

## TC Document

### I. Basic Information for TC

▪ Country/Region:	SURINAME
▪ TC Name:	Support to State Asset Surveillance Management System
▪ TC Number:	SU-T1156
▪ Team Leader/Members:	Wilks, Jason Malcolm (IFD/ICS) Team Leader; Mejia-Guerra, Jose Antonio (IFD/ICS) Alternate Team Leader; Acevedo Calle, Daniela (LEG/SGO); Berlanda Custodio Da Silva, Cleide (VPC/FMP); Jackson, Moreno Randal (CCB/CSU); Laura Rodriguez (IFD/ICS); Mariana Catano Jorgenson (IFD/ICS) Berlanda Custodio Da Silva, Cleide (VPC/FMP); Jackson, Moreno Randal (CCB/CSU); Mariana Catano Jorgenson (IFD/ICS); Michelle Manzur Madariaga (IFD/ICS); Natalia Almeida (LEG/SGO) Berlanda Custodio Da Silva, Cleide (VPC/FMP); Jackson, Moreno Randal (CCB/CSU); Mariana Catano Jorgenson (IFD/ICS); Michelle Manzur Madariaga (IFD/ICS); Natalia Almeida (LEG/SGO)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	04 Oct 2022.
▪ Beneficiary:	Government of Suriname
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	OC SDP Window 2 - Institutions(W2C)
▪ IDB Funding Requested:	US\$100,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months, with 18 months for execution
▪ Required start date:	December 2022
▪ Types of consultants:	Firms
▪ Prepared by Unit:	IFD/ICS-Innovation in Citizen Services Division
▪ Unit of Disbursement Responsibility:	CCB/CSU-Country Office Suriname
▪ TC included in Country Strategy (y/n):	Y
▪ TC included in CPD (y/n):	Y
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Institutional capacity and rule of law; Environmental sustainability

### II. Objectives and Justification of the TC

- 2.1 The objective of this technical cooperation (TC) is to support the coordination of digital solutions for geospatial data analysis and the protection of state assets at the national level in Suriname. By conducting diagnostic evaluations of organizational capacities for the surveillance of the country's territorial domain and supporting redress of knowledge gaps in the use of the state's geospatial information registry, this TC will provide key recommendations to combat illicit use of natural resources through

institutional strengthening and the improvement of multi-institutional coordination mechanisms.

- 2.2 This TC will support the Government of Suriname to design and use of innovative tools for geospatial analysis towards improving the monitoring, interpretation, and timely dissemination of earth observation data for effective environmental policing. More broadly, the TC will see Suriname contributing in an effort to improve the knowledge base on environmental monitoring in the Amazon region, situated at the nexus of key regional issues such as climate change, digital transformation and the fight against transnational crime.
- 2.3 Almost 95% of the Republic of Suriname is covered by rainforest, earning it the informal title of greenest country on earth. However, the country's deforestation rate is among the highest globally and expected to exceed 0.5% by 2025<sup>1</sup>. The increasing rate of forest coverage is due in large part to the illicit outflows of natural resources through activities such as illegal logging and informal gold mining using labor-intensive, low-technology techniques called Artisanal and small-scale goldmining (ASM). For example, ASM has become a major source of income for Surinamese particularly in the remote hinterland regions of the country, but a major element of the practice involves mercury that, when left unrecovered, leads to the salinization of rivers and creeks, impacting not only the environment but also the health of nearby communities<sup>2</sup>. Additionally, these communities are vulnerable to social harms related to ASM such as the extensive networks of organized crime elements who facilitate ASM illegally through trafficking in persons for sexual slavery; forced labor; migrant smuggling; and money laundering<sup>3</sup>.
- 2.4 Over the past five years, the Government of Suriname initiated a series of reforms to regularize ASM and minimize its harmful socio-environmental impacts. Reform activities under the Ministry of Natural Resources (MNR) such as the Gold + project of the United Nations Development Programme seek to detect where illicit activities occur, map the supply chain for illegal gold to international markets and identify the concomitant financial flows towards reducing the appeal and profitability of illicit trafficking of state resources. However, recent evaluations of these initiatives commonly cite the inadequacy of baseline geospatial data - a critical tool in environmental policing<sup>4</sup>. Earth observation (EO) data and information, which include satellite, airborne, land and marine-based data can provide real-time insights to inform decisions on how and where environmental management assets can be deployed.

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<sup>1</sup> See: [REDD+ Suriname website](#).

<sup>2</sup> Ottenbros, I. B., Boerleider, R. Z., Jubitana, B., Roeleveld, N., & Scheepers, P. T. J. (2019). Knowledge and awareness of health effects related to the use of mercury in artisanal and small-scale gold mining in Suriname. *Environment international*, 122, 142-150.

<sup>3</sup> Wagner, L., & Hunter, M. (2020). Links Between Artisanal and Small-Scale Gold Mining and Organized Crime in Latin America and Africa. In *Illegal Mining* (pp. 77-104). Palgrave Macmillan, Cham.

<sup>4</sup> Purdy, R. (2010). Using earth observation technologies for better regulatory compliance and enforcement of environmental laws. *Journal of Environmental Law*, 22(1), 59-87.

