



Invitation to Bid No. 2-2024:

Procurement and Installation of PCD Equipment for Peru

The Amazon Cooperation Treaty Organization (ACTO) is pleased to invite qualified companies to participate in the procurement process for the supply and installation of Data Collection Platforms (PCDs). This invitation includes not only the provision of the equipment but also the installation of the infrastructure. Costs related to freight, taxes, fees, and certification required to ensure the effective transmission of data generated by the equipment should be considered.

I. Bid Details

- Opening Date: August 16, 2024
- Time: 9:00 AM (Brasília local time)
- Type: Global Cost Public Bidding

II. Technical Specifications

Each PCD must include:

- Data collection platform;
- GOES satellite communication system;
- River level and precipitation sensors;
- Solar power system; and
- Foldable mast and electrical protection.

III. Bidding Company Requirements

Interested companies must present/have:

- Articles of incorporation;
- Company bylaws;
- Appointment of the legal representative;
- Legally constituted shareholder associations;
- Micro and Small Enterprises (MyPYMES);
- Cooperatives capable of offering goods and services; and
- Representation office in Peru and registered with SUNAT (desirable).

IV. Economic Proposal

Technical and economic proposals must include:

- Brand and manufacturer;
- Unit and total value;
- Total cost of the equipment package;



- Breakdown of additional costs (freight, taxes, fees);
- Details of civil works necessary for installation;
- Applicable taxes; and
- Proof that the equipment is certified and/or in the process of certification according to Peru's requirements (desirable).

V. Proposal Submission Deadline

- Proposals must be submitted according to the following schedule:

Date	Activities
August 16	<ul style="list-style-type: none">• Opening of the bidding process and start of proposal submission
August 16 to September 15	<ul style="list-style-type: none">• Consultation period
September 15	<ul style="list-style-type: none">• Deadline for proposal submission
September 16 to 30	<ul style="list-style-type: none">• Proposal opening and evaluation period
October 01	<ul style="list-style-type: none">• Notification of Final Results
October 15	<ul style="list-style-type: none">• Contract signing

VI. Submission of Documents and Proposals:

The companies must submit all documents and the financial proposal described in Annex I of the Terms of Reference in digital format, in either Spanish or Portuguese, via the institutional email: projeto.amazonas@otca.org, indicating in the subject line [Amazon Project - Data Collection Platform Acquisition - DCP]. Alternatively, it is preferred to complete the documents using the form at <https://abre.ai/krRW>.

The winning company must submit all supporting documents in virtual format, signed and notarized (or certified by a similar institution that verifies the authenticity of the documents in their country of origin) when requested. Failure to submit or incomplete submission of the documents will result in the disqualification of the company.





BID No. 2-2024 ANA/ABC/OTCA

PROCUREMENT OF PCD EQUIPMENT FOR PERU

The Amazon Cooperation Treaty Organization (ACTO), an international organization seated in Asa Norte, Brasília-DF, Brazil, Postal Code: 70.750-521, hereby announces the release of this invitation for price quotations on August 16, 2024, at 9:00 AM Brasília time. This process is governed by ACTO's current Procurement Procedures and, where applicable, supplemented by reference to the Internal Administrative Financial Instrument (IAF) and other relevant conditions and specifications outlined in this Invitation to Bid and its annexes.

TERMS OF REFERENCE

1. RATIONALE

The “**Amazon Project: Regional Action in the Area of Water Resources**” was carried out during its first phase within the framework of managing the hydrographic network in the Amazon region. The project was implemented from 2012 to 2017 as a joint initiative of Brazil's National Water and Basic Sanitation Agency (ANA), the Brazilian Cooperation Agency (ABC), the Northern and Western South America Department (DAS) of the Brazilian Ministry of Foreign Affairs, and the Amazon Cooperation Treaty Organization (ACTO). Its primary goal was to strengthen the institutions responsible for water management in the eight ACTO Member Countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela.

In December 2016, the second phase of the Amazon Project started with the aim of contributing to the collaborative and sustainable management of the Amazon Basin's water resources. This phase involved the implementation of shared networks for hydrological and water quality monitoring, the development of a database on water resources and climate change, and the dissemination of knowledge about the Amazonian reality. Additionally, technical training programs were implemented for staff from institutions responsible for water resource management in ACTO Member Countries. This second phase builds on the successes of Phase I, which helped to enhance the technical capabilities of the institutions tasked with managing this critical basin.

