

## TECHNICAL COOPERATION DOCUMENT (TC)

### I. Basic Information for TC

▪ Country/Region:	Suriname/CCB
▪ TC Name:	Support for Improving Transport Logistics and Competitiveness in Suriname
▪ TC Number:	SU-T1105
▪ Team Leader/Members:	Christopher Persaud, Team Leader (TSP/CBH); Daniel Pérez (INE/TSP); Aziz Baladi (INE/TSP); Amado Crotte (TSP/CME); Karisa Maia (TSP/CBR); Javier Jiménez (LEG/SGO); and Liza Lutz (LEG/SGO)
▪ Taxonomy:	Operational Support
▪ If Operational Support TC, give number and name of Operation Supported by the TC:	Improving Transport Logistics and Competitiveness in Suriname (SU-L1057) - 1. Support for Preparation
▪ Date of TC Abstract authorization:	November 13, 2018
▪ Beneficiary:	Ministry of Public Works, Transport and Communications; Port Authority
▪ Executing Agency:	Inter-American Development Bank
▪ Donors providing funding:	OC Strategic Development Program for Infrastructure (INF)
▪ IDB Funding Requested:	US\$500,000
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period:	24 months
▪ Required start date:	December 15, 2018
▪ Types of consultants:	Individuals and Firms
▪ Prepared by Unit:	Transport Division (INE/TSP)
▪ Unit of Disbursement Responsibility:	Infrastructure and Energy (INE)
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation; Economic Integration; Climate Change

### II. Description of the Associated Loan

- 2.1 The economy in Suriname has traditionally been open and primarily based on commodities such as gold, bauxite, oil and agricultural products<sup>1</sup>, thus, the economic performance has heavily relied on exports of these commodities, as the main source of foreign earnings (90%) and fiscal income (45%)<sup>2</sup>, with an outstanding growth between 2005–2013. This growth came to an end after the decline in the price of extractives in 2014, creating important socio-economic challenges related to economic diversification and general productive competitiveness. Imports represent approximately 80% of the total consumption of goods, due to the economy's exposure to external trade. Suriname has a score of 0.20 on the Herfindahl-Hirschmann Index (HHI), indicating a lower diversified export portfolio than other similar economies in the

<sup>1</sup> Observatory of the Economic Complexity (OEC), 2015.

<sup>2</sup> IDB Group Country Strategy with The Republic of Suriname 2016-2020 (GN-2873).

Caribbean<sup>3</sup> and agriculture is seen as the most important sector for diversification. Improving infrastructure and logistics services is a top priority to enhance global competitiveness, especially for economic activities such as agriculture, fish farming, and forestry.<sup>4</sup>

- 2.2 Accordingly, the main objective of the operation Improving Transport Logistics and Competitiveness in Suriname (SU-L1057) is to contribute to enhance Suriname's logistic productivity by improving the performance and reducing logistics costs of the main port facility in Suriname. Specifically, SU-L1057 will improve the efficiency of the infrastructure and operations of the Port of Paramaribo through: (i) the provision of port efficient infrastructure, and the acquisition and implementation of equipment and digital platforms to facilitate trade logistics and goods clearance processes; (ii) improvements in the level of service, capacity, and resilience of adjacent roads and access to the port; and (iii) institutional capacity strengthening to ensure efficient execution, sustainable asset management, and adequate operation.
- 2.3 The program is intended to increase the quality of road and port infrastructure to enhance exports of agricultural goods. It is expected that the project will result in lower logistic costs and travel times, thus improving the ease of trade and competitiveness, and improving resilience standards of road and port infrastructure. The beneficiaries are transport and logistics companies, importers and exporters, and the population of Paramaribo that use the Van 't Hogerhuysstraat and adjacent roads.
- 2.4 The Eligibility Review Meeting (ERM) for the Project Profile (PP) of SU-L1057 took place on October 4, 2018. The due date to distribute the Proposal for the Operation Development (POD) to Quality and Risk Review (QRR) is February 22, 2019, and the Board approval date is June 29, 2019. To support the preparation of the operation, this TC will finance the technical, environmental, social, economic, and financial studies of the port and road infrastructure and logistics.

### III. Objectives and Justification of the TC

- 3.1 **Justification.** There are several inefficiencies in the port operation and its adjacent infrastructure, which create bottlenecks for trade. The main logistic constraint is the severe traffic congestion in peak hours along the Van 't Hogerhuysstraat road, the only access point to the port, which causes delays and costs for transport operators. The Port Management Company is using valuable port land inner roads (12,914 m<sup>2</sup>) as a truck parking area to avoid traffic congestion along adjacent roads. This has resulted in a significant decrease in port storage capacity. The four-lane Van 't Hogerhuysstraat road presents deficiencies contributing to its poor service performance. The road carries more than 40,000 vehicles/day and has in general narrow driving lanes, insufficient traffic management, limited load capacity, poor junction geometry, inefficient drainage, and low safety standards; adding up to the congestion conditions of the port area.
- 3.2 From an operational perspective, the following specific challenges can be identified: (i) inefficient internal cargo flows which do not optimize port facilities; (ii) lack of available space to perform value-added services for export cargo (especially

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<sup>3</sup> A low HHI implies a highly diversified portfolio of export products (0.15 for small commodity exporting economies). HHI is for The Bahamas: 0.17; Trinidad and Tobago: 0.15; and Barbados: 0.10. World Integrated Trade Solution, 2017.

<sup>4</sup> According to the OEC, agriculture, forestry, and fish farming are key components of export products after extractives.

agriculture-related); (iii) inefficient internal goods clearance and security processes which require long dwell-time (e.g., lack of risk management principles to reduce current manual inspections of 100% of cargo); (iv) absence of systems which automate processes, facilitate operational planning, increase revenue collection and improve documentary compliance; and (v) weak institutional capacity and outdated processes and policies in Customs and the Port Authority. These bottlenecks create excessive dwell-times and high logistics costs for economic value chains, affecting the ease of doing business in Suriname and its trading partners.

- 3.3 The Government of Suriname has requested assistance from the Bank to support the preparation and execution of SU-L1057 to address quality and efficiency of the infrastructure and operations of the Port of Paramaribo. The operation is presently being designed and has been prioritized in the Bank's programming for Suriname in 2019. Due to the complexity of the proposed loan operation, it is considered vital to develop preparatory activities that ensure the appropriate design of the loan and its effective implementation. The consulting services to be procured with the funds of this TC will provide technical and operational inputs, key to ensure both issues are adequately addressed.
- 3.4 **Objective.** The objective of this TC is to support the preparation and execution of the operation SU-L1057, which is intended to increase Suriname's competitiveness and productivity by improving the logistic performance that is key to the agricultural sector. Specifically, the TC aims to identify: (i) systems, equipment and infrastructure to improve quality and efficiency of the infrastructure and operations of the port; (ii) sections of road networks related to the port to lower logistic costs, particularly transportation costs, travel times, improve safety and climate resilience; and (iii) the development of the operative instruments that allow the effective implementation of the program.
- 3.5 **Link to the Bank's country strategy and institutional strategy.** The operation supports the strategic area of Private Sector Development in-keeping with the GN-2873, by tackling logistic bottlenecks and improving road facilities to enhance competitiveness and diversification of export products, particularly agricultural exports. The proposed activities are consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008), aligned with the challenge of: (i) Productivity and Innovation, as it will improve infrastructure services that will increase the productivity of the agriculture sector and the economy through time savings and enhancement of communication technology services in the port and adjacent areas; and (ii) Economic Integration, as it will improve the ease of trade between Suriname and its commercial partners. The TC is also aligned with the cross-cutting theme of Climate Change, as it will focus on delivering resilient logistic infrastructure. This intervention is also aligned with the IDB's Infrastructure Strategy "Sustainable Infrastructure for Competitiveness and Inclusive Growth" (GN-2710-5) and the Transportation Sector Framework Document (GN-2740-7), specifically with the principle of efficiency and competitiveness, as it will tackle logistic bottlenecks through transport infrastructure and services that will promote productivity gains. In addition, the TC is aligned and will contribute with the Ordinary Capital Strategic Development Programs (GN-2819-1) in the thematic area of transport in particular with the outcome of processes to identify, assess, develop, and prepare bankable, sustainable, and equitable infrastructure projects. Lastly, the intervention is aligned with the Integration and Trade Sector Framework Document (GN-2715-6) through its objective of facilitating trade and logistics.

