indicator was added to connect to the new logic.
Percentage of laboratories accredited through component 1.1	Percentage	100	2022	80	2027	GNBS administrative records	This indicator seeks to monitor the sustainability of accreditation achieved by laboratories. The target assumes that no	Indicator Added in 2022 Justification: This indicator reflects the sustainability of

Indicators	Unit	Baseline		Goals		Means of verification	Observations	Changes to the Original Matrix
		Value	Year	Value	Year			
that retain their accreditation							more than 1 out of 5 laboratories already accredited loses its accreditation by the end of the project. Underlying baseline is 100% corresponding to 5 laboratories currently accredited.	products already executed under component 1.1
Growth in use of legal metrology testing and verification services provided by GNBS	Percentage	0	2021	6.8	2023	GNBS administrative records	This indicator monitors the growth in demand for testing services provided by GNBS. The underlying baseline value is 117 new testing and verification services provided by GNBS in 2021. The target assumes GNBS own projections of expected demand by 2023: 125 new testing and services of legal metrology.	Indicator Added in 2022 Justification: Since the specific objective changed to improvement of NQI, this indicator was added to connect to the new logic.

OUTPUTS

Indicators	Unit	Baseline 2017	Executed 2017-2021	2022	2023	2024	Final Goal	Means of Verification	Changes to the Original Matrix
Sole Component. Enhancing the National Quality Infrastructure for Economic Competitiveness									
Subcomponent 1. Modernization of the Institutional Framework of the NQI									
1.1. Accreditation of existing laboratories	Number of laboratories	0	5	1	0	0	5	Project Execution Unit (PEU) reports	Original": Final Goal: 4 New Final Goal: 5 Justification: Adjusted to reflect and additional laboratory certified
1.2. Training and capacity building for Stakeholders	Trainings	0	6	0	0	0	6	PEU reports	Product completed No changes
1.3. Creation and Operation of Laboratory Networks	Network	0	2	0	0	0	2	PEU reports	Product completed No changes
1.4. Network Consultancy for Information	Network	0	1	0	0	0	1	PEU reports	Product completed No changes
1.5. Website and operation	Website	0	2	0	0	0	2	PEU reports	Product completed No changes
1.6. Strengthening Capacity for SMEs	Training	0	4	0	1	1	6	PEU reports	Product completed No changes
1.7. Training for certification	Trained firms	0	0	0	30	30	60	PEU reports	New Product Justification: Product associated to the need of firms for certification
1.8. Training for certification for women led business or with 80% women employees	Trained firms	0	0	0	30	30	60	PEU reports	New Product Product associated with the GNBS

Indicators	Unit	Baseline 2017	Executed 2017-2021	2022	2023	2024	Final Goal	Means of Verification	Changes to the Original Matrix
									program from promoting certification of women-led firms or firms with at least 80% women employees Pro-Gender indicator
1.9. Awareness Campaigns, including climate change awareness	Campaigns	0	0	0	1	0	1	PEU reports	New Product Product associated with the awareness campaigns that the GNBS is carrying out with the Climate Change Office in Guyana
1.10. Strengthen capacity for GNBS-consultancy	Reports	0	1	1	0	0	0	PEU reports	Changes in the timeline The timeline of the goal is adjusted to provide for additional time to finalize the National Quality Policy
1.11. Strengthen capacity for GNBS-training	Trainings	0	2	0	0	0	0	PEU reports	Product completed No changes
Subcomponent 2. Expanding Laboratory Facilities and Equipment									
2.1 Architectural and Engineering designs	Set of Blueprints and Report	0	1	0	0	0	1	PEU reports	Product completed No changes
2.2. Civil Works (Laboratory Facility including access to persons with disabilities)	Laboratory Facility building	0	0	0	0	1	1	PEU reports	Unified Product. Changes in timeline Original Products:

Indicators	Unit	Baseline 2017	Executed 2017-2021	2022	2023	2024	Final Goal	Means of Verification	Changes to the Original Matrix
									Laboratory Building (goal 1 unit) Air Conditioning System (Goal: 1 unit) Fire System (Goal: 1 unit) Electronic System (Goal: 1 unit) Justification: All the equipment is part of the Civil Works.
2.3 Civil works supervision and inspection completed, including social and environmental supervision	Report	0	0	0	0	1	1	PEU reports	Unified Product. Changes in timeline Original Products Civil works supervision and inspection Social and Environmental Supervision Justification The civil works supervision and inspection includes social and environmental supervision.
2.4 Social and Environmental Supervision	Report	0	0	0	0	0	0	n/a	Excluded Goal Justification

