



**PROJECT: IMPLEMENTATION OF THE PROGRAM OF STRATEGIC ACTIONS  
TO ENSURE THE INTEGRATED AND SUSTAINABLE MANAGEMENT OF  
TRANSBOUNDARY WATER RESOURCES IN THE AMAZON RIVER BASIN  
CONSIDERING CLIMATE VARIABILITY AND CLIMATE CHANGE**

**TERMS OF REFERENCE FOR THE CONTRACTING OF  
NATIONAL MONITORING CONSULTANT  
TO SUPPORT THE IMPLEMENTATION PROCESS OF THE INTEGRATED  
WATER RESOURCES MONITORING SYSTEM  
(MONITORING NETWORKS)**

**SURINAME**

**Funding Agency:** Global Environment Facility (GEF)  
**Implementing Agency:** UN Environment Programme  
**Executing Agency:** Amazon Cooperation Treaty Organization (ACTO)  
**Project Duration:** 5 years



Brasilia, 2025

## 1. Background

The Amazon basin faces numerous challenges for Integrated Water Resources Management (IWRM), especially Transboundary Resources, in the context of its socioeconomic development and in the face of anthropogenic and climatic impacts. The basin constitutes a unique hydrological system that extends beyond the national borders of eight countries – Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela – that consider the need to establish a regional framework for IWRM and, in this way, meet the needs of the population and promote the sustainable development of the Amazon region.

The eight countries of the basin signed the Amazon Cooperation Treaty in 1978 and subsequently created the Amazon Cooperation Treaty Organization (ACTO) as a regional forum for political dialogue and regional cooperation, institutionally strengthening the process of cooperation, coordination, and joint actions of the Member Countries to promote the sustainable development of the Amazon.

The main roles and functions of ACTO, with its Permanent Secretariat (SP/ACTO), are to facilitate exchange, knowledge, cooperation and joint outreach among Member Countries (MPs) to fulfill the mandates of the Amazon Cooperation Treaty. Thus, it seeks to generate consensus among the Member Countries that allow the implementation of activities, programs and projects, establishing spaces for political and technical dialogue between these and other actions of regional relevance.

In this context and within its regional scope of action in water resources, ACTO has been implementing the *Project for the Implementation of the Programme of Strategic Actions to Ensure the Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin Considering Climate Variability and Change*, which is funded by the Global Environment Facility (GEF), with the United Nations Environment Programme (UNEP) as implementing agency and SP/ACTO as executing agency.

The main objective of this Project is to advance in the implementation of the Strategic Action Program (SAP), promoting Integrated Water Resources Management (IWRM). The regional initiative has promoted previous agreements among Amazonian countries that have resulted in a shared vision and a common strategy to implement IWRM contained in the SAP. In this context, the project seeks to support countries to strengthen national capacity and regional governance for IWRM, as well as increase climate change adaptation capacity and ensure robust regional data to improve decision-making and coordination on the water resources of the Amazon River, from the Andes to the delta in the Atlantic, for a healthier Amazonian ecosystem.

The project's activities are expected to benefit more than 7.8 million people, corresponding to 20% of the Basin's population (ACTO and UN-MA, 2020).

The project is implemented within four components:

- 1) *Innovative community-to-cabinet governance model of Integrated Water Resources Management (IWRM) in the Amazon basin;*
- 2) *Strengthened community resilience and protection of aquatic ecosystems to face the effects of climate variability and change in the Amazon basin;*

- 3) *Integrated environmental monitoring and reporting based on responses to indicators of relevant international conventions and agreements.*
- 4) *Comprehensive model for monitoring, evaluating, and communicating the progress of the overall implementation of the Amazon Basin SAP.*

While components 1 and 4 of the project are cross-cutting, providing an enabling and catalytic political, institutional and social environment for the implementation of the SAP, components 2 and 3, being interrelated, form the basis for the implementation of the SAP, with interventions across the basin and providing comprehensive monitoring data. which directly feed and support the two transverse components.