ACTO is tasked with overseeing the vast Amazon Basin, where the Madeira River sub-basin is particularly critical due to its susceptibility to both seasonal floods and increasingly frequent droughts. The installation of hydrometric stations is crucial to enhance monitoring in this region and throughout the Basin. Given that 80% of the Madeira River sub-basin extends into Bolivian territory, with portions also in Peru and Brazil, the ACTO is contributing by donating 9 Data Collection Platforms (DCPs) through the Amazon Project, 4 of which are destined for Peru and 5 for Bolivia. This effort aims to strengthen monitoring capabilities, thereby enabling more effective, integrated management of the basin



and improving responses to extreme conditions, whether floods or droughts, within the Madeira River sub-basin.

In this context, it is proposed the procurement of a company to supply and install the PCD equipment, including the necessary infrastructure, freight costs, taxes, certification, and other requirements for its installation and operation

2. IDENTIFICATION

As part of the management of the hydrographic network in the Amazon region, eligible companies are invited to participate in the bidding process for the acquisition, supply, and installation of Data Collection Platforms (PCDs), including the necessary civil works and infrastructure for their installation in the Amazon Basin. This process will be conducted under the global price bidding modality.

The technical specifications for these devices are detailed in Annex I.

3. OVERALL OBJECTIVE

The goal of this bidding process is to enhance the monitoring and integrated management capabilities of the Amazon Basin by installing Automatic Data Collection Platforms (PCDs). This initiative will enable more efficient management of water resources and strengthen the ability to respond effectively to extreme conditions such as floods and droughts.

The acquisition of these PCDs will strengthen the monitoring capacity of Member Countries, leading to more effective and cohesive management of the basin. Consequently, this will improve responses to extreme conditions, whether it be floods or droughts, particularly in the Madeira River sub-basin.

4. SPECIFIC OBJECTIVES

The selected company will be responsible for:

- a. Acquiring and supplying the PCDs and all their components;
- b. Constructing the infrastructure for the installation of the PCDs;
- c. Installing, configuring, and commissioning the PCDs; and
- d. Providing technical training to local personnel for the operation and maintenance of the PCDs.

5. DESCRIPTION AND TECHNICAL SPECIFICATIONS

Each of the four (4) Data Collection Platforms must include the following main components:

- a. Data collection platform;
- b. GOES satellite communication system;
- c. Power Supply System: Including a battery, charge controller, and solar panel to ensure reliable energy;
- d. River Level and Precipitation Sensors;
- e. Mounting System (consisting of a foldable mast and protective/support brackets); and



- f. Electrical Protection System (lightning rods and surge protection devices - DPS).

6. BIDDING COMPANY PARTICIPATION REQUIREMENTS

The participating companies must meet the following general criteria:

- a. Articles of incorporation;
- b. Company bylaws;
- c. Appointment of the legal representative;
- d. Legally constituted shareholder associations;
- e. Micro and Small Enterprises (MyPYMES);
- f. Cooperatives capable of offering goods and services;
- g. Proven Experience;
- h. PCD Station Installation Projects;
- i. Experience Working in the Amazon Basin; and
- j. Knowledge and Application of Specialized Software.

7. TECHNICAL PROPOSAL TO BE SUBMITTED

Interested companies must submit their technical proposals including the following detailed information:

6.1. Equipment Package Information:

- a. Product Specifications;
- b. Brand;
- c. Manufacturer;
- d. Unit and Total Value;
- e. Product Description: Model and whether it is approved in Peru; and
- f. Warranty Period.

6.2. Team Formation:

- a. Technical Manager;
- b. Postgraduate degree in Hydrology, Meteorology, or related fields;
- c. Civil Engineer;
- d. Experience in water infrastructure projects;
- e. Communications Engineer; and
- f. Experience in telemetry systems and satellite communication.

6.3. Company Experience:

- a. Projects involving the installation of EHA stations;
- b. Details of previous projects, including certificates specifying equipment purchases, costs, etc.;
- c. Experience working in the Amazon Basin:



**PROJETO
AMAZONAS**
AÇÃO REGIONAL NA ÁREA DE
RECURSOS HÍDRICOS



ANA
AGÊNCIA NACIONAL DE ÁGUAS
E SANEAMENTO BÁSICO



OTCA
Organização do Tratado
de Cooperação Amazônica



ABC
AGÊNCIA
BRASILEIRA DE
COOPERAÇÃO
MINISTÉRIO DE RELAÇÕES EXTERIORES



**MINISTÉRIO DE
RELAÇÕES EXTERIORES**
REPÚBLICA FEDERATIVA DE BRASIL

- d. Proof of work performed in the region;
- e. Knowledge and application of specialized software;
- f. Proven experience using specialized software for managing hydrological stations; and
- g. Office representation in Peru and SUNAT registration (desirable).

