

GOVERNMENT OF THE CO-OPERATIVE  
REPUBLIC OF GUYANA

Ministry of Public Infrastructure

**WORKS SERVICES GROUP**



**Project Summary**

**The Upgrade of the Lethem Aerodrome**

JULY 2019

## 1 Background

The Co-operative Republic of Guyana (Guyana) had a population of 746,955 (375,150 females and 371,805 males) in 2012. The latest poverty assessment in 2006 showed that 36.1% of the population was poor, with higher prevalence in the hinterland areas. The Human Development Report (2016) however reveals steady improvement in living conditions, especially life expectancy, mean years of schooling, and gross national income per capita. The country thus attained a Human Development Index value of 0.638 in 2015 (an improvement of 17.9% since 1990). Notwithstanding progress made, at-risk groups including women, Amerindians, persons with disabilities (PWDs), and youth, face vulnerabilities. For example, female labour force participation was 43.6% compared to 68.9% for males, and 56% for the total population in 2017 (Third Quarter). Comparatively, the female unemployment rate was 15.3%, as opposed to 9.9% for males, and 12% for the total population in 2017. Social exclusion and vulnerabilities faced, impact all aspects of socioeconomic life including accessible air, road and riverine transportation infrastructure, and particularly affects hinterland subpopulations. The socially inclusive *no one left behind* 2030 Sustainable Development Goal's agenda requires programming to address services disproportionately accessed by such groups. The hinterland population recorded a prevalence of 74%, the Amerindian population 78%, and urban population 19% (Guyana Measuring Poverty 2008). Unemployment rates are higher for youth age cohorts and more so for females and rural dwellers: males 17.3%, females 28.0%, both males and females 21.6%; rural 24.5%, and urban 20.5%). Further, some 15% of PWDs never attend school, 40% of unemployed suffer job losses due to disability, and 79% of families face financial difficulties (Bureau of Statistics 2006).

Guyana is currently in the process of drafting a new Green State Development Strategy (GSDS), which will guide the country's economic and social development over the next 15 years. The objective of the Strategy is to reorient and diversify Guyana's economy, and therefore reduce reliance on traditional sectors and opening up new sustainable income and investment opportunities in higher value adding sectors such as ecotourism and renewable energy. This also involves creating development opportunities in the hinterland, thereby reducing migration to coastal areas. One of the necessary conditions for achieving this is an efficient transportation system.

An effective transportation system connects people to the supply and distribution of goods and services in both social and economic sectors and is therefore essential to sustainable growth and development. Guyana's transportation sector consists of road, air, riverine and maritime modalities. The Government of the Co-operative Republic of Guyana (GOGY) therefore seeks to improve specifically identified services in three sub sectors, which all fall under the purview of the Ministry of Public Infrastructure (MPI). These improvements are: (a) road, through the construction of a new bridge at Wismar; (b) air, through the upgrade of the aerodrome at Lethem; and (c) riverine, through the construction of a new stelling at Parika.