Earth observation data systems are also cost-effective, with multiple country case studies illustrating significant contributions to national economies<sup>5</sup>

- 2.5 Utilizing earth observation data for environmental policing in Suriname is constrained by the multiplicity of state actors who maintain geospatial databases within a suboptimal governance framework. A 2017 Integrated Geospatial Information Framework Summary Assessment, conducted by the Management Institute for Land Registration and Land Information System (MI-GLIS)<sup>6</sup>, found that no policies or systems exist to facilitate coordination in geospatial data collection or analysis. MI-GLIS to compile existing geospatial data sources launched a national geospatial online repository in 2019 but without clear guidelines and systems for updating the information, the repository is under-utilized and increasingly outdated<sup>7</sup>.
- 2.6 In May 2021, the Ministry of Defense (MoD) requested the Bank's support in strengthening the state's surveillance capacity mitigation of illegal economic activities on land and in the waters of Suriname by strengthening the government's surveillance capabilities using digital solutions and services. In servicing this request, the MoD and IDB convened critical stakeholders on geospatial data for a series of consultations to discuss the governance framework. The agencies represented throughout these consultations include MI-GLIS, MNR, the General Bureau of Statistics, and the Ministry of Spatial Planning and the Environment (ROM). These agencies reached consensus that a modern, centralized environmental surveillance system must be devised to consolidate national geospatial data management. Owing to previous efforts at data management coordination being less than successful, coupled with the keen interest to use digital solutions that are novel to the context, it is prudent to gauge the viability of such a system within the current regulatory framework.
- 2.7 Arising from the series of consultations with government stakeholders, capacity building in geospatial data analysis was highlighted as a second constraining factor to effective environmental policing. The value of an improved supply of geospatial information would be diminished given the lack of technical capacity among personnel in stakeholder agencies to use the data to guide policy and operational responses. Through support from the Islamic Development Bank Institute (IsDBI), the Government of Suriname is now receiving support from the Global Partnership for Sustainable Development Data (GPSDD) to train government personnel on using earth observation data and methodologies for environmental monitoring. Building on this initiative to develop a pilot for these trained personnel to apply their knowledge in a multi-agency surveilling exercise of illegal gold mining and its socioenvironmental impact was therefore proposed as an important demonstration of enhanced national surveillance capabilities for environmental policing.

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<sup>5</sup> [Policy briefing Unlocking Data for A Better, Greener, Safer Future.](#)

<sup>6</sup> <https://miglis.sr/wp-content/uploads/2018/12/4.-Assessment.pdf>

<sup>7</sup> [www.miglis.sr/spatialcatalog](http://www.miglis.sr/spatialcatalog)

- 2.8 **Alignment.** This TC is aligned with the Second Update of the Institutional Bank Strategy 2020-2023 (AB-3190-2), particularly the cross-cutting issue of “Institutional Capacity and Rule of Law”, by supporting the collection, analysis, and dissemination of geospatial information on the regulation and protection of natural resources to improve border security and reduce illicit outflows of state resources. By conducting diagnostic assessments resulting in a detailed action plan for the establishment of a strategic-operational command facility with the requisite digital surveillance capabilities, this TC will ensure the evidence-based formulation of tactical and strategic responses to transnational environmental crimes that are prevalent in the country such as illegal mining and logging.
- 2.9 Additionally, this TC aligns with Priority Area 3: Effective, efficient and transparent institutions of the Ordinary Capital Strategic Development Programme (GN-2819-14) as well as the Corporate Results Framework 2020-2023 (GN-2727-12).
- 2.10 The work of this TC aligns with the third priority area within the 2021-2025 Bank Group Country Strategy for Suriname, which refers to improving basic services and social protection. Additionally, the cross-cutting issues of climate change resilience; data production and access; institutional capacity; and the rule of law are in keeping with the objectives and activities under the project. This client support operation is not presently aligned to any existing operation. However, the operation would provide diagnostics and capacity building in support of the proposed loan being discussed by the COF and the Ministry of Spatial Planning and the Environment concerning support to the institutional strengthening of the Ministry in light of planned amendments to the Environmental Framework Act.

### III. Description of activities/components and budget

- 3.1 **Component I: Capacity Building on Earth Observation Data Analysis for Environmental Policing (US\$35,000).** Under this component, the TC will support a pilot exercise undertaken by GPSDD to ensure the transfer of data analysis skills for earth observation data towards improving environmental policing outcomes. The pilot exercise will culminate a series of customized training sessions to approximately 30 technical personnel across government agencies in Suriname with geospatial analysis capacities and responsibilities<sup>8</sup>. This capacity building exercise will result in the application of more advanced geospatial analysis methodologies and production of a use case report detailing good practices in the collaborative monitoring of ASM in Suriname using geospatial data applications.

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<sup>8</sup> Technical personnel will be nominated by their respective institution but will only participate in the pilot exercise upon meeting or surpassing the threshold for capacity building that will be empirically assessed by the consulting firm providing the training.