Indicators	Unit	Baseline 2017	Executed 2017-2021	2022	2023	2024	Final Goal	Means of Verification	Changes to the Original Matrix
									Unified with Civil Works Supervision and Inspection
2.5 Laboratory Furniture	Goods	0	0	0	0	0	0	n/a	Excluded Goal Justification GNBS has purchased some of the equipment already and has plans to purchase the remaining during the course of the program
2.6. Office Equipment	Goods	0	0	0	0	0	0	n/a	Excluded Goal Justification GNBS has purchased this already
2.7. Air Conditioning System	Equipment	0	0	0	0	0	0	n/a	Excluded Goal Justification Unified with Civil Works
2.8 Fire System	Equipment	0	0	0	0	0	0	n/a	Excluded Goal Justification Unified with Civil Works
2.9 Specialized Equipment	Equipment	0	0	0	0	0	0	n/a	Excluded Goal Justification GNBS has already bought part of the equipment and is responsible for buying the remaining

Indicators	Unit	Baseline 2017	Executed 2017-2021	2022	2023	2024	Final Goal	Means of Verification	Changes to the Original Matrix
									during the course of construction
2.10. Electronic System	Equipment	0	0	0	0	0	0	n/a	Excluded Goal Justification Unified with Civil Works
2.11. Solar Panel System	Equipment	0	0	0	0	0	0	n/a	Changes in the timeline The timeline of the goal is adjusted to adjust for the construction period of the new facility
2.12. Maintenance Contracts	Contract	0	0	0	0	0	0	n/a	Product Excluded Justification The maintenance contracts are related to the equipment to be purchased by the GNBS
2.13 Specialized Equipment GAFDD & GLDA	Equipment	0	2	0	0	0	2	PEU reports	Product completed No changes
Subcomponent 3. Implement the National Export and Investment Strategy									
3.1. Best Practices on IPAS	Report	0	1	0	0	0	1	PEU reports	Product completed No changes
3.2. Redesign of Go Invest Trade and Investment Framework	Report	0	0	0	0	0	0	n/a	Product Excluded Justification Government changed priorities and vision on this topic

Indicators	Unit	Baseline 2017	Executed 2017-2021	2022	2023	2024	Final Goal	Means of Verification	Changes to the Original Matrix
3.3. Customer relationship management and training	Report	0	0	0	0	0	0	n/a	Product Excluded Justification Government changed priorities and vision on this topic
3.4. Website Improvement	Website	0	0	0	0	0	0	n/a	Product Excluded Justification Government changed priorities and vision on this topic
3.5. Boutique Forum	Report	0	0	0	0	0	0	n/a	Product Excluded Justification Government changed priorities and vision on this topic
3.6. Export and Investment Strategy	Report	0	0	0	0	0	0	n/a	Product Excluded Justification Government changed priorities and vision on this topic

Country: Guyana **Division:** IFD/CTI **Operation No.:** GY-L1082 **Year:** 2022

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Executing Agency (EA): Ministry of Tourism, Industry and Commerce (MTIC)

Operation Name: Enhancing the National Quality Infrastructure for Competitiveness. Reformulation and Additional Financing

I. FIDUCIARY CONTEXT OF EXECUTING AGENCY

1. Use of country system in the operation

<input checked="" type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input type="checkbox"/> Information System	<input type="checkbox"/> National Competitive Bidding (NCB)
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Others
<input checked="" type="checkbox"/> Accounting	<input checked="" type="checkbox"/> External Control	<input type="checkbox"/> Individual Consultants	

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Particularities of the fiduciary execution	The MTIC through its current PEU will have overall technical and administrative responsibility for all matters relating to the project and direct responsibility for the administration of loan resources and procurement processes. The PSC will provide strategic direction and oversight for all matters related to the project through the assessment and review of the project's operations.
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3. Fiduciary Capacity

Fiduciary capacity of the EA	An ICAP of the MTIC, the GNBS and PEU was completed in May 2022. Following the assessment of the EA's fiduciary capacity, the overall fiduciary risk level is classified as medium-low. It is considered that the PEU has experience managing projects financed under IDB financing as they have been executing the 3824/BL-GY operation since its approval in 2016. Financial management capacity is considered high. However, main fiduciary risks are related to delays in procurement as delays have been experienced in the planning and management of procurement processes critical for project implementation. Supervision and mitigation actions will be focused on efforts to strengthen the fiduciary capacity. The fiduciary risk is being addressed through: (i) the updating of the POM which seeks to provide guidance and mitigation measures to discharge all fiduciary duties in accordance
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	with the Bank's rules and procedures; (ii) continuous support to streamline the timely execution of all fiduciary activities (i.e. Financial Management and Procurement); (iii) providing continuous technical supervision and training as necessary in financial management and procurement staff responsible for fiduciary activities under the operation; and (iv) strengthening procurement management and procedures best practices through the incorporation of lessons learnt from delays/bottlenecks encountered in previous procurements.
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4. Fiduciary risks and risk response

Risk taxonomy	Risk	Risk level	Risk response
Planning	Delays in the planning, launching and management of procurement processes	Medium-low	(i) Providing continuous technical supervision and training as necessary in financial management and procurement staff responsible for fiduciary activities under the operation; and (ii) strengthening procurement management and procedures best practices through the incorporation of lessons learnt from delays/bottlenecks encountered in previous procurements.