#### IV. Description of Activities/Components and Budget

- 4.1 The main activities that will be developed in the framework of this TC include:
- 4.2 **Component I: Technical studies for the improvement of the transport logistics in Paramaribo Port (US\$135,000).** This component will finance a technical and financial assessment on the port and its main access roads in order to determine the investments needed to increase the competitiveness and productivity of the port facilities regarding cargo flows. This study will also include an analysis of the main access roads to the port that connect the logistic facilities with its hinterland. The consultancy will cover data gathering (traffic counts, origin-destination data, cargo handling data, among others), modelling and projection of traffic and handling demands, a comprehensive analysis of road's traffic and infrastructure as well as a detailed operation analysis of the port. Finally, it will conclude with a technical feasibility design that will cover an identification of most feasible solutions for the improvement of the port performance, an identification of port and road improvements, as well as an inventory of required Intelligent Transport Systems and a layout of a Port Community System (PCS). A microsimulation will also be developed in order to determine different scenarios, identify capacity constraints and determine aggregate service level.
- 4.3 **Component II: Road feasibility study and preliminary designs (US\$325,000).** The study to be financed under this component will analyze the challenges found in the main access roads to the port, highlighting the status of the pavement and the recurrent congestion. This component will also carry out feasibility designs considering climate adaptation standards and assess the environmental and social impacts of the interventions. The following road sections are going to be considered for this study: (i) van 't Hogerhuysstraat – 4 km between Latourweg and Molenpad; (ii) Willem Campagnestraat – 1 km between the roundabout Slangenhoutstraat and Hernhutterstraat; (iii) Slangenhoutstraat and Hernhutterstraat – 2 km; and (iv) Molenpad Road – 1 km from the north entrance of the port till the J.A. Pengelstraat. In addition, feasibility designs are also going to be developed for the replacement of the two-lane van 't Hogerhuysstraat Bridge with a four-lane bridge. This component is complementary to component 1 and it is intended to improve the efficiency of the port and contribute to the sustainability of the outcomes of the project by improving its climate resilience. The activities to be funded by are as follows:
- (i) Technical, economic, social, and environmental feasibility analysis to identify suitable alternatives for road access to the port.
  - (ii) Environmental and Social Assessment of the project components including stakeholder consultations.
  - (iii) Engineering designs for the road, bridge, and drainage structures incorporating climate resilient measures.
- 4.4 **Component III. Development of operative instruments (US\$40,000).** This component will finance the development of the Program Operating Manual (POM) for the loan operation and consultation plan for the execution of the loan operation.

- 4.5 The estimated budget for this TC has been estimated at US\$500,000 and will be financed by the OC Strategic Development Program for Infrastructure (INF) on a non-reimbursable basis.

**Table 2. Indicative Budget (US\$)**

Activity/Component	Description	IDB/Fund Funding	Counterpart Funding	Total Funding
<b>Component I: Technical studies for the improvement of the transport logistics in Paramaribo Port</b>				
Technical consultancy firm	Technical and financial assessment on the port and its main access roads to identify the investments needed	135,000	0	135,000
<b>Component II: Road feasibility study and preliminary designs</b>				
Technical consultancy firm	Technical, economic, social, and environmental feasibility analysis	50,000	0	50,000
Technical consultancy firm	Environmental and Social Assessment	80,000	0	80,000
Individual consultants	Engineering designs for the road, bridge, and drainage structures	195,000	0	195,000
<b>Component III: Development of operative instruments</b>				
Individual consultants	Operating procedures to guide execution	40,000	0	40,000
<b>TOTAL</b>		<b>500,000</b>	<b>0</b>	<b>500,000</b>

## **V. Executing agency and Execution Structure**

- 5.1 The IDB will be executing this TC, through the Transport Division (INE/TSP) given its relevant experience and inhouse capability in the subjects of transport logistics, port community systems, and multi-modal connectivity. The Ministry of Public Works, Transport and Communications existing institutional capacity is geared towards the execution of infrastructure works and it does not have the capacity to supervise the logistic, technical, and economic studies which are contemplated in the TC.
- 5.2 The activities to be executed under this operation will be included in the Procurement Plan and will be executed in accordance with the Bank's established procurement methods, namely: (i) hiring of individual consultants, as established in AM-650 standards; (ii) contracting of consulting firms for services of an intellectual nature according to GN-2765-1 and its associated operational guides (OP-1155-4) and (iii) contracting of logistics services and purchase of goods in accordance with the GN-2303-20. Some of the studies require specific technical expertise (the identification of proposed interventions that improve roads and ports performance as a unit, including the design of a port community systems for a Caribbean country), therefore, Single Source Selection (SSS) modality will be used for contracts under US\$100,000 according to the Bank's policies.

- 5.3 The supervision of the activities of the TC will be led by INE/TSP, according to what is proposed in the Results Matrix. The product indicators will be monitored every six months and progress reports will be submitted annually; a final report will be prepared at the end of the operation.

## **VI. Major issues**

- 6.1 The main risk of this TC is a potential lack of engagement from the relevant government agencies which could limit a robust analysis and outputs to be funded. The operation will mitigate the risks by engaging government officials in the stakeholder agencies as well as private sector in the activities from the commencement of TC execution and through working meeting and dissemination of results as the products are developed.

## **VII. Exceptions to Bank policy**

- 7.1 No exceptions to Bank policies were identified.

## **VIII. Environmental and Social Strategy**

- 8.1 This TC consists of technical studies and preliminary and basic engineering designs for the main interventions that will be executed under the related operation SU-L1057. As such, the TC does not entail environmental and social risks or impacts.
- 8.2 However, it is classified as Category B, following the classification of the related operation SU-L1057, for which the main impacts are related to expansion of roads and a two-lane bridge (to a four-lane bridge) that give access to the Port, as well as the construction of a truck center adjacent to the port. The road expansions are being designed to be limited to the existing rights-of-ways (ROWs) and the truck center will be built in lands that belong to the port and are currently vacant, thus it is not expected that the proposed improvement and construction works will result in any physical involuntary resettlement or economic displacement. As such, the potential key negative environmental, health, and safety (EHS) impacts from road improvements and bridge expansion will be mainly direct, temporary, localized and moderate, which justifies the classification of the related project SU-L1057 as Category B.
- 8.3 The Bank is ensuring the coordination between the technical teams in charge of the project design and the environmental and social consultants that are developing the Environmental and Social Assessment (ESA) for the related project SU-L1057, as to make sure that the project designs are compliant with Bank environmental and social safeguards.

### **Required Annexes:**

- Annex I: [Request from the client](#)
- Annex II: [Results Matrix](#)
- Annex III: [Terms of Reference](#)
- Annex IV: [Procurement Plan](#)



**TRANSPORT DIVISION (INE/TSP)**  
**SURINAME**  
**IMPROVING PORT AND ROAD INFRASTRUCTURE (SU-L1057)**  
**AIDE MEMOIRE**  
**IDENTIFICATION MISSION (MAY 7<sup>th</sup> TO 10<sup>th</sup>, 2018)**

**I. BACKGROUND**

- 1.1. An Identification Mission for the operation Improving Port and Road Infrastructure (SU-L1057) took place from May 7<sup>th</sup> to May 10<sup>th</sup>, 2018. Participating in the mission on behalf of the IDB were Mr. Amado Crotte (TSP/CME) Team Leader; Mr. Christopher Persaud (TSP/CBH) alternate Team Leader; Mr. Reinaldo Fiorevanti and Mr. Daniel Pérez (INE/TSP); Ms. Nadischia Semmoh (CCB/CSU); Mr. Cesar Faiconi (CCB/CSU) Country Representative, and Mr. Ricardo Flores (external consultant).
- 1.2. The overall objective of the mission was to initiate the preparation of a potential investment loan to increase Suriname's competitiveness and productivity by improving the logistic performance that is key to the agricultural sector. The specific objectives included: i) identify the main problems and bottlenecks to be tackled and its alignment with the country's strategy; ii) outline potential interventions to be financed by the Bank; iii) identify studies required to assess the feasibility of the projects, including the technical, socio economic and financial aspects; iv) propose a timeline for the preparation of the loan and the approval of technical assistance resources.
- 1.3. To achieve the objectives, the mission team met with representatives from the Ministry of Public Works, Transport and Communication, including Minister Mr. Patrick Pengel, from the Ministry of Finance (the Joint Desk), and from the Port Authority. A full list of government representatives is included in Annex I.
- 1.4. The mission team gratefully acknowledges national authorities for their contribution and support during the visit.