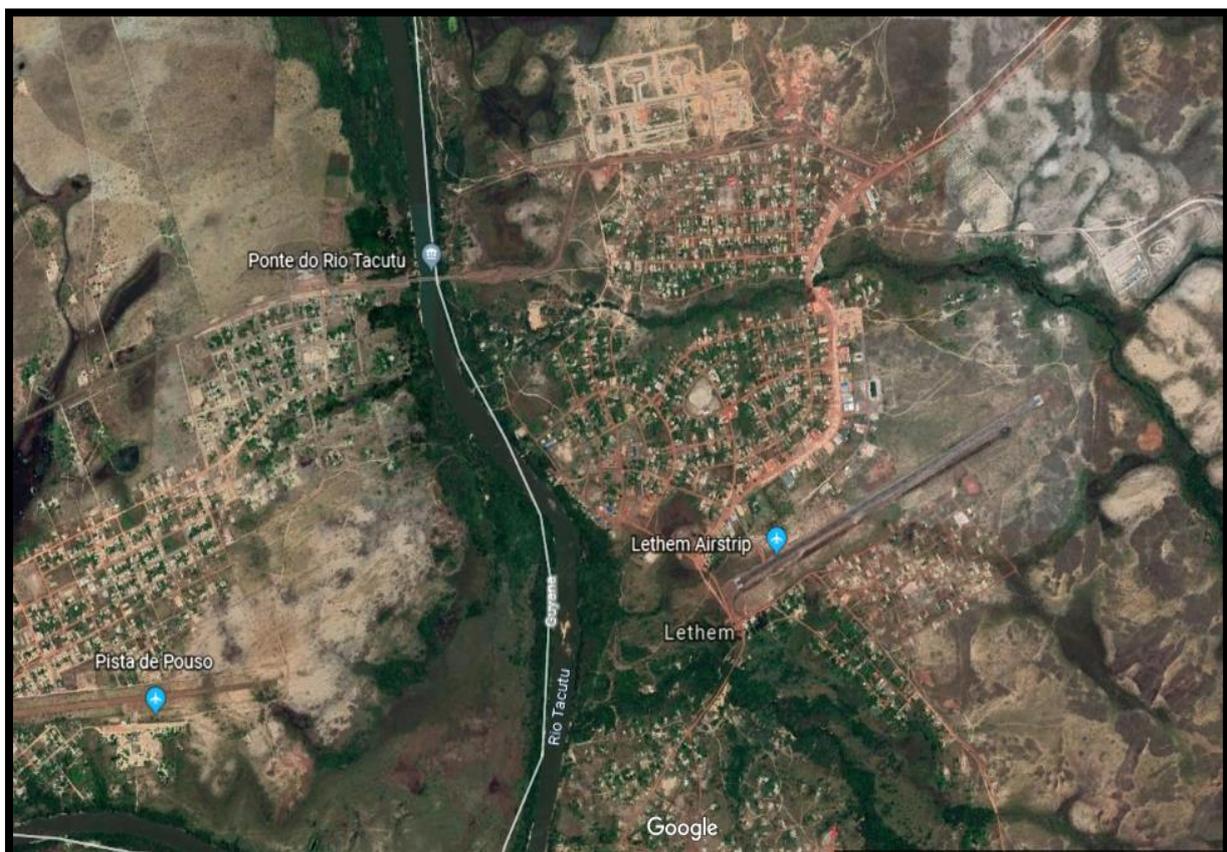
## 2 Introduction

Lethem Aerodrome is located in Region 9. It is owned by GOGY and operated by the Guyana Civil Aviation Authority (GCAA). During the early years of existence of the aerodrome, daily flights were received from Guyana Airways Corporation operating the Douglas DC-6 aircraft. The DC-6 aircraft had passenger accommodation for 48-56 persons but was mostly equipped to carry freight with a maximum take-off capacity of about 97,200 pounds. Two carriers currently use the aerodrome; Trans Guyana Airways and Roraima Airways.

There was a steady increase in aircraft departures between 2015 and 2018 with an annual growth rate of 13%. In 2018, approximately 3,000 flights operated at the aerodrome, 90% of which were commercial flights operating along the Georgetown-Lethem-Georgetown route. The most used aircrafts were the Beechcraft 1900 and the Cessna Grand Caravan to transport passengers on this route. A significant number of the travellers transported were Guyanese and Brazilian nationals moving between Northern Brazil, Region 9 and Georgetown.

The aerodrome has one runway, which has a length of 1,815m and a width of 30m. The aerodrome's category is 3B-restricted according to International Civil Aviation Organization (ICAO) because of its pavement having technical failures restricting its take-off distance to 1,140m. The aerodrome currently lacks a paved apron, visual aids, lighting system, tower control, passenger terminal, rescue and fire-fighting service or a reliable security system.

A Map indicating the location of the proposed project location is presented in Figure 1 below.