Component 3 focuses on the consolidation of an integrated environmental monitoring and communication system based on the response to the indicators of the relevant international conventions and agreements. This will be the fundamental tool that will allow the evaluation of the state and dynamics in time and space of the water resources of the basin and the associated environmental services. The monitoring will also provide information to understand trends in current and future changes and dynamics through statistical models and will provide early warnings of threats, evidence of changes and information, for sustainable and efficient management oriented to the concepts and principles of water security in the region.

This consultancy, inserted in Component 3 of the Amazon Basin Project - Implementation of the ACTO Strategic Action Program, seeks to consolidate actions within the scope of the Amazon Regional Observatory (ARO) for the construction of an Integrated Regional Platform aimed at the Integrated Management of Water Resources in the Amazon Basin. In this context, following a theoretical framework, it is necessary to involve different operational monitoring systems, compatible and articulated with agreed protocols for their operation throughout the basin, in order to allow ACTO Member Countries to have data for decision-making. In this way, it seeks to deepen south-south cooperation and integrated environmental monitoring at the basin level. To this end, this cooperation is based on international conventions and agreements, as well as on production indicators relevant to the topics to be discussed.

## **2. Context and scope of the implementation of the consultancy**

There are currently various institutions and organizations, as well as different sources of information, that are dedicated to the collection of hydrological and environmental data, as well as other knowledge systems linked to the management of water resources in the Amazon basin that can be a potential source of information to feed the monitoring systems within the scope of ACTO. However, when information from different sources is used and for the information generated to have technical and scientific rigor, two elements are essential: a) Have information management and integration procedures (protocols agreed upon in minimum and internationally accepted standards) that guarantee the necessary robustness throughout the data and its comparison; and b) Transparency on the generation of data and protocols that are used. Both elements are fundamental for the different actors and users involved in the systems (producers and users of data and information), especially when monitoring is oriented towards the articulation of science and decision-making in processes and changes that occur at the global, continental, regional and even local levels.

In this regard, and in the context of the participatory Transboundary Diagnostic Analysis (TDA) and the development of the Strategic Action Programme (SAP), ACTO Member Countries identified

as a priority the need to promote and consolidate: a) A regional water resources monitoring and surveillance system with a focus on the consolidation of two monitoring networks; a hydrometeorological (RHA) and a water quality (RCA) program, as well as developing a monitoring program for the processes of water erosion, sediment transport and sedimentation (ETS) and; b) Build an Integrated Information System on Water Resources.

Effective systems require the involvement, participation, and commitment of public, private, and civil society entities to promote research, the flow of information, and the generation of knowledge for the management of water resources in transboundary basins. Thus, within the scope of the SAP and its implementation, the MCs also agreed to develop, on the basis of their own technical-operational realities, protocols, procedures, techniques and agreements for the exchange of information related to the monitoring and surveillance systems aimed at the implementation and application of the Integrated Information System for the Management of Water Resources in the Amazon Basin.

## **2.1. Progress in regional monitoring of water resources in the Amazon basin**

The countries of the Amazon basin have made important progress in environmental monitoring, including the implementation of ACTO's Amazon Regional Observatory (ARO), and the results of the Amazonas Project: Regional Action in the Area of Water Resources (ANA-ABC-ACTO). There are also data from other initiatives such as those of the Amazon Basin Water Resources Observation Service (SO-HYBAM; [www.hybam.org](http://www.hybam.org)) and the World Meteorological Organization (WMO) Global Hydrological Cycle Observing System (WHYCOS) project.

Although there are advances in the area of Water Resources that provide information with a significant impact on the environmental health of the basin, until then there was no operational integrated regional system. In this regard, ACTO, within the framework of the implementation of the SAP, has been working on the coordination and consolidation of the implementation of an integrated regional monitoring system based on existing initiatives that have made substantial progress. In this context, the following initiatives should be highlighted:

### ***2.1.1. Amazonas Project***

The Amazonas: Regional Action in the area of Water Resources Project, which has been operating since 2012, is an initiative of the National Agency for Water and Basic Sanitation of Brazil (ANA/Brazil), the Brazilian Cooperation Agency (ABC), the Department of South America (DAS) of the Ministry of Foreign Affairs of Brazil and the Amazon Cooperation Treaty Organization (ACTO). It carries out technical cooperation actions aimed at strengthening the institutions responsible for water management in ACTO member countries. It develops technical cooperation among Amazonian countries to support integrated water resources management, especially with regard to:

- a) Creation of networks of regional monitoring systems and their protocols for hydrometric and water quality monitoring of the Amazon basin;
- b) Development of the Water Resources module in the Amazon Regional Observatory (ORA) of ACTO, to provide tabular and documented information on the state of the water situation in the basin;
- c) Development of the Amazon Networks module that provides real-time hydrometric information; and

d) Creation of the Water Resources Situation Room in ACTO, as part of the ORA, with the preparation of a proposal for an operational manual defining its functions and scope so that they can be subsequently implemented in the ACTO MC.

### ***2.1.2. Amazonian Regional Observatory (ORA)***

The Amazon Regional Observatory (ORA), inaugurated in October 2021, is a Regional Information Reference Center on the Amazon that promotes the flow and exchange of information between institutions, government authorities, the scientific community, academia and civil society of the Member Countries/ACTO. The ORA is supported by a computer structure, with access through a web portal equipped with a modular architecture that allows the acquisition, storage and publication of information on the various topics established by the ACT and updated in the Belém Declaration (2023).

The information from the ORA comes from government entities of the MC/ACTO and also from external sources, regional and international organizations, which have a high level of recognition for their work in the Amazon Region.

### ***2.1.3. The conceptual framework of the PIGRH***

The proposed macro-process for IWRM and IPGRH consists of 7 processes, as well as a set of outputs that will be generated at a unified regional scale. The seven processes are:

- 1) Follow-up process of laboratory intercalibration procedures;
- 2) Water quality monitoring process;
- 3) Process of monitoring water quantity;
- 4) Follow-up process of ETS monitoring;
- 5) Regional data and information management process;
- 6) Monitoring of the intervention process of the pilot projects; and
- 7) Process of education, communication and social participation.

These processes will be carried out under the supervision of a Technical Monitoring Group that will consist of technical members appointed by the MC/ACTO, as well as members of ACTO's own technical staff.

PIGRH products are technically important in providing the necessary support for decision-making. They are based on 3 pillars:

- 1) Calculations of specific balance sheets and indices;
- 2) Operability of the monitoring system (ORA) and
- 3) Training meetings and exchange of data and information.

These pillars will have their results incorporated by the products of subsequent activities, that is, in the process of producing the Regional Models and Scenarios Report. In addition, the pilot intervention projects will serve with their products to subsidize prospects for new implementations and/or investments in actions that are consistent with regional demands or that aim to meet the specificities of areas considered priorities, both from a geographical and thematic point of view.

Basically, what is needed is a set of nine (9) reports at the end of each process cycle as follows:

- 1) Laboratory validation and certification report;
- 2) Variability and Mass Balance (QA) Report;
- 3) Bids vs. Bids Reports Demand and reference values for P (rainfall) and Q (flow);
- 4) ETS (Sediment Erosion, Transport and Deposition) reports with both on-site and satellite data, as well as the proper calculation of QS (solid discharge);
- 5) Reports of the data worked on (received, processed and made available), as well as the accesses made to them by users;
- 6) Report on the operation of supervisory operations (situation rooms);
- 7) IP/IWRM diagnostic reports (indices) based on seminar/training compilations, as well as existing socio-economic demands;
- 8) Pilot project status reports, and finally, and
- 9) IWRM reporting using TWAP and/or SDG 6 indices.

Each of these reports should take into account an approach that presents a diagnosis of the current situation, an analysis of the situation in relation to the operational reference protocols or a time frame of reference, an indication of a rate of progress in accordance with quantifiable targets, a list of the areas for improvement to be proposed so that new targets can be proposed within the scope of the same indicators evaluated, are capable of being achieved.