5. Policies and Guides applicable to operation: The procurement of goods works and services, and the selection of consultants financed by the Bank will be carried out in accordance with the Policies for the Procurement of Goods and Works financed by the IDB (document GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-15), respectively. The [PP](#) includes details on program procurement.

The PEU will follow procurement processes of the program as described in the [PP](#) to be approved by the Bank, which will cover the entire duration of the program, in accordance with the applicable loan agreements. The PP will be updated through the semi-annual progress report, or whenever necessary or as required by the Bank.

6. Exceptions to Policies and Rules: None.

II. ASPECTS TO BE CONSIDERED IN THE SPECIAL CONDITIONS OF THE LOAN AGREEMENT

Exchange rate: For purposes of Article 4.10 of the General Conditions, the Parties agree that the applicable exchange rate shall be: that indicated in paragraph (b)(ii) of said Article. Accordingly, the agreed exchange rate shall be the exchange rate established by the Central Bank of Guyana on the effective date on/in which the Borrower, the respective Executing Agency, or any other person or legal entity in whom the power to incur expenditures has been vested makes the related payments to the contractor, the supplier, or beneficiary.
Type of audit: Project audited financial statements during project execution and a final project audited financial statement. Throughout the loan disbursement period, the EA will submit to the Bank annual audited financial statements within 120 days after

the close of the fiscal year, April 30th. The audit of the financial statements will be conducted by the Audit Office of Guyana. The audit's scope and related considerations will be governed by the Financial Management Guidelines (document OP-273-12) and the Guide for Financial Reports and Management of External Audit. Audit costs will be financed with project resources.

III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

<input checked="" type="checkbox"/>	<p>Bidding documents</p>	<p>For procurement of works, goods and services different of consulting executed in accordance with the Procurement Policies (document GN-2349-15), subject to ICB, the Bank's Standard Bidding Documents (SBDs) or those agreed between EA and the Bank will be used for the particular procurement. Likewise, the selection and contracting of consulting services will be carried out in accordance with the Policies for the Selection and Contracting of Consultants (document GN-2350-15) and the Standard Request for Proposals (SRP) issued by the Bank or agreed between the EA and the Bank will be used for the particular selection. The revision of the technical specifications, as well as the terms of reference of the procurements during the preparation of selection processes, is the responsibility of the sectorial specialist of the project. This technical review can be ex ante and is independent of the procurement review method.</p> <p>In the procurement processes that include the supply and/or installation of solar panels, the Borrower, directly or through the EA, shall ensure that all bidding documents and contracts include provisions that require applicants, bidders, contractors, consultants, representatives, staff members, subconsultants, subcontractors, goods suppliers and their representatives, contractors, consultants, staff members, subcontractors, subconsultants, service providers, concessionaires, and supervising entities, among other aspects, to comply with the ESHS Plans and the environmental and social instruments referred to therein, including procedures to prevent child labor and forced labor. Specific criteria will be defined on a case-by-case basis, considering market conditions and industry standards. Procurement processes that include silicon-based solar modules will be subject to ex ante review and centralized monitoring to ensure that the EA performs due diligence on the bidders' compliance with criteria related to prevent child labor and forced labor and mitigate reputational impact.</p>
<input checked="" type="checkbox"/>	<p>Recurrent expenses</p>	<p>The recurrent expenses required to put the project into operation approved by the Project Team Leader, which are financed, will be made following the POM approved by the Bank. Such procedures will be reviewed and accepted by the Bank, provided that they do not violate the principles of value for money, economy, efficiency, equality, transparency and integrity and in</p>