**2. ACTIVITIES AND RESULTS**

**A. Technical discussions and site visit**

- 2.1. As a result of various technical discussions with the Ministry of Public Works, Transport and Communications and The Port Authority, and a site visit to the port and surrounding roads, the mission identified the following problems:
- 2.2. **Port Access and Land utilization** Severe traffic congestion in peak hours along the van 't Hogerhuysstraat road, the only access point to the port, has limited the competitiveness of the port due to time delays and additional fuel costs for transport operators. To avoid the traffic congestion along the van 't Hogerhuysstraat road, NV Havenbeheer Suriname (the port management company) is using valuable port land (12,914 m<sup>2</sup>) as a truck parking area which has resulted in a decrease in port storage capacity for agriculture products reducing its potential for future development, as well as a loss in revenue generation that could be invested in other port operations improvements.
- 2.3. **Port operation and customs inspections** In addition, the port faces the following operational challenges: i) excessive dwell time that trucks spend inside and outside of the port facilities, ii) Lack of space to perform added-value services



(stuffing, sacking, packing, labeling, etc.) for the agriculture cargo for exports, and iii) long customs and security procedures: the current regulation establishes a 100 % container inspection, therefore Customs does not have a risk analysis methodology to determine which containers should be inspected, and there is also a lack of scanning equipment for the inspection of containers.

- 2.4. **Road infrastructure and traffic management.** The four-lane van 't Hogerhuysstraat - Martin Luther King Highway between Latourweg and Molenpad presents deficiencies that contribute to the poor service performance of the road, resulting in traffic congestion that inhibits free access to the Port of Paramaribo. During the morning-peak and afternoon-peak hours the traffic along this road heading into downtown Paramaribo backs up for almost 2 km. The road in general has relatively narrow driving lanes, poor junction geometry, inefficient drainage and insufficient traffic management and safety features such as public transport buses stopping on the road; all of which would have to be addressed in a comprehensive manner to improve the service level of the road and port access, as well as their reliability.
- 2.5. **Bridges and secondary roads.** The Saramacca Canal bridge along the van 't Hogerhuysstraat has an axle load capacity of 5 tonnes, therefore, bigger t/axle trucks coming to the port from the south use alternate routes such as Slangenhoutstraat or Hernhutterstraat to access the port. The Mission team agreed that the traffic analysis would also include the Slangenhoutstraat and Hernhutterstraat to identify the contribution of these roads to the accessibility of the port and if any improvements were necessary within the context of the operation under consideration.

## B. The Program

- 2.6. As a result of the mission, the Government of Suriname (GoS) requested the Bank to start the preparation of an investment loan to address the problems identified. The Government recognizes that the country has the potential to significantly increase the competitiveness of the agricultural sector by improving the transport logistics in and around the Port of Paramaribo.
- 2.7. **Cost.** According to the request of the GoS, the Bank will prepare a proposal for a loan operation considering an estimated budget of US\$45 million financed by IDB funds.
- 2.8. The intervention would potentially include the following components:
  - Component I: Port Interventions (\$10 M)**
  - 2.9. Creation of a formal truck waiting area, completion and implementation of a Port Community System (PCS), acquisitions of security scanners for containers and other equipments, and development of additional container storage area to account for projected increases in throughput in the port.
  - Component II: Road Interventions (\$30 M)**
  - 2.10. Road upgrade and climate adaptation: Rehabilitation and improving in the geometry of i) a road section of the van 't Hogerhuysstraat - 4 km between Latourweg and Molenpad, ii) Willem Campagnestraat 1 km between the roundabout Slangenhoutstraat and Hernhutterstraat, iii) Slangenhoutstraat and Hernhutterstraat - 2 km, iv) van 't Hogerhuysstraat Bridge: Replacement of the 2 lane bridge with a 4 lane bridge, and v) Molenpad Road - 1 km from the north entrance of the port till the J.A. Pengelstraat
  - 2.11. Intelligent Transport Systems: Traffic control and monitoring systems to control





traffic lights and monitor variable traffic signs and road sensors for enforcement and around the port. Smart Weight Systems for freight vehicles to improve infrastructure performance and road safety.

### **Component III: Institutional Strengthening and Administration (\$5 M)**

- 2.12. This component would include: Supervision of Works, Project Execution Unit, Civil Works Detailed Designs, Management Systems; Development of a Road Maintenance Management System for the road network which would allow for the planning and execution of maintenance in a systematic manner to enhance sustainability of investments; PCS training for various stakeholders.

#### **Technical Cooperation**

- 2.13. In order to prepare the key technical analysis for the program design, and to help identify strategic interventions, the GoS requested the Bank non-refundable resources of around USD \$500,000 through a technical cooperation. It was agreed that this technical cooperation will be executed by the Bank and that it will cover consultancies including technical analysis, operational and implementation issues and feasibility studies for SU-L1057.
- 2.14. Some of the activities to be developed within the scope of the Technical Cooperation include the following:
- 2.14.1. Conduct a diagnosis of the current port operation and create an action plan to improve it, including the improvement of truck access and mobility inside the port, consulting all the stakeholders (NV Havenbeheer Suriname, terminal, customs, custom broker agencies, etc.).
  - 2.14.2. Preliminary engineering designs, socioenvironmental and economic analysis for the port, the road and bridge interventions. This would include public consultations with stakeholders in keeping with the IDB safeguard policies.
  - 2.14.3. Collaborate in the elaboration of the Master Development Plan of Paramaribo Port including the required areas for the access and parking of trucks avoiding the congestions in the adjacent roads. The plan should consider several alternatives for parking spaces including the integration of parking areas outside the port that could be enabled throughout Information Technology (PCS module).
  - 2.14.4. Microsimulation of the road and port access to validate the infrastructure requirements to have an efficient operation and assessment of different intervention scenarios.
  - 2.14.5. Preparation of preliminary designs for the road infrastructure works including drainage, traffic management and safety features.

#### **Local Focal Points**

- 2.15. The GoS informed the Bank that its focal points for the program preparation will be:
- 2.15.1. Mr. Santosh Soman, Permanent Secretary of Civil Technical Works Department. For all matters related to program preparation for the road intervention.
  - 2.15.2. Mr. Andreas Talea, General Manager of the Port Authority. For technical matters regarding the component of the port interventions.
- 2.16. Annex II includes a list of information and data requested to the GoS to initiate



the preparation of the loan

### 3. Program Preparation

- 3.1 The Bank expects to approve the Program in the first half of 2019. For that goal to be achieved, the preparation plan includes the following milestones:
- 3.1.1. Reception of information and data from the GoS. 31<sup>st</sup> of May
  - 3.1.2. **Technical visit** for data gathering: June 2018 (tentatively June 4<sup>th</sup> to June 8<sup>th</sup>)
  - 3.1.3. **VC** Technical visit findings: July 2018
  - 3.1.4. Technical Cooperation approved: August 2018
  - 3.1.5. **VC** Project Profile validation: August 2018
  - 3.1.6. Project Profile preparation and distribution: September 2018
  - 3.1.7. **Orientation mission**: November 2018

The fulfillment of the milestones mentioned in 3.1 will depend on the approval of the TC and the implementation progress of the different consultancies

  
H.E. Minister Guillermo Hoefdraad

Ministry of Finance

  
H.E. Minister Patrick Pengel

Ministry of Public Works, Transport and Communications

  
Amado Crotte

Team Leader, IDB

  
Cesar Falconi

Representative, IDB



Ministry of Public Works, Transport and Communications	
Mr. Patrick Pengei	Minister of Public Works, Transport and Communications
Mr. Santosh Soman	Permanent Secretary of Civil Technical Works Department
Mr. Awinash Dawoe	Acting Deputy Director Dry Civil Works
Mr. Clifton Amoida	Acting Deputy Director of Transport
Mr. Playfair Lloyd	Head Planning / Manager Operations
Ms. Vanisha Premcharan	Junior Technical Worker
Port Authority	
Mr. Andreas Tafea	General Manager
Mr. Charl Gatrouw	Operations Manager
Ministry of Finance	
Ms. Iris Sandel	Joint Desk - Ministry of Finance
Ms. Sagita Jaggan	Joint Desk - Ministry of Finance