Figure 2. PIGRH organizational chart with emphasis on decision support products and subsidies

### 3. Objectives of the consultancy

The main objective of the consulting work is to support the management of information and data related to the implementation process of the Integrated Water Resources Monitoring System (Monitoring Networks) obtained with the use of the Monitoring Protocols adopted by the ACTO Network of Water Authorities.

#### 3.1 Specific objectives

- **Specific Objective 1:** To identify, at the national level, the sensitive points and difficulties existing in the hydrological, ETS and water quality monitoring system, as well as the strengths and opportunities for improvement so that it is possible to support the promotion of the sustainability of the Integrated Water Resources Monitoring System at the level of each country;
- **Specific Objective 2.** Support the consolidation and implementation of an Integrated Regional Water Resources Monitoring System in the Amazon Region that is made up of the regional networks: the Regional Water Quality Network (RQA), including the evaluation of an intercalibration system of the existing analytical laboratories in the country and the Amazon Hydrometeorological Network (RHA), and the creation of an Articulated ETS Monitoring Program, in accordance with the proposed Conceptual Framework.

#### 4. General Activities

- The Consultant must be available to participate in face-to-face and/or virtual meetings as requested by the NPCU and the PCU.
- The Consultant must be available to travel to participate in regional coordination and training meetings if necessary.
- The Consultant must support the holding of national meetings and workshops related to the development of the consultancy theme and prepare the respective report, as requested by the PCU/NPCU.

##### 4.1 Specific activities to meet Objective 1:

- Carry out a mapping of the institutions and actors at the specialized national levels that monitor the quantity and quality of water in the Amazon basin to collaborate in the achievement of the objectives of the consultancy.
- On the mapping of institutions and actors, identify the National Authority(ies) responsible (head of sector) and with operational competence (departments) responsible for collecting, analyzing, making available and giving official criteria regarding the quantity and quality of water, including the monitoring of erosion and sedimentation processes.
- Identify the levels and flows of articulation and coordination between the identified institutions (data exchange, interoperability, objectives);
- For each institution, identify and describe its data collection and monitoring management system, taking the ACTO Regional Monitoring Protocols as a guiding parameter:

- Data collected, purposes, objectives and purpose of the monitoring system and data collections;
- Internal organization for monitoring, collection, analysis, use and disposal of data;
- Map of georeferenced points of data collection separated by data type;
- Frequency of data collection.
- To identify the quantity, spatial distribution and state of operation of the national monitoring networks of Water Quality, Hydrological (quantity), Meteorological and Sediments currently existing in the country. Explain the characteristics of each station: type, condition, technology used, timing, including the parameters measured, responsible institutions and personnel involved;
- Identify and relate the characteristics of the operation of the existing referenced stations that contain: frequency of level and precipitation records; frequency of level and flow measurements, water quality, sediment and frequency of additional measurements (e.g. bathymetry); leveling and maintenance frequencies in general; identification of the equipment used in the operation, among other relevant information for full knowledge of the existing situation;
- Type of data storage systems;
- Database structures and their management,
- Data processing and the existing mechanisms for its public availability.
- Information systems used and types of analytical tools for the process of analyzing Quality and Quantity data.
- Existence and status of (situational) monitoring rooms or their analogues, including roles and functions.
- Identify and attach manuals, guides for the operation of the situation rooms and others that exist and summarize their operation in a report.
- Identify the quantitative and training of permanent and temporary dependent technical staff (consultants),
- Institutional capacities in place (physical facilities, cars, boats and equipment in general) for the collection, analysis and availability of data (raw and processed), including policies for the use of data and use of data for regional purposes.
- In a participatory way, identify the difficulties of the operation in data management and monitoring.
- Explore and systematize existing Sector Plans regarding the improvement of data management (modernization of stations, expansion of monitoring networks, etc.)
- Prepare four historical databases (available) of the Amazon at the national level: 1) Hydrological, 2) Meteorological, 2) Water Quality, 3) Sediments. The data format will be

discussed in due course with the technical staff of the Amazon Basin Project – Implementation of the ACTO SAP.

