REQUEST FOR EXPRESSIONS OF INTEREST
SSERVICES OFCCONSULTANCY- EITHERPERATIONSANDEXECUTED BY THEBANCO
PPROCESS OFSCHOICECCOMPETITIVESIMPLIFIED

NPROJECT NAME: Development of the Integrated Solid Waste Management Information System (SIGIRS) in Panama and the processing of information, design, and updating of the website https://hubresiduoscirculares.org/home
SCHOICE#:RG-T4291-P003
MMETHOD OFSCHOICE: Simplified Competitive **PAÍS:**
Regional
SECTOR ORDDEPARTMENT: Water and Sanitation
NNAME OF THECT: Solid waste: accelerating the transformation of the sector and moving towards a circular economy
FFINANCING– CT #:ATN/OC-19993-RG and ATN/CF-20571-RG
ANDLINK TO THE DOCUMENT OFCT:https://www.iadb.org/en/project/RG-T4291

Attention Consulting Firms: Important Update on Registration on the Portal of BEO Acquisitions

As of July 1, all consulting firms, both new and previously registered in theBEO Procurement Portal , they must add their**Business Partner Number**to your organization's profile to participate or continue participating in a BEO acquisition process.

Please refer to the**Frequently Asked Questions** (FAQs) on the Portal for more details about **"How to find or obtain your BP Number."**

Avoid delays,Don't wait until the last minute to complete this update. This process may take up to **48 hours** to complete and could prevent your organization from participate in a BEO Process.

For questions or technical assistance, please use the**live chat** on the BEO Procurement Portal page or email us at:**ocs.procurement@iadb.org**

The Inter-American Development Bank (the Bank) was established in December 1959 to help accelerate the economic and social development of Latin America and the Caribbean. Today, the Bank is a major catalyst in mobilizing resources for the region (For more information about the Bank, see its website atwww.iadb.org) .

Section 1. Purpose of this Request for Expressions of Interest

1.1. The Bank is executing the aforementioned project. The Bank intends to contract the consulting services described in this Request for Expressions of Interest (REOI). The purpose of this REOI is to obtain sufficient information to allow the Bank to evaluate whether eligible consulting firms (CFs) possess the required experience and expertise to provide the consulting services requested by the Bank.

1.2. As defined in the Institutional Procurement Policy (GN-2303-33), participating ECs must be from a Country[1] or Territory[2] a member of the Bank in order to submit an Expression of Interest (EOI). CIE's with the required experience relevant to the engagement will be evaluated. The Bank will evaluate and rank the EOIs submitted by the CIE's that have expressed interest. The Bank will invite CIE's to submit a proposal in the order in which they have been ranked. If the proposal of the top-ranked CIE is acceptable, it will be invited to negotiate a Contract. If negotiations with the top-ranked CIE fail, the next-ranked CIE may be invited to submit a proposal and negotiate.

1.3. This REOI should not be construed as a Request for Proposal or an offer to contract and does not obligate the Bank in any way to contract any company.
EC. The Bank reserves the right to reject any and all participating ECs for any or no reason, without giving any explanation. The Bank assumes no obligation to select a participating consulting firm. The Bank will not provide any information on the reasons why any participating EC was or was not included on the shortlist.

Section 2. Instructions for eligible consulting firms

2.1. Expressions of interest must be sent using the *IDB BEO Procurement Portal* (the Portal) (http://beo-procurement.iadb.org) before the **September 17, 2025.** 5:00 PM. (**Washington, DC time**) in PDF format (Max. 45MB).

2.2. To access the Portal, the EC must generate a registration account that includes

[1] **Member countries:** Argentina, Austria, Bahamas, Barbados, Belgium, Belize, Bolivia, Brazil, Canada, Colombia, Costa Rica, Chile, Croatia, Denmark, Ecuador, El Salvador, Slovenia, Spain, United States, Finland, France, Guatemala, Guyana, Haiti, Honduras, Israel, Italy, Jamaica, Japan, Mexico, Nicaragua, Norway, Netherlands, Panama, Paraguay, Peru, Portugal, United Kingdom, Republic of Korea, Dominican Republic, People's Republic of China, Sweden, Switzerland, Suriname, Trinidad and Tobago, Uruguay and Venezuela.

[2] **Eligible territories:** a) Guadeloupe, French Guiana, Martinique, and Réunion - as departments of France; b) the United States Virgin Islands, Puerto Rico, and Guam - as U.S. territories; c) Aruba - as a constituent country of the Netherlands; and