- 3.2 **Component II: Feasibility Analysis of an Environmental Surveillance System (US\$65,000).** Under this component, the TC will provide financing to assess the viability of existing law enforcement capacities and governance arrangements for developing a comprehensive environmental surveillance system housed on a digital platform. At a minimum, this activity will involve (i) conduct of a requirement's analysis examining legislative, institutional and technological factors; (ii) design of a costed roadmap for creating the most feasible centralized monitoring system based on the right technological solutions; and (iii) facilitation of fora for stakeholders to share perspectives and information on the proposed system in a collaborative manner.
- 3.3 **Expected Results.** The expected result of this TC is the institutional strengthening of the Surinamese government to collect, analyze and use environmental data to inform law enforcement and information management strategies. The direct beneficiaries include approximately 30 civil servants and project managers tasked with implementing or supervising institutional reforms towards securing the country's environmental heritage.
- 3.4 The total amount funding amount for this TC is US\$100,000 (non-reimbursable) to be financed with resources from the Ordinary Capital Strategic Development Programme (OC-SDP).

Budget			
Activity/Component	Description	IDB/Fund Funding	Total Funding
<b>Component 1: Capacity Building on Earth Observation Data Analysis for Environmental Policing</b>	At least (1) use case report detailing the pilot exercise and highlighting good practices and recommendations for evidence-informed environmental policing.	<b>US\$ 35,000</b>	<b>US\$ 35,000</b>
<b>Component 2: Feasibility Analysis of an Environmental Surveillance System</b>	At least (1) assessment study on the viability of a centralised state management system for environmental monitoring	<b>US\$ 65,000</b>	<b>US\$ 65,000</b>
<b>Total</b>		<b>US\$ 100,000</b>	<b>US\$ 100,000</b>

#### IV. Executing agency and execution structure

- 4.1 As there is presently no national authority with legal capacity to both coordinate and execute capacity building activities for geospatial data management, the overall coordination and technical supervision of the operation will be the responsibility of the Bank's Innovation in Citizen Services Division (IFD / ICS), in close coordination with the Country Office. This justification is in keeping with conditions set out the Bank's GN-2629 Guidelines - Annex 10, Section 2 (d). The project team is led by Jason Wilks (IFD/ICS), Public Management Sector Specialist with responsibility for IFD/ICS projects in Suriname, who will supervise the TC components overall and have direct

supervision of activities. Operational support will be provided by colleagues from the CCB/CSU Country Office. The TC will have over 24 months for the processing of disbursements, with execution expected over an eighteen-month period.

The IFD/ICS, in accordance with the guidelines and requirements established in the Technical Cooperation Policy (GN-2470-2) and in the TC Operational Guidelines (GN-2629 Guidelines Annex 10, Section 2 (d)), will implement the project over 24 months, with execution expected over an eighteen-month period. The activities to be executed under this operation will be included in the Procurement Plan and carried out in accordance with the Bank's established procurement guidance, namely: (a) GN-2765-4 and OP-1155-4 for Consulting Firms for services of an intellectual nature; and (b) GN-2303-28 for logistics and other related services.

- 4.2 Justification for the single source selection of the GPSDD planned for Component 1 is in accordance with Bank Policy for the Selection and Hiring of Consulting Companies (GN-2765-4), Section 4.1.3 as well as the Operational Guidelines OP-1155-4, Section 2.9 (b) and (d). The contract is a small assignment with the value of US\$35,000 being under the US\$100,000 threshold. Additionally, the Government of Suriname has stated its intent to develop capacity building geospatial analysis in line with a series of introductory courses delivered by GPSDD to the target beneficiary throughout 2022. Personnel from the GPSDD were directly responsible for the design and execution of the training model and the firm therefore retains unique technical expertise that is unlikely to be found elsewhere in the market. Notwithstanding, all knowledge products derived from this Technical Cooperation will be the Bank's intellectual property.

## **V. Major issues**

- 5.1 There are two attendant risks for this project. The first risk relates to concerns over data sharing and unintended disclosures potentially limiting the scope of cooperation among the partner agencies benefitting from the process. The second risk involves the selection of officers for training who may not have the competency or interest for undertaking advanced geospatial data analysis. Both risks can be mitigated by an effective project coordination mechanism. Specifically, the agencies represented in the stakeholder group will be invited to nominate representatives for a Steering Committee that will ensure clarity in intern-agency communication, standardization of data sharing protocols where necessary and suitable selection criteria for personnel involved in the pilot study. This Steering Committee will also seek membership from non-government actors in the private sector and civil society, towards ensuring transparency in decision making and participation for those communities most affected by environmental crimes locally.

## **VI. Exceptions to Bank policy**

- 6.1 This operation does not foresee any exceptions to Bank policy.

## **VII. Environmental and Social Strategy**

- 7.1 This TC will not finance feasibility or pre-feasibility studies of investment projects or associated environmental and social studies, for which reason it does not have applicable requirements of the Bank's [Environmental and Social Policy Framework \(ESPF\)](#).

**Required Annexes:**

[Request from the Client - SU-T1156](#)

[Results Matrix - SU-T1156](#)

[Terms of Reference - SU-T1156](#)

[Procurement Plan - SU-T1156](#)