## ANNEX II

Information and Data needed for the preparation of the loan	
<b>Port</b>	
(1)	Reports from port community consultancy
(2)	Layout drawing of port and any planned expansion
(3)	Conceptual designs for junctions with Havenlaan north and south
(4)	Data from port on – truck traffic, cargo type and volumes, quantity of cargo by break bulk and containers or TEU
(5)	Traffic flows from the Paramaribo Port by type of traffic (import/export), and type of product
(6)	Origin/ destination of the traffic flows of Paramaribo Port for the main products
(7)	Social and demographic data of rural households (household surveys) and agriculture production areas (manufacture or production surveys) where main agricultural exports are produced
(8)	Historical data of the total production and exports of agriculture products by area and product - in value (USD) and volume (tons)
(9)	Contract details of the companies located within the port facilities (location and surface)
(10)	Information about transportation companies that serve the Port of Paramaribo: costs of transportation from the different municipalities and districts to the Port, fleet description, economic sectors they are serving
(11)	Other studies available relevant to the scope of the project
<b>Roads</b>	
(12)	Available designs for, where possible: <ul style="list-style-type: none"> <li>• Zwartenhovenstraat (Baitali)</li> <li>• Martin Luther Kingweg (Dalian) – in design phase</li> <li>• As built drawings van 't Hogerhuysstraat (Latourweg to Molenpad)</li> </ul>
(13)	Historic Traffic Counts: Annual average daily traffic values (AADTs) of the roads to be intervened, as well as available information from feeder roads, including, if possible, the detail of type of transportation (or number of axels) per hour
(14)	Current blueprints of the roads to be intervened including the public utilities (electric, water, drainage pipes, high tension lines, ...)
(15)	Location of traffic lights and public transportation stops along the roads to be intervened
(16)	Geotechnical studies of the roads to be intervened
(17)	Historic data of daily and/or monthly precipitation, Studies on flood risks
(18)	Bridge study
(19)	World Bank flood study
(20)	Accident statistics
(21)	Other studies available relevant to the scope of the project

In order to speed up the hiring of studies needed for the preparation of the loan, it is of paramount importance to receive the information and data available from this list before the end of May

## Results Matrix

### Outcomes

No information related to this operation.

### Outputs: Annual Physical and Financial Progress

1 Technical Studies for the Improvement of the Transport Logistics in Paramaribo Port						Physical Progress				Financial Progress						
Outputs	Output Description	Unit of Measure	Baseline	Baseline Year	Means of verification	2018	2019	EOP	2018	2019	EOP	Theme	Fund	Flags		
1.1 Feasibility study completed	Technical and financial assessment on the port and its main access roads in order to determine the investments needed to increase the	Studies (#)	0	2018	Acceptance of Final Report by Project Team Leader	P	0	1	1	P	0	135000	135000	Sustainable Infrastructure	INF	
						P(a)	0	1	1	P(a)	0	135000	135000			
						A				A						
2 Road Feasibility Study and Preliminary Designs						Physical Progress				Financial Progress						
Outputs	Output Description	Unit of Measure	Baseline	Baseline Year	Means of verification	2018	2019	EOP	2018	2019	EOP	Theme	Fund	Flags		
2.1 Feasibility study completed	Technical, economic, social and environmental feasibility analysis to identify suitable alternatives for road access to the port.	Studies (#)	0	2018	Acceptance of Final Report by Project Team Leader	P	0	1	1	P	0	50000	50000	Sustainable Infrastructure	INF	
						P(a)	0	1	1	P(a)	0	50000	50000			
						A				A						
2.2 Environmental impact assessment completed	Environmental and Social Assessment of the project components including stakeholder consultations.	Assessments (#)	0	2018	Acceptance of Final Report by Project Team Leader	P	0	1	1	P	0	80000	80000	Sustainable Infrastructure	INF	
						P(a)	0	1	1	P(a)	0	80000	80000			
						A				A						
2.3 Civil works design completed	Engineering designs for the road, bridge and drainage structures incorporating climate resilient measures	Designs (#)	0	2018	Acceptance of Designs by the Ministry of Public Works	P	0	3	3	P	0	195000	195000	Sustainable Infrastructure	INF	
						P(a)	0	3	3	P(a)	0	195000	195000			
						A				A						
3 Development of Operative Instruments						Physical Progress				Financial Progress						
Outputs	Output Description	Unit of Measure	Baseline	Baseline Year	Means of verification	2018	2019	EOP	2018	2019	EOP	Theme	Fund	Flags		
3.1 Operational manuals developed	Program Operating Manual (POM) for the loan operation	Manuals (#)	0	2018	Manual accepted by the Bank	P	0	1	1	P	0	40000	40000	Sustainable Infrastructure	INF	
						P(a)	0	1	1	P(a)	0	40000	40000			
						A				A						

### Other Cost

### Total Cost

	2018	2019	Total Cost
P		\$500,000.00	\$500,000.00
P(a)		\$500,000.00	\$500,000.00
A			

**INTERAMERICAN DEVELOPMENT BANK**

**TRANSPORT DIVISION**

**CONSULTANCY SERVICES FOR THE DEFINITION OF INTERVENTIONS FOR THE IMPROVEMENT OF  
TRANSPORT AND LOGISTICS IN PARAMARIBO**

**TERMS OF REFERENCE**

**I. BACKGROUND AND JUSTIFICATION**

- 1.1. **Background of the program.** The program “Improving Transport Logistics and Competitiveness in Suriname” aims to contribute increasing the productivity of the agricultural sector by improving the transport links and logistics in and around the Paramaribo Port, that is key to the export activities. The program considers investments and activities along four inter-related fronts: (i) improvement of port access and land utilization; (ii) optimization of port operation and customs inspections; (iii) upgrade and climate adaptation of road infrastructure, bridges and secondary roads; and (iv) modernization of traffic management.
- 1.2. The program consists of three components: (i) investments in port infrastructure; (ii) interventions in the road access to the port; and (iii) institutional strengthening and administration.
- 1.3. **Background of the port’s operation.** The agricultural sector accounts for over 50% of the volume of foreign trade and 20% of the total value. The Paramaribo Port exports 90% of the seaborne foreign trade of Surinam, in which most of the agricultural products are transported. The port is the exit point for more than 80% of rice exports and more than 95% of exported bananas, shrimp and fish. Similarly, considering import data, its relevance is also based on the fact that inputs and machinery for crops arrive in the country at the port of Paramaribo. However, the exports/imports of agricultural sector have been affected by high freight costs and transit times due to the limitation in the roads that connect the producing areas to the port and the operational difficulties in the port access.
- 1.4. The main road to the port (*Van ’t Hogerhuysstraat* road) has a high concentration of traffic with over 40,000 vehicles per day and is also subjected to the truck traffic serving the port, which has caused accelerated deterioration of the road and damage to the road shoulders and parapets, as the trucks park to await entry to the port and complete other maneuvers. In addition, the drainage along the road is inadequate for the short duration, high-intensity rainfall which is now common in Paramaribo and as such these roads are often flooded causing the traffic situation to worsen. This road poses a major bottleneck to cargo entering and exiting the port, thus adding cost to the export of agriculture and manufactured products.
- 1.5. The high congestion on the road has limited the competitiveness of transportation due to the difficulties in its access. In order to avoid the traffic congestions in the *Van ’t Hogerhuysstraat* road, the *NV Havenbeheer* Suriname had to make adjustments in the infrastructure, which had reduced its capacity and competitiveness. This includes the closing of the main gate, the use of an internal road (470 m length) and a storage area (12,914 sqm) for the transit and parking of the cargo of the trucks. This has been due to the lack of schedule planning for transportation and the limited access capacity.

## II. OBJECTIVES

- 2.1 The objective of the consultancy is to conduct a diagnose of the operation of the port (*NV Havenbeheer* Suriname) and its access roads, to determine the main bottlenecks in its operation that decrease the efficiency in transport logistics, and therefore, the competitiveness of the agricultural sector.