6.4. Certifications and Approvals:

- a. ISO Quality Certifications;
- b. Documentation proving ISO certification;
- c. Necessary equipment approvals in Peru; and
- d. Approvals required by Peruvian legislation.

6.5. Training and Technical Support:

- a. Training Plan;
- b. Detailed training plan for local personnel;
- c. Post-installation technical support; and
- d. Provision of technical support after installation.

6.6. Experience in Similar Projects:

- a. History of similar projects;
- b. Description of similar projects completed;
- c. References and testimonials from previous clients; and
- d. Contacts and testimonials from clients validating the company's experience and capabilities.

6.7. Economic Proposal:

- a. Unit and Total Value of the equipment package;
- b. Detailed breakdown of unit and total costs;
- c. Details of Additional Costs; and
- d. Inclusion of additional costs such as freight, taxes, fees, infrastructure, and/or equipment approval costs in Peru, if applicable.

6.8. Technical proposal:

- a. Equipment Purchase Proposal;
- b. Detailed description of the equipment to be acquired;
- c. Proposed Work Plan;
- d. Schedule including deadlines for delivery of the products specified in these Terms of Reference (ToR)
- e. Information about the Project Team;
- f. Curriculum Vitae (CV) of team members;



- g. Detailed roles of each team member in the project; and
- h. Experience and qualifications, meeting the minimum requirements described above.

6.9. Offer Maturity and Payment Terms:

- a. Validity of the Offer;
- b. Minimum validity of the offer of 90 days;
- c. Payment Terms; and
- d. Clear and specific details about the payment conditions.

8. DESCRIPTION AND TECHNICAL SPECIFICATIONS OF THE AUTOMATIC DATA COLLECTION STATIONS

a) Each of the four (4) PCDs must include:

- Data collection platform for processing and storage;
- Satellite communication system via GOES: transmitter and Yagi antenna;
- Power system: Battery, charge controller, and solar panel;
- Measurement system: river level sensor and precipitation sensor;
- Mounting system: Folding mast and protective and/or fixing supports; and
- Electrical protection system: Lightning rod and surge protection devices.

b) **Delivery Location:**

The equipment must be delivered in a single shipment to the *Servicio Nacional de Meteorología e Hidrología de Perú - SENAMHI* (National Service of Meteorology and Hydrology of Peru) at the following address: Av. Fernando Tupac Amaru G9 A, Urb. Tupac Amaru Distrito de San Sebastián, Cusco, Perú. Subsequently, the equipment will be installed at each of the designated locations. The transportation to the installation site will be the responsibility of the awarded company.

c) **Installation**

- After delivery, the installation of the 4 PCDs must be completed at the designated locations. These installations may be rescheduled, if necessary, in coordination with the contractor, the ACTO, and SENAMHI.
- All accessories for installing all PCD components must be included, including cables, hoses, pipes, supports, connectors, etc.
- A grounding system (one per station) with a minimum capacity of 8 ohms must be implemented, including all materials for this purpose. The grounding system will be connected to the lightning down conductor.

d) **Reception of the Stations:**

- The contractor will be responsible for transporting the goods to the designated locations where the PCDs will be installed. The contractor will cover all costs related to transportation and insurance



during transport and storage until all goods have been dispatched from the warehouse to the installation sites.

- Verification of the equipment upon receipt will involve ensuring that both the hardware and software components of the automatic stations match the specified models and brands, following a protocol that the supplier must outline in their work plan, schedule, and Occupational Health and Safety (OHS) plan. This protocol must be reviewed and approved by the supervising authority (or its equivalent) before the commencement of any work.

e) **Physical Verification**

Physical verification of the equipment will be conducted through visual inspection to ensure that the acquisition includes all items with the specified physical configuration, considering the following aspects:

1. The quantity in numbers; and
2. Physical characteristics of the equipment (dimensions, NEMA4/IP56 protection, manufacturing materials, installation accessories, offered brand/model, etc.).

f) **Installation Location:** The geographic coordinates for the installation of the 4 automatic weather stations (PCDs) are detailed in the following table:

Name of the Stations	Department	Province	Basin	Coordinates		
				Latitude	Longitude	Altitude (msnm)
Limal	Madre de Dios	Manu	Manu	12°13'59.00"S	70°56'22.00"W	323
Atalaya	Cusco	Paucartambo	Madre de Dios	12°53'26.00"S	71°21'38.00"W	555
Puente Inambari	Madre de Dios	Manu	Inambari	13°11'10.00"S	70°23'06.00"W	464
Los Amigos	Madre de Dios	Tambopata	Madre de Dios	12°34'36.07"S	70° 04'10.71"W	180

g) **Data Visualization**

As part of the installation, the contractor must provide WEB-HOSTING services for the visualization of data transmitted by GOES satellites. This service must be included for a minimum period of 2 years and should be accessible from any PC with internet access. The company must provide access credentials (USERNAME and password) with the following minimum functionalities:

- Ability to view data from automatic stations transmitting via commercial GOES / UMTS / GPRS communication systems;
- Ability to analyze/decode messages from relevant automatic stations;
- Ability to control and validate data to ensure maximum reliability of recorded data across the entire network of automatic stations;



- Ability to connect to NOAA/NESDIS servers and automatically download data from automatic stations transmitting to GOES satellites, with large-scale visualization of statistics from the stations;
- Ability to export data in various formats (at least Excel and CSV);
- Ability to analyze and visualize data with graphical analysis (e.g., maximums, minimums over periods of days, months, years) and numerical data visualization;
- Ability to select standard sensors from the sensor library, configuring specific sensor parameters and default values.

9. ECONOMIC PROPOSAL

- Format** The budget proposal must include the date, signature, and seal of the legal representative, along with the company's registration number, and the infrastructure and technical specifications of the equipment to be supplied. The quoted prices must include taxes, freight, fees, and costs related to delivery, installation, and/or equipment certification (it is important to indicate whether the equipment is certified or in the process of certification).
- Delivery Time:** Up to 120 calendar days from the date of receipt of the purchase order by the contractor.
- Warranty of at least 2 (two) years** from the date of acceptance by OTCA. If the manufacturer's warranty is less than this period, the company must extend the warranty for the remaining time.
- Validity of Technical and Economic Proposal:** 90 days.

10. EQUIPMENT DELIVERY TIME

The total execution time for the services will be 120 days (hundred and twenty) from the signing of the contract, and the goods must be delivered according to the execution schedule for acquisition, delivery, construction, and installation of the equipment, which must be included in the proposal.

Activities	Term	%	Payment condition
Contract/Advance	30 days	15%	From the signing of the contract and sending of the fiscal invoice
Delivery of equipment (4 PCD), "item 9"	90 days	35%	Certificate of validation of the internalization of goods from the project's economic entity (ANA) and subsequent invoice submission by the supplier.
Installation of equipment and functionality test	120 days	50%	Certificate of validation of operational status and final delivery with photographic evidence by the project's economic entity (ANA) and subsequent invoice submission by the supplier.

11. PAYMENT METHOD AND PRODUCT DELIVERY SCHEDULE



Payments will follow the table of contract compliance percentages and respective delivery times in the proposal, as follows:

12. ASSESSMENT OF PROPOSALS

Explanation of Criteria:

Economic Proposal (40 points):

- Total Price (25 points): Evaluation of the total proposal value compared to the project's estimated budget.
- Cost details (10 points): Clarity in the cost details, including equipment, freight, taxes, fees, infrastructure, etc.
- Payment Conditions (5 points): Flexibility and clarity in the proposed payment conditions.

Technical Proposal (40 points):

- Active company prepared for business processes with an office in Peru and registered with SUNAT (desirable);
- Equipment Quality (20 points): Evaluation of the brand, manufacturer, technical description, product specifications, and warranty period.
- Work Plan (10 points): Detail of the proposed work plan, including the activity schedule and delivery times; and
- Training and Technical Support (10 points): Training plan for local personnel and provision of post-installation technical support.

Experience and Technical Capacity (20 points):

- Previous experience (10 points): History of similar projects, references, and client testimonials.
- Knowledge and application of specialized software (5 points): Proven experience in using specialized software for hydrological station management.
- Projects in the Amazon Basin (5 points): Experience working in the Amazon Basin.

Table for Assessment

Categories	Criteria	Maximum score
Economic Proposal	Total price	25
	Cost breakdown	10
	Payment terms	5
Technical proposal	Quality of equipment	20



	Work Plan	10
	Training and Technical Support	10
Experience and Technical Capacity Previous experience	Previous experience	10
	Knowledge and application of specialized software	5
	Projects carried out in the Amazon Basin	5
Total		100

12. SUPERVISION AND MONITORING

Consulting supervision will be carried out jointly by PS/ACTO and the National Water Agency - ANA-Brazil, which will designate the contract supervisors.

Products delivered by the company according to the proposed execution schedule will be reviewed by the supervising entities indicated in the contract, within a period not exceeding fifteen days from their receipt. Subsequently, general and specific observations will be directed to the company for necessary adjustments.

The Contracting party, through specially designated technicians, will monitor, supervise, and oversee the work performed by the company.