- At the level of each institution, systematize institutional information (institutional guidelines and policies, technical capacities, technological and computer capacities, others), identify strengths and weaknesses to incorporate data and information from different sources of information into their national information systems and analysis including satellite information (World Water Quality Portal, Remote Sensing Data, IHP UNESCO, etc.);
- Identify and characterize the routes and operating equipment of the existing stations referenced in the RCA (Water Quality Network), RHA (Amazon Hydrometric Network) and the ETS Program (Erosion, Transport and Sedimentation), highlighting the main considerations and characteristics that the country follows for the monitoring and operation of the existing stations (Preliminary Explorations, Sampling Site Selection, Operational Requirements, Field Measurements, Sample Transportation, Dispatch and Processing, and Data Management);
- Describe the data processing methodologies (data consistency and contour generation) and the publication of data related to the monitoring of surface water quantity and quality and the sediment monitoring system within the scope of the existing RCA, RHA and ETS reference stations.
- Of all the monitoring points of the institutions involved, work in coordination with the institutions to identify the points that the institution would be able to share data at the regional level in the ORA (through APIs and/or other modes) in a continuous, sustained and uninterrupted manner in order to comply with the application of ACTO monitoring protocols and monitoring networks.
- Develop a proposal for a national capacity building program based on integrated monitoring to operate the water quality and quantity monitoring system and the sediment monitoring system in the Amazon, based on the application of the Monitoring Protocols and the conceptual framework of the Integrated Platform for Integrated Water Resources Management of the SAP/ACTO-GEF Project and satellite information;
- Prepare specific technical reports on the State of the Environment of the Amazon Region (State of the Environment and Regional Works) that will be determined by the Regional Coordination of the Project;
- Support the demands of the Regional Project Coordination for the implementation of the Integrated Platform for Water Resources Management in the MC/ACTO, RCA, RHA monitoring networks and the ETS Program.

## **4.2 Specific activities to achieve Objective 2:**

### **4.2.1. Activities for the consolidation of the Regional Water Quality Network**

- To coordinate technically with national institutions to consolidate the agreements to establish the Water Quality Monitoring System within the framework of the ORA and the Integrated System for the Integrated Management of Water Resources of the SAP;

- Coordinate with national institutions to allow water quality data to be shared between OPERATORS and ACTO-ORA, facilitating their tasks;
- Support institutions for the internalization of the use of satellite water quality information that will be provided within the scope of the SAP.
- Assess national capacities for the use of water quality indices;
- Carry out a survey on the status of accredited laboratories, their accreditation process, technical standards and others.
- Support the intercalibration process and prepare reports on the progress of the laboratory intercalibration and monitoring system, for the dissemination of results.
- Support the development of a training program to increase national capacities for the management of the Integrated Water Resources Monitoring System and the environmental reporting of the Amazon Basin, promoting gender balance in the different stages of development.

#### **4.2.2 Activities for the consolidation of the Amazon Hydrometeorological Network**

- Compile information at the national level, taking into account existing information systems;
- To technically articulate with national institutions the consolidation of the agreements of the Hydrometeorological System within the framework of the ORA;
- Coordinate with national institutions to allow access to data on water resources to be shared between OPERATORS and ACTO-ACTO, facilitating their tasks;
- To evaluate national capacities in relation to the use of models for the calculation of water balances and the generation of hydrological scenarios in the Amazon Region;
- Support institutions for the internalization of the use of satellite information of level measurements and other measurements that will be provided within the scope of the SAP;
- Prepare reports on the status of progress of the monitoring system, for the dissemination of the results;
- Support the development of a training program to increase national capacities for the management of the Integrated Water Resources Monitoring System and the environmental reporting of the Amazon Basin, promoting gender balance in the different stages of development;
- Articulate and support the strengthening/installation of a Situation Room, the computer systems that are being used in the country and their interoperability with the ACTO Regional Situation Room.