		keeping with the GN-2331-5 Expense Eligibility Policy and updates.
<input checked="" type="checkbox"/>	Advanced contracting, retroactive financing	<p>The Bank may retroactively finance from the resources of the loan, up to the sum of US\$1.6 million representing a percentage of 20% of the proposed loan amount of eligible expenses incurred by the Borrower prior to the date of approval of the loan. The eligible expenses may include: (i) construction costs of the laboratory facility; and (ii) supervision of works, provided that all requirements are substantially like those set out in the loan contract. The retroactive financing is justified by the fact that the two main activities are in the final stages of the bidding process and the construction pace may require additional resources before the eligibility of the new operation. Such expenses must have been incurred on or after the date of approval of the Project Profile (May 20th, 2022), but under no circumstances will expenses incurred more than 18 months before the loan approval date be included (See GN-2349-15, GN-2350-15 and the Policy on Recognition of Expenditure, Retroactive Financing and Advance Procurement (GN-2259-1). To ensure that there are no environmental and social liabilities, the retroactively financed activities will be carried out in accordance with all provisions from environmental and social legal requirements set out in the loan contract and including those established in the POM, the Environmental and Social Action Plan (ESAP), the operation's Environmental and Social Management System (ESMS) and the ESMP. In addition, the Bank will rely on best practices for integrity risk management to assess any integrity red flags that may have a negative impact to the Bank's and the program's reputation.</p>
<input checked="" type="checkbox"/>	Procurement supervision	<p>The method of supervision under the present loan shall be ex ante. The supervision method must be determined for each selection process and approved in the project PP. All procurement processes will be launched once all technical specifications and/or terms of reference are validated by the Bank's Sector Specialist; and will be documented in accordance with the Bank's general filing guidelines.</p> <p>All modifications to the present arrangement are subject to a prior written agreement between the EA and the Bank. The evaluation of capacity and the level of risk may vary during the project's execution depending on the findings of the regular supervision activities that will be conducted during the project's lifespan. As such, supervision modalities may vary as capacity increases.</p>
<input checked="" type="checkbox"/>	Records and archives	<p>All records and files will be maintained by the Borrower according to accepted best practices and to the general guidelines provided by the Bank. All records must be kept for seven (7) years beyond the end of the operation's execution period. It is also recommended that the EA develop electronic filing to avoid losing project files.</p>

Main Acquisitions

Description of the Procurement	Selection Method	Estimated Date	Estimated Amount US\$
Goods			
Supply and installation of solar panels	Price comparison with 3 quotations	TBD	100,000
Works			
Construction of Laboratory Facility	International Competitive Bidding (ICB)	February 2022	12,900,000
Consulting Firms			
Supervision of Civil works	Quality- and Cost-Based Selection (QCBS)	February 2022	480,000

IV. AGREEMENTS AND REQUIREMENTS FOR FINANCIAL MANAGEMENT

<input checked="" type="checkbox"/>	Programming and budget	The Borrower has committed to allocate, for each fiscal year of project execution, adequate fiscal space to guarantee the unfettered execution of the project as determined by normal operative instruments such as the Annual Operating Plan and the Procurement Plan.
<input checked="" type="checkbox"/>	Treasury and disbursement management	The Bank will supervise the creation of an Advance of Funds, using the Advance of Funds methodology. Whenever resources from the financing are requested through an Advance of Funds, it will be deposited into a Special Account, denominated in Dollars of the United States of America, established exclusively for the project at the Central Bank of Guyana. Required resources from this Special Account will be transferred to another bank account, denominated in Guyanese Dollars to be utilized for payment of expenditures in local currency.
<input checked="" type="checkbox"/>	Accounting, information systems and reporting	It is expected that IFMIS accounting system will facilitate the recording and classification of all financial transactions, supported by an off-shelf accounting system.
<input checked="" type="checkbox"/>	Internal control and internal audit	The management of the project will assume the responsibility for designing and implementing a sound system of internal controls for the project.
<input checked="" type="checkbox"/>	External control: external financial audit and project reports	For each fiscal year during project execution, the EA will be responsible to produce semi-annual financial reports for the project due at 60 days after each semester (February 28 th and August 31 st), annual Audited Financial Reports of the Program due 120 days after each fiscal year (on April 30 th) and one final Audited Financial Report at the end of the program (due within 120 days after the last disbursement date or any extension thereof), audited by the Audit Office of Guyana.

<input checked="" type="checkbox"/>	Project financial supervision	Financial supervision will be developed based on the initial and subsequent risk assessments carried out for the project. Inspection visits will be performed based on the risk assessed, covering the following: (i) review of the bank reconciliation and supporting documentation for Advances and Justifications; (ii) compliance with procedures; (iii) review of compliance with the lending criteria; and (iv) ex post review of disbursements.
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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/22

Guyana. Loan ____/OC-GY to the Co-operative Republic of Guyana. Enhancing the National Quality Infrastructure for Competitiveness. Reformulation and Additional Financing to Loan 3824/BL-GY “Enhancing the National Quality Infrastructure for Economic Diversification and Trade Promotion”

The Board of Executive Directors

RESOLVES:

To approve the amendments to the program “Enhancing the National Quality Infrastructure for Economic Diversification and Trade Promotion (Loan Contract No. 3824/BL-GY) approved by Resolutions DE-112/16 and DE-113/16, as described in document PR-____, and to authorize the President of the Bank, or such representative as he shall designate, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Co-operative Republic of Guyana, as borrower, for the purpose of granting it an additional financing to cooperate in the execution of the program “Enhancing the National Quality Infrastructure for Competitiveness”. The additional financing will be for an amount of up to US\$8,000,000, from the resources of the Bank’s Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ____ 2022)