## III. SCOPE OF SERVICES

- 3.1 The consultant is to conduct a diagnosis of the port and road's operation and infrastructure to determine the interventions and its preliminary design that will have to be done in Paramaribo to improve transport and logistics. The study should also include a high-level cost-benefit analysis of the proposed interventions. The following tasks are required to achieve the objective.

## IV. KEY ACTIVITIES

- 4.1 **Task 1: Preliminary Diagnosis of the Port's Operation and Road Infrastructure.** The consultant is to perform a diagnosis on the port and the cargo flows in the roads around it, connecting it to its hinterland, for which it will conduct interviews with the most relevant stakeholders to identify the current process and the main areas of opportunity in its operation. The activities to be developed are the following:
- (i) Analysis of preliminary information and interviews with stakeholders.
    - (a) Meetings with stakeholders to assess the current port operation regarding the flows of cargo between the terminals, inspection areas, and access points.
    - (b) Collection of available data from previous studies from the IDB and meetings with stakeholders.
  - (ii) Preliminary analysis of the port access current process: port's access, internal flows and custom's process.
  - (iii) Analysis of heavy and light vehicles traffic flows of the roads including those generated by the Paramaribo Port.
  - (iv) Visual analysis of the current road infrastructure.
    - (a) Number of lanes, sidewalks, quality, public transport stops, etc.
    - (b) Identification of private buildings and/or public utility infrastructure that may limit the development of the road throughout visual inspection and meeting with stakeholders.
    - (c) Current traffic management and safety features: roundabouts, traffic lights, and signs, etc.
- 4.2 **Task 2: Definition of Interventions and Preliminary Design.** Once the Consultant has identified the current bottlenecks in the port operation, the Consultant will determine the potential improvements for the roads and port's access.
- (i) Definition of the road interventions to increase the level of service: capacity upgrade, heavy traffic flows organization, encourage pedestrian circulation, etc.

- (ii) Microsimulation for the port access and main crossing in the roads for the current situation and for the road interventions proposal.
  - (a) The consultant will define the simulation parameters and determine the future operation transport flows.
  - (b) For this activity, the consultant is expected to use a specialized traffic simulation software (e.g. VISSIM, Transmodeler, Synchro, or similar)
  - (c) The results must include Level of service and estimation of delays for every movement in every intersection of the road analysis
- (iii) Estimation of the construction cost of the proposed interventions using ratios accepted by the industry.
- (iv) Drawing of elevation blueprints of the proposed interventions.

4.3 **Task 3: Cost-Benefit Analysis.** The Consultant is to develop a cost-benefit analysis of the port, the road and bridge interventions, which will include the following activities:

- (i) Estimation of the potential socioeconomic impact due to the improvements in transport logistics in and around the Paramaribo Port.
- (ii) Estimation of profitability parameters of the project: Internal Return Rate, Net Present Value, and Payback.

## **V. EXPECTED OUTCOME AND DELIVERABLES**

5.1 The Consultant will elaborate the following deliverables:

- (i) Definition of interventions and preliminary design, which will include the results of tasks 1 and 2, previously described.
- (ii) Cost-Benefit Analysis which will include the results of task 3.

## **VI. PROJECT SCHEDULE AND MILESTONES**

- 6.1 The interviews with the relevant stakeholders will be carried within the first two weeks of the project. To this end, the Consultant must submit a list with the stakeholders to be interviewed and main topics, so that the entities can be contacted throughout the IDB.
- 6.2 The Definition of interventions and preliminary design will be presented at the end of the fourth week of the project.
- 6.3 The Cost-Benefit Analysis will be presented in the sixth week of the project
- 6.4 The IDB will carry weekly follow up meetings with the Consultant.

## **VII. REPORTING REQUIREMENTS**

- 7.1 The Consultant will submit two copies of reports to the IDB. An electronic form of the reports will also be submitted with each one of the paper copies.
- 7.2 The output/ deliverable of the study shall be presented as follows:



- (i) Definition of interventions and preliminary design: shall be submitted four weeks after the commencement date of the contract, which will include the information collected for the study, as well as the minutes from the interviews carried out with the stakeholders.
- (ii) Cost-Benefit Analysis Report: shall be presented within six weeks after the commencement date of the contract. This will include the corrections to all the comments submitted by the IDB.

## **VIII. ACCEPTANCE CRITERIA**

- 8.1 The services shall be carried out in accordance with generally accepted professional practices, following recognized technical and management principles and practices. The Consultants' scope of work is understood to cover all activities necessary to accomplish the stated objectives and outputs of the below services while adhering to the aforementioned principles and practices. This is not an exhaustive list and the absence of any 'activities' necessary for the Consultant to satisfy the objectives and outputs, does not preclude the Consultants obligation to perform these activities.
- 8.2 The IDB is the primary counterpart and the party responsible for directing the Consultant to any necessary knowledgeable parties. All other government entities or private companies should be contacted throughout the IDB or with IDB approval.

## **IX. OTHER REQUIREMENTS**

- 9.1 Not applicable.

## **X. SUPERVISION AND REPORTING**

- 10.1 The IDB will be responsible for the approval of the documents, however, due to the nature of the project, the deliverable will be contrasted with the NV Havenbeheer Suriname to assure that the diagnosis presented by the Consultant reflects the current situation.
- 10.2 It shall be Consultant's responsibility for ensuring that contrast meetings are conducted with NV Havenbeheer Surinam.
- 10.3 Division Leader or Coordinator: Amado Crotte (TSP/CME)

## **XI. SCHEDULE OF PAYMENTS**

- 11.1 Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b>Deliverable</b>	<b>%</b>
Definition of interventions and preliminary design	70%
Cost-Benefit Analysis Report	30%
<b>TOTAL</b>	<b>100%</b>

- 11.2 The fees will be covered in US Dollars (USD).

## **INTERAMERICAN DEVELOPMENT BANK**

### **TRANSPORT DIVISION**

#### **SURINAME PORT IMPROVEMENTS, INCLUDING THE ACCESS ROADS AND ACCESS BRIDGE**

#### **TERMS OF REFERENCE FOR THE ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA)**

### **I. BACKGROUND AND JUSTIFICATION**

- 1.1 The Environmental and Social Safeguards Compliance Policy of the Inter-American Development Bank (OP-703)<sup>1</sup> requires that an environmental impact assessment including social impacts be carried out for all projects to be financed by the Bank (Part A). For projects with existing facilities and/or operations, an Environmental, Health and Safety Review is required (Part B).

#### **PART A: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF PROPOSED WORKS**

- 1.2 This Part A covers the Terms of Reference (TOR) for the preparation of the Environmental Assessment of the Port of Paramaribo improvements, including in its access roads and in the bridge. The operation aims at increasing Suriname's competitiveness and productivity, especially for economic activities such as agriculture, fish farming and forestry. The operation focuses on improving the logistic performance of the Port of Paramaribo (The Jules Sedney Port of Paramaribo) as well as the main access roads, including replacing the 2-lane bridge with a 4-lane bridge. Component 1 (Port Interventions- USD\$10 million) will finance the development of: (i) a formal truck terminal at the port and the expansion of the gate to improve capacity; (ii) implementation of a Port Community System (PCS)<sup>2</sup>; (iii) acquisition of security scanners for containers; and (iv) development of additional container storage area to account for projected increases in throughput of the port. Component 2 (Road Interventions - US\$30 million) will finance the upgrade and improve climate adaptation and safety of road sections along: (i) the van 't Hogerhuysstraat (between Latourweg and Molenpad), the Willem Campagnestraat (between van 't Hogerhuysstraat and Hernhutterstraat); (ii) Slangenhoutstraat, Hernhutterstraat and Molenpad; and (iii) the van 't Hogerhuysstraat Bridge (replacement of the 2-lane bridge with a 4-lane bridge). This component will also implement Intelligent Transport Systems for traffic control, planning and enforcement, while connecting traffic lights and variable message signs to a Traffic Control Centre. This is to be done for sections adjacent to the port and along the 4 km road between Latourweg and Molenpad. Component 3 (Institutional Strengthening and Administration - US\$5 million) will finance: (i) a Project Execution Unit; (ii) Detailed Designs for the civil works (iii) the supervision activities of the civil works and proposed interventions; (iv) the development of a Road Maintenance Management System for the road network which would allow for the planning and execution of maintenance in a systematic manner; and (v) training sessions related to project management, engineering, monitoring and evaluation.