**Figure 1** showing Proposed Project Location

### 3 Feasibility Study and Designs for the Upgrade of the Lethem Aerodrome

The scope of work for the consultancy is expected to cover all activities to accomplish the stated objective. The duties of the Consultant(s) will include, but will not be limited to:

- (i) Prepare project-specific environmental and social impact assessment for Phase 1 works. Provide specific mitigation measures for all significant negative environmental, social and gender impacts identified for both the construction and operational phases. Building design specifications and overall project design for the facilities and associated works should conform to acceptable national/international building codes as well as Guyana's national planning and building regulatory requirements.
- (ii) Develop a Draft Environmental and Social Management Plan (ESMP) for inclusion in the tender documents. The ESMP should specifically address, but not necessarily be limited to the following: traffic management; management of construction materials (transportation, storage and waste disposal); surface water drainage; mitigation of dust and noise nuisance; social and gender safeguards to address risks identified and enhance community relations and other social impacts identified in the SIA.
- (iii) Prepare detailed designs, specifications and drawings as per the approved AMLP, implementation schedule, and cost estimates, including costs of any measures to mitigate environmental and social impacts. The designs shall take into account energy efficiency and incorporating the use of Renewable Energy and Energy Efficiency (RE/EE) fixtures and systems, floor areas of major facilities, standard busy hour rates and peak hour passenger rates or other design criteria, facility requirement and limitations. Customs and airline requirements, operational procedures, aircraft operations and concession areas should also be taken into account. In preparing the design, the Consultant will take into account the need to maximise the use of local materials and skilled and unskilled labour, minimum future requirements to the extent possible, and a need to keep the cost of the proposed development to a level commensurate with the available finance.

## 4 ENVIRONMENTAL IMPACT ASSESSMENT - UPGRADE OF LETHEM AREODROME

The full EIA will at minimum, include the following:

### (a) Methodology:

- (i) Review of secondary data from reports, studies, hazard risk assessments, geotechnical surveys, hazard risk assessments, and relevant policy documents such as legislation, regulations, standards and policies in the related areas.
- (ii) Collection of primary data through participatory consultations with all categories of stakeholders in order to introduce the project, facilitate feedback, and gauge perception of the project. Information from the residents in the area on hazard history and impact, environmental impacts will guide in design and location.
- (iii) Field visits.
  - (i) Analysis and computation of data.

### (b) Description of the Environment:

Baseline data will be assembled, evaluated and presented on the environmental, natural hazard, and climate change characteristics of the study area.

### (c) Determination of the Potential Impacts of the Proposed Project:

Consultants will conduct a detailed analysis of potential environmental, natural hazard, and climate change impacts and recommend mitigation measures and prepare a draft environmental management plan for the project. Distinguish between significant positive and negative impacts, direct and indirect impacts, cumulative, immediate and long-term impacts. Identify impacts that are unavoidable or irreversible. Wherever possible, describe impacts quantitatively in terms of environmental costs and benefits. Assign economic values when feasible.

### (d) Analysis of Alternatives to the Proposed Project

(e) Consultation with the social development and gender expert, and collectively develop an ESMP to mitigate negative impacts and maximise project benefits for the vulnerable.

### (f) Stakeholder Consultations

Consultants will identify appropriate mechanisms for providing information on progress of project preparation and implementation to stakeholders. It is anticipated that there will be considerable public interest concerning issues of viability, affordability, and the economic benefits to be derived from the Project. Public consultation work will be carried out at an early stage of the ESIA field work and once again, when the draft ESIA report is available, before detailed designs commence. The results of the public consultation process will be reported in the ESIA.

(g) Climate Vulnerability Assessment

The consultants will prepare a CVA to identify and evaluate the effects of climate change on the project components and to identify resilience measures that should be included in the proposed project. The CVA methodology used will be consistent with recommendations from the Inter-governmental Panel on Climate Change.

**4.1 SOCIAL IMPACT ASSESSMENT AND GENDER ANALYSIS**

The Social Impact Assessment and Gender Analysis will investigate developmental opportunities and risks related to the execution of the project; and inform possible mitigating measures to safeguard against any risks identified, as well as other measures to support positive social impacts. It will be conducted in a highly participatory, gender-responsive and socially inclusive manner engaging the communities, particularly with representatives of women and men, vulnerable groups such as children, youth, elderly, indigenous peoples (Amerindians), and persons with disabilities (PWDs).