#### **4.2.3 Activities to consolidate a regional monitoring program for erosion, sediment transport and sedimentation (ETS) processes in the Amazon basin**

- Compile information at the national level, taking into account existing information systems;

- Serve as a technical liaison with national institutions to consolidate agreements for STD monitoring;
- Assess national capacities in relation to the use of models for the generation of hydro-sedimentary scenarios and the calculation of sedimentometric balances;
- To technically articulate with national institutions the consolidation of the agreements of the Hydro-sedimentological System in the context of the ORA;
- Prepare reports on the progress of the monitoring system, for the dissemination of the results.
- Support the development of a training program to increase national capacities for the management of the Integrated Water Resources Monitoring System and the environmental reporting of the Amazon Basin, promoting gender balance in the different stages of development;
- Articulate and support the strengthening/installation of a Situation Room in the country and its interoperability with the ACTO Regional Situation Room.

## 5. Products

*All products must be delivered according to the format to be provided by the PCU in order to achieve comparability and facilitate their systematization and integration;*

### **First Product. Work plan containing:**

- a) Details of the activities to be carried out to achieve each of the specific objectives and activities proposed in this TOR;
- b) Prior collection of the documentation and other resources necessary for the performance of the work and, when possible, identification of the sources of information to be consulted;
- c) Execution schedule in which the following will be presented:
  - (i) The activities to be carried out, the resulting outputs and the specific objectives;
  - ii) A detailed plan that includes virtual/face-to-face meetings with partners from the hydrological and environmental institutions of the Member Country. This plan includes an initial mapping of the institutions involved related to quality, quantity and ETS monitoring.

### **Second product. Report on the current institutional status and on the data management systems for the Monitoring of Water Resources (present the results of the activities item 4.1), which allows:**

- a) Document on the current state of the national scenario that addresses all the activities of point 4.1. and other relevant ones such as the existing priorities for the water resources sector in the country.
- b) Analysis document with the contents produced in response to the demands of the SAP, identifying:
  - i) Strengths and weaknesses, opportunities and threats for the operation and management of the Integrated Water Resources System in the country;

- ii) Identify national partners to consolidate the regional long-term monitoring platform;
- iii) Given the understanding of the current reality on the subject, how could the country be classified in terms of:
  - Operability;
  - System governance;
  - Access to information;
  - Information production.
- b) Proposal of the possibilities for improvement will be suggested to the national partners in the context of the demand for the implementation of the Monitoring System and the integrated platform for IWRM;
- c) Specific reports on the contributions that the SAP implementation project can make to meet the demands of each country in relation to the issue.

**Third Product. Report on the consolidation and contribution from the national to the regional level in the implementation of the Water Quality Monitoring Network.**

- a) Based on the analysis of the current national status carried out with respect to the monitoring of water quality and the data and information collected, prepare a report regarding Water Quality in relation to international references and its adequacy to the system of indicators: a) TWAP - Transboundary Water Assessment Program and b) SDG 6 - Guide for the integrated monitoring of SDG 6: Good practices for national monitoring systems, determining the degree of progress of the existing one in the PM, in addition to verifying the gaps and failures that exist.
- b) Report with recommendations for improvements to the Water Quality Network for the achievement of the objectives of the SAP and the application of the Monitoring Protocols.
- c) Report on the implementation of the uses of information from disruptive technologies (satellite information) in partner institutions.
- d) Report, previously agreed with the laboratories, on the follow-up for the laboratory intercalibration process, taking into account the reality identified in each Member Country in the implementation of these actions;
- e) Base documents/complementary agreements (if necessary) to interoperate (API) and establish the Water Quality Monitoring network within the framework of the ORA and the Integrated System for Integrated Water Resources Management, including

interoperability of systems and data exchange between the OPERATORS and the ACTO-ORA.

- f) Updated and improved training program focused on water quality monitoring.