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<sup>1</sup> OP-703/B.5 <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=665902> and <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35597106>

<sup>2</sup> The Port Community System (PCS) will allow stakeholders to communicate electronically on a common platform along with a training program that 1. will enable stakeholders to utilize the system.

- 1.3 As noted above, the detailed designs will be developed as part of Component 3. Therefore, this ESA will be developed in close coordination with the design process, to provide input to study and selection of the best alternatives, in particular for the road improvements and truck terminals, where environmental and social criteria are to be taken into account.
- 1.4 The ESA Report must contain the following sections (an annotated outline of each section is presented in Section XXX):
- Section 1 – Executive Summary
  - Section 2 – Project Objectives and Description
  - Section 3 – Policy, Legal and Regulatory Framework
  - Section 4 – Environmental and Social Conditions
  - Section 5 – Environmental, Social and Health and Safety (ESHS) Impacts
  - Section 6 – Analysis of Alternatives
  - Section 7 – Disaster Risk Analysis and Proposed Management
  - Section 8 – Environmental and Social Management Plan
  - Section 9 – Public Consultation, Disclosure and Monitoring
- 1.5 The following sections present an annotated outline to be developed in the ESA:
- A. Executive Summary**
- 1.6 An executive summary highlighting the main arguments, evidence and recommendations in support of the project's feasibility from the standpoint of environmental and social impacts. The section should present a concise discussion of the most significant aspects, including the following summaries: project description; applicable environmental, social, health and safety legal requirements; environmental and social conditions in the direct and indirect area of influence; principal project ESHS impacts; proposed mitigation and monitoring measures; project alternatives, and public consultation activities and results.
- 1.7 The Executive Summary should be written in “non-technical version” to be made available<sup>3</sup> to the public in general and to the affected people prior to consultation. It may be necessary to include illustrations, photos and other visual effects to better communicate the project and its potential impacts and proposed mitigation measures to the affected people. In some cases, it could require to be accompanied by a short video with 3-D simulations to enable the perfect understanding of the project consequences.

## II. PROJECT OBJECTIVES AND KEY ACTIVITIES

- 2.1 To develop an adequate ESA, a thorough understanding of the project being assessed is the first step to correctly predict impacts and to identify alternatives and mitigation measures. This requires that a comprehensive project description be included in the ESA to enable stakeholders to completely understand the project features and activities, as well as a timeline of implementation. “The actions that are part of a project are what cause impacts to occur. Consequently, the failure to obtain a thorough project description commonly results in an incomplete ESHS analysis. Post-ESA audits often show that actual impacts differed from those predicted because the project description did not fully characterize an important
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causal action. It is always good practice for team members to study existing projects that use similar technologies or are in similar settings to learn more about what is important to prediction of actual impacts.”

2.2 A detailed project description of the proposed works, including, but not limited to:

- Details of the improvements inside the Port facility, including, but not limited to, maps and layout of affected areas;
- Details of the works in the Port access gates, including, but not limited to, drawings and layout of affected areas;
- Project location with geographical location and geo-referenced data for all project infrastructure facilities (ancillary and associated<sup>4</sup>),
- Description and georeferenced location of all access roads for input and outputs of the port, including terrestrial, river and aerial paths, source of materials, labor, energy, water and disposal of wastes,
- Details of the improvements proposed for each one of the access roads, including, but not limited to, dimensions, maps and designs to indicate vehicle lanes, truck lanes, pedestrian passages, location of traffic lights, right-of-way, and other visual information; information on location of campsite and number of workers;
- Details of the proposed works for the bridge, including, but not limited to, design, dimensions, proposed activities;
- Details of the anticipated required land acquisition, i.e., a clear definition of the Area of Direct Impact (AID) or project foot print.

**For construction:**

- Detailed and visible maps with project layout showing where all project activities will be performed, including storage, waste generation, generation of air contaminants and water effluents, all discharge locations, disposal of wastes and hazardous wastes;
- Detailed overlapping maps indicating the local/direct project footprint (where the project locations above overlap with the environmental aspects and features in the project site) as well as the overall project footprint, including the overlap of the project facilities outside the direct project location and the ecological regions for the project and ancillary facilities;
- Detailed description of construction and operation (and maintenance) project activities, and closure activities (as appropriate),
- Location of the campsite (s) for each of the roads, bridge, port;
- Number of expected workers in each case
- Duration of construction, for each work;
- Sources of atmospheric contaminant emissions, such as particulates and CO<sub>2</sub> during land clearing and construction;

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<sup>4</sup> These include campsites, quarries, waste disposal sites, energy sources, water sources, and all other facilities necessary for the construction of the project.

- Sources and location of liquid discharges.
- Types of wastes and plans for their disposal (e.g., landfill, licensed waste management facility, other, etc.).
- Detailed schedule for project planning, project time schedule for construction, operation and closure, including a histogram of the workers' needs throughout the project phases.
- Detailed information on the number of workers to be employed during construction – average number, peak numbers and decommissioning number – origin and qualification, location of workers accommodations, campsite, activities and facilities included in the campsite, existing and proposed accesses.
- Project costs.

## **B. POLICY, LEGAL AND REGULATORY FRAMEWORK**

- 2.3 Applicable host country environmental, social and occupational safety and health institutions and legal requirements. This should include the following: national, state or province, local (e.g., municipal or city) institutions and legal requirements (including specifically all necessary permits/authorizations and all applicable standards or limits for emissions, discharges, and ambient conditions); relevant requirements of applicable international treaties/conventions/agreements; other applicable legal requirements (e.g., concession contract, etc.); and any other requirements that will be applied to the project (e.g., international standards or guidelines, best/good management practices, requirements of potential investors, lenders and insurers).
- 2.4 These requirements must cover all environmental, social and health & safety related areas, including, but not limited to: environmental impacts assessments, air quality, water supply, waste water, protection of sensitive areas and endangered species, land use control, waste management (both non-hazardous and hazardous), hazardous materials and social impact such as physical and economic displacement (impact on dwellings, other assets and economic activities) as well as workers health and safety.
- 2.5 A description of the international standards applicable, including the IDB environmental safeguards applicable, and how the Project is compliant with them, is also required.
- 2.6 IDB environmental and social safeguards:
- OP-102 – Access to Information Policy
  - OP-704 – Disaster Risk Management Policy
  - OP-703 – Environment Safeguards and Compliance Policy
    - Operational Directive B.1 – Compliance with Bank Policies,
    - Operational Directive B.2 – Compliance with Country Laws,
    - Operational Directive B.3 – Screening and Classification,
    - Operational Directive B.4 – Other Risks,
    - Operational Directive B.5 – Environmental Assessment,
    - Operational Directive B.6 - Consultation,
    - Operational Directive B.7- Supervision,

- Operational Directive B.9 – Natural Habitats.
- Operational Directive B.10 – Hazardous materials,
- Operational Directive B.11- Pollution Prevention,
- Operational Directive B.17 - Procurement
- OP-761 – Gender Equality in Development Policy,
- OP-710 – Involuntary Resettlement Policy (It will be taken into consideration if there is physical displacement or significant economic displacement (i.e. that could potentially lead to physical displacement)).

## **C. ENVIRONMENTAL AND SOCIAL CONDITIONS**

- 2.7 This section should present a detailed description, including quantitative data and information, when available, on the existing environmental conditions at the proposed project site(s) and the complete direct and indirect project area of influence.
- 2.8 To determine the project's area of influence (direct and indirect) the assessors must consider all the areas potentially affected by the foreseen impacts – direct and indirect. Thus, the direct areas of influence will include areas of campsites, workers camps, water and energy sources, quarries and other sources of construction or operational materials. And, in all cases, encompass, as a minimum, the watershed and any other environmental or ecological unit. Also, to be included are transportation routes of heavy equipment, workers and hazardous materials.
- 2.9 The identification of the existing baseline (without project situation) is required to enable the identification of the magnitude and significance of the likely impacts. It must be based on selected and appropriate indicators (impact indicators) that will be used throughout the project cycle to estimate potential impacts and monitor / verify the effectiveness of the proposed mitigation. If community health impacts are expected, health baseline should also include an epidemiological profile of the population by sex, using the most up-to-date information available, focusing on the Area of Influence. The health data collected must focus on the specific risks or impacts expected from the project, for example, data on lung diseases if the project may lead to increased levels of air contamination.

## **D. ANALYSIS OF ALTERNATIVES**

- 2.10 The Consultant will work closely with the design team to examine most environmentally sound alternatives and site selection for the proposed works, particularly the road improvements and the truck terminal areas. The assessment of project alternatives and site selection must specifically include environmental factors and include a “no action” (i.e., without the project) scenario. The assessment must clearly state and justify the selected alternative.

## **E. ESHS IMPACTS**

- 2.11 This section should present a detailed description (quantitative to the extent possible) of the anticipated project specific environmental impacts directly associated project activities during construction; negative and positive impacts; direct and indirect impacts; cumulative, short, medium and long-term impacts, and unmitigated, irreversible, unavoidable impacts. Special consideration should be made to describe impacts causing physical and economic displacement, and some specific environmental aspects should also be taken into consideration, such as Community Health and Safety, in relation to transportation and traffic

through communities, and impacts on local traffic during construction, thus potentially exposing residents, pedestrians and vehicles to increased risk of injuries and accidents, dust and noise<sup>5</sup>. This Section should present:

- An analysis of the direct and short-term, environmental, social and health and safety impacts and risks for each of the proposed works described above;
- An analysis of the indirect, medium to long-term, and cumulative, environmental and health and safety impacts and risks of the increased competitiveness of the Country with the proposed improvements; in particular, any potential impacts of the expanded agriculture, fish farming and forestry on natural habitats.
- An analysis of impacts causing physical and economic displacement including the definition of the ADI and estimated number of properties affected, as well as other assets. It should furthermore include an estimation of the number of Project Affected Persons (PAP) that are physically displaced and the estimated number PAP that are economically displaced.
- Assessment of risks of the project exposure to natural disasters, including those induced or exacerbated by climate change.

## **F. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

- 2.12 The project's proposed mitigation measures must encompass all actions taken to avoid, eliminate, or reduce potentially adverse environmental, social and health & safety impacts to acceptable levels. This must follow the "mitigation hierarchy" that dictates that impacts should be anticipated and avoided; when avoidance is not possible, minimized and mitigated; when impacts occur, rehabilitate and restore; and when significant residual impacts remain, "offset".
- 2.13 This Section should describe the proposed project environmental, health and safety management plan (EHSMP). This plan must include, as a minimum, the following components: (a) detailed description of the proposed environmental, health and safety control and mitigation measures for project construction and closure of the construction works; (b) detailed description of the planned environmental, social and health & safety monitoring program for construction; (c) description of the planned workers health and safety plan, procedures and controls; (d) description of planned environmental contingency plan and procedures; (e) description of the proposed environmental, health and safety management system (including personnel, training, documentation, auditing, etc.); (f) a Compensation and Livelihood Restoration Plan that explains the mitigation of economic displacement, and (g) description of project specific supervision and evaluation actions to be implemented. For each component listed above, including clearly indicated performance indicators, the proposed time schedule (i.e., when initiated, when completed, frequency), responsibility (i.e., who will implement), the estimated cost must be provided; this information should be provided for the individual actions within a component. This Section should include also the Emergency Response and Contingency Plan for the construction phase, including emergency related to natural disasters, including those induced or exacerbated by climate change, as well as the Worker's Health and Safety Plan.

## **G. PUBLIC CONSULTATION, DISCLOSURE AND MONITORING**

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<sup>5</sup> A good guidance on traffic impact assessment is available at <https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Guide-to-Traffic-Impact-Assessment>

- 2.14 Interested and affected parties need to be informed about the project and its impacts as well as having the possibility to have their opinions heard and, to the extent possible, considered in developing the final design of the project.
- 2.15 The section must describe the specific actions performed related to the engagement of affected people and disclosure of project-related environmental and social information. The ultimate objective of this section is to enable the Bank to determine whether there was a “meaningful consultation”<sup>6</sup> with the affected people. Some elements to ensure that the consultation was meaningful are: (i) undertake a stakeholder analysis to identify groups and sub-groups who may be adversely affected, the potentially vulnerable groups, those who are the potential beneficiaries, and those who may influence project outcomes. The intensity (e.g. scope, level of efforts) of the stakeholder engagement and consultation should be proportional to the significance of the project’s environmental and social risks and impacts. Description and details regarding (i) process and methodology to consult affected parties in project design and continue public consultation; (ii) comments and feedback (formal written, group meetings, presentations, etc.); (iii) documents, media programs, flyers and other information provided to promote public consultation; and (iv) significant stakeholders’ positions and responses to the project.
- 2.16 Monitoring activities, undertaken by the Borrower throughout the project life, should ensure compliance with provisions contained in the project EHSMP for construction and operation. Specifically, monitoring should help determine the effectiveness of mitigation measures, and verify fulfillment of the commitments stated in the EHSMP, using the proposed indicators. The results of the monitoring program should be used to evaluate, as applicable: (i) the extent and severity of the environmental impacts against the predicted impacts; (ii) the effectiveness of the environmental protection measures or compliance with pertinent rules and regulations; (iii) the trends in relevant impacts; and (iv) the overall effectiveness of the project ESMP.

## **PART B: ENVIRONMENTAL, SOCIAL AND HEALTH & SAFETY REVIEW OF THE PORT EXISTING OPERATIONS**

- 2.17 **Regulatory compliance:** Verify compliance with all the regulatory requirements required by international and country regulations, all international applicable treaties and conventions, such as MARPOL<sup>7</sup> and Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and those related to any applicable permits and authorizations.
- 2.18 Environmental & Social Management System:
- a. Verify if the Port has developed and implements an Environmental Management System (ESMS) that is consistent with the principles of ISO 14001:2015;
  - b. If applicable, verify that the Port administration EMS includes a dredging program to minimize impacts on environmental resources as a result of: (1) changes in water quality and circulation, including depletions in dissolved oxygen levels; (2) resuspension of toxic contaminants from existing sediment deposits; (3) contaminant uptake by and accumulation in fish and shellfish; (4) increased

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<sup>6</sup> Meaningful Consultation: <https://publications.iadb.org/bitstream/handle/11319/8454/Meaningful-Stakeholder-Consultation.pdf?sequence=3&isAllowed=y>

<sup>7</sup> International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 or commonly referred to as the MARPOL 73/78 – from International Maritime Organization’s (IMO).



turbidity causing decreased photosynthesis activity; and (5) disposal of dredged materials.

- c. Verify that the Port ESMS includes procedures to address the collection and environmentally sound disposal of ship-generated wastes according to the requirements of the International Convention for the Prevention and management of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto, (MARPOL 73/78). Examples of such wastes include: oily wastes, mixtures of oil, ballast water, chemical wastes and tank washings containing noxious liquid substances, residues of hazardous substances in packed form, sanitary wastewater (sewage) and garbage.
- d. Verify that the Port administration ESMS includes procedures to adequately address impacts from Port operations, such as
  - i. Air emission;
  - ii. Noise;
  - iii. Contamination of the waters with oils and sewage and other wastes from land and ships;
  - iv. Impacts on the local community, impacts related to heavy traffic and traffic of heavy trucks,
  - v. Impacts on the river traffic and river tourism (if any).
- e. Verify that the Port administration ESMS includes a social management plan to mitigate any social impacts caused by the operation;
- f. Verify that the Port administration ESMS includes an adequate Port monitoring program, especially with respect to ambient air quality, air emissions, noise, water and waste water, and biological.
- g. Verify that the Port administration includes in its organizational structure the human, financial and operational resources to ensure the implementation of the EMS.
- h. Verify that the Port maintains records of significant environmental matters, including monitoring data, spills, occupational accidents and illnesses, and fires and other emergencies.
- i. Verify that the Port maintains records of public complaints and accidents involving the general public must also be maintained.
- j. Verify that the Port maintains an adequate training program for the personnel involved in the operation of the Port, mainly on hazards, safety procedures and emergency response plan associated with their tasks; in handling oil and chemical spill and firefighting equipment, and in emergency response.