**Fourth Product. Report on the consolidation and contribution from the national to the regional level in the implementation of the Water Quantity Monitoring Network.**

- a) Based on the analysis of the current national status carried out with respect to the monitoring of the quantity of water and the data and information collected, prepare a report in relation to the international references and their adequacy to the system of indicators: a) TWAP - Transboundary Water Assessment Program and b) SDG 6 - Guide for the integrated monitoring of SDG 6: Good practices for national monitoring systems, determining the degree of progress of those existing in the MC, in addition to verifying the gaps and failures that exist.
- b) Report with recommendations to improve the Water Quantity Network to achieve the objectives of the SAP and the application of monitoring protocols, including the process of automating data collection (use of automatic stations and obtaining data via satellite), taking into account the reality identified in each MC in the performance of these actions.
- c) Base documents/supplementary agreements (if necessary) to interoperate (API) and establish the Water Quantity Monitoring network within the framework of the ORA and the Integrated System for Integrated Water Resources Management, including system interoperability and data exchange between OPERATORS and ACTO-ORA
- d) Updated and improved training program.
- e) Accompany in the assembly and commissioning of the national situation room.

**Fifth Product. Report on the consolidation and contribution from the national to the regional level in the implementation of the Regional Program for the Monitoring of Erosion, Sediment Transport and Sedimentation Processes (ETS).**

- a) Based on the data and information previously collected, prepare an analysis report to establish a Regional Monitoring Program of the ETS and its potential in terms of monitoring indicators, in addition to verifying the gaps and failures that exist;
- b) Based on current national priorities and capacities, prepare a report with recommendations for improvements for the development of a Regional Monitoring Program for Erosion, Sediment Transport and Sedimentation (ETS) processes based on previously collected data and information.

**Sixth Product. Final report.** Synthesis of experience.

**6. Qualifications, requirements and professional experience**

**6.1 Qualifications – Education**

The consultancy requires a completed higher education in Earth Sciences, Natural Sciences, Environmental Sciences, or related areas related to the objectives of this consultancy. Master's and/or

doctoral degrees in areas that meet the objectives of this announcement, especially in water resources management, are desirable.

## 6.2 Requirements

- A good knowledge of the use of office suites (e.g. MS Office), especially with the use of electronic spreadsheets;
- Familiarity with the development of work plans and the management of their execution;
- Know how to use project management and information management tools;
- Ability to work in a team and communicate in at least two of the ACTO languages;
- Be open to a multicultural and multilingual environment;
- Good institutional/sectoral relationship to interact between local institutions and regional technical coordination in their country of origin/interaction.

## 6.3 Professional experience

- More than 4 years of proven work experience in the field of water resources, of which at least 2 years in the Amazon region;
- Experience in technical and/or scientific cooperation projects, especially international projects.

## 7. Contractual term

The Consultant will sign a contract per product with SP/ACTO for a total term of 18 months.

### 7. Payment Terms

Payments will be made according to the delivery of the products with the validation of the project coordination and the SP/ACTO and will correspond to a percentage of the total amount of USD 16,000 (Sixteen thousand dollars), as shown in the table below, in which the products are presented, the percentage values corresponding to each one and the month of the contract period counted from the signing of the same.

#### 7.1. Payment schedule expressed by purpose, products and deadlines

Objective	Main Products	% of the value of the delivered product	Delivery Deadline
<b>General</b>	1. Product (Work Plan)	<b>10</b>	<b>By 1st month</b>
<b>General</b>	2nd. Product	<b>20</b>	<b>4th month</b>
<b>1</b>	3rd. Product	<b>15</b>	<b>8th month</b>
<b>2</b>	4th. Product	<b>15</b>	<b>11th month</b>
<b>2</b>	5. Product	<b>20</b>	<b>14th month</b>
<b>1 and 2</b>	6. Product (final report)	<b>20</b>	<b>18th month</b>

## **8. Supervision and Monitoring**

The supervision of the consultancy will be in charge of the PS/ACTO and the regional coordination of the project, which will appoint the supervisors of the contract, in coordination with the respective National Project Coordination Unit in the PM. Products must be delivered to the NPCU and SP/ACTO. The products delivered by the consultant within the deadlines mentioned in item 7 will be subject to review by the aforementioned instances, within a period of no more than fifteen days after their receipt. Subsequently, the general and specific comments will be forwarded to the Consultant for necessary adjustments. These revisions must be sent back to those instances for approval.