## 2.19 Health and Safety Management System

- a. Review the Health and Safety Management System of the Port Administration/Operator, as to verify its appropriateness, especially in terms of the current operations and its potential increase as a result of the Project.
- b. Review the Port's Health and Safety Plan and Program to confirm that the plans and procedures include the necessary detail measures, procedures, equipment,

training, responsibilities, and resources required to adequately control, respond and remediate potential project risks, accidents and emergencies.

- c. Verify that the Port EMS/Health and Safety Plan implements operational measures for:
  - General harbor safety, including signals, wind directional instruments and emergency procedures.
  - Ensure unauthorized personnel are prevented from entering hazardous or restricted areas.
  - Establish procedures for handling, storage and transport of hazardous materials.
- d. Review the adequacy and completeness of the Port's Contingency and Emergency Plans and procedures, especially those related to (i) probable natural hazards (flooding, high tide flood, hurricanes, tornadoes, etc); (ii) spills of fuel, toxic and/or hazardous materials; and (iii) fires and explosions in the facilities.

### **III. EXPECTED OUTCOME AND DELIVERABLES**

- 3.1 This proposal covers only the Environmental, Social, and Health & Safety Review of the existing port operations.

### **IV. PROJECT SCHEDULE AND MILESTONES**

- 4.1 It is understood that preliminary documents are required in November or early December.

### **V. SUPERVISION AND REPORTING**

- 5.1 The IDB will be responsible for the approval of the documents.
- 5.2 Division Leader or Coordinator: Amado Crotte (TSP/CME)

### **VI. SCHEDULE OF PAYMENTS**

- 6.1 It is proposed the following payment schedule:

<b>Payment Schedule</b>	
<b>Deliverable</b>	<b>%</b>
1. Notice to proceed	20
2. Submittal of ready-to-publish documents	50
3. Submittal of final documents	30
<b>TOTAL</b>	<b>100%</b>

**INTERAMERICAN DEVELOPMENT BANK**

**TRANSPORT DIVISION**

**CONSULTANCY SERVICES FOR PRELIMINARY DESIGN FOR THE PROPOSED INTERVENTIONS TO  
IMPROVE TRANSPORT AND LOGISTICS IN PARAMARIBO**

**TERMS OF REFERENCE**

**I. BACKGROUND AND JUSTIFICATION**

- 1.6. **Background of the Program.** The Improvement of logistics and transport in Paramaribo Program is a program in response to the challenge to increase Surinam's competitiveness and productivity in the agricultural sector by improving the transport logistics in and around the Paramaribo Port that is key to the export activities. The program considers investments and activities along four inter-related fronts: (i) improvement of port access and land utilization; (ii) optimization of port operation and customs inspections; (iii) upgrade and climate adaptation of road infrastructure, bridges and secondary roads; and (iv) modernization of traffic management.
- 1.7. The program consists of three components: (i) investments in port infrastructure; (ii) interventions in the road; and (iii) institutional strengthening and administration. In order to determine the scope of these components, the IDB has created a Technical Cooperation in order to prepare the key technical analysis for the program design and to help identify strategic interventions.
- 1.8. **Background of Interventions.** Portfolio of roads interventions was identified in a previous stage of this consultancy, focused on a conceptual solution to the traffic congestion located at the entrance and exit of the port. A preliminary volumetry was estimated thru the photogrammetry obtained from initial flight plans over the corridors of study. Also, a unitary construction price of the interventions was estimated based on parameters calibrated for the country.
- 1.9. This first estimation of construction cost allowed evaluating the relevance of proposed solutions, so it becomes necessary to fine-tune the construction cost of the proposed interventions.

**II. OBJECTIVES**

- 2.1 The objective of this stage is to increase the level of precision of the construction cost estimated for interventions identified in the previous stages.

**III. SCOPE OF SERVICES**

- 3.1 The consultant is to conduct a preliminary design for the proposed interventions, including drawings, plans and a bill of quantities to determinate the improvements cost. The following tasks are required to achieve the objective.

**IV. KEY ACTIVITIES**

- 4.1 **Task 1: Definition of Complementary Information.** The consultant must determine the

complementary data needed to improve the precision of the volumetry needed to implant the interventions proposed. This campaign will be focused on those corridors defined as a priority in the previous stage.

- 4.2 **Task 2: Data Collection and Post-Processing.** The Consultant will be carried out the complementary data collection and post-processing needed for its inclusion in the analysis.
- 4.3 **Task 3: Technical Visit Report.** The Consultant will prepare a technical visit report with the main findings obtained in the new data collection campaign.
- 4.4 **Task 3: Pre-Designs.** The consultant must include new data in the model developed in the previous stage to calibrate natural terrain and street levels. The deliverables will be:
- Vertical and horizontal alignments
  - Construction profiles
  - Catalog of concepts and unitary prices

## **V. EXPECTED OUTCOME AND DELIVERABLES**

- 5.1 The Consultant will elaborate the following deliverables:
- Definition of complementary information
  - Data Collection and post-processing
  - Technical Visit Report
  - Pre-Designs
    - a) Schematics of vertical and horizontal alignments
    - b) Construction profiles
    - c) Catalog of concepts and unitary prices

## **VI. PROJECT SCHEDULE AND MILESTONES**

- 6.1 Definition of complementary information will be carried within the first week of the project.
- 6.2 Data Collection and post-processing will be carried out and presented at the end of the third week of the project.
- 6.3 Technical Visit Report will be presented in the fourth week of the project.
- 6.4 Predesigns with schematics will be presented at the sixth week of the project.
- 6.5 The IDB will carry weekly follow up a meeting with the Consultant.

## **VII. REPORTING REQUIREMENTS**

- 7.1 The Consultant will submit two copies of reports to the IDB. An electronic form of the reports will also be submitted with each one of the paper copies.
- 7.2 The output/ deliverable of the study shall be presented as follows:
- 1.iv.1. Pre-Design: shall be presented within six weeks after the commencement date of the contract. This will include the corrections to all the comments submitted by the IDB.

## **VIII. ACCEPTANCE CRITERIA**

- 8.1 The services shall be carried out in accordance with generally accepted professional practices, following recognized technical and management principles and practices. The Consultants' scope of work is understood to cover all activities necessary to accomplish the stated objectives and outputs of the below services while adhering to the aforementioned principles and practices. This is not an exhaustive list and the absence of any 'activities' necessary for the Consultant to satisfy the objectives and outputs, does not preclude the Consultants obligation to perform these activities.
- 8.2 The IDB is the primary counterpart and the party responsible for directing the Consultant to any necessary knowledgeable parties. All other government entities or private companies should be contacted throughout the IDB or with IDB approval.
- 8.3 The IDB has 2 weeks after the submission of this report for review and its approval.

#### **IX. OTHER REQUIREMENTS**

- 9.1 Not applicable.

#### **X. SUPERVISION AND REPORTING**

- 10.1 The IDB will be responsible for the approval of the documents.
- 10.2 Division Leader or Coordinator: Amado Crotte (TSP/CME)

#### **XI. SCHEDULE OF PAYMENTS**

- 11.1 Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b>Deliverable</b>	<b>%</b>
4. Technical Visit Report	70
5. Pre-Designs	30
<b>TOTAL</b>	<b>100%</b>

- 11.2 The fees will be covered in US Dollar (USD).



**SUPPORT FOR IMPROVING TRANSPORT LOGISTICS AND COMPETITIVENESS IN SURINAME**

**SU-T1105**

**CERTIFICATION**

I hereby certify that this operation was approved for financing under the **Ordinary Capital Strategic Development Program for Infrastructure (INF)**, through a communication dated November 13, 2018 and signed by Jane Silva. Also, I certify that resources from said fund are available for up to **US\$500,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project until December 12, 2018. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, representing a risk that will not be absorbed by the Fund.

Certified by:

Original Signed

DEC/03/2018

\_\_\_\_\_  
Sonia M. Rivera  
Chief

\_\_\_\_\_  
Date

Grants and Co-Financing Management Unit  
ORP/GCM

Approved by:

Original Signed

DEC/03/2018

\_\_\_\_\_  
Nestor H. Roa  
Division Chief  
Transport Division  
INE/TSP

\_\_\_\_\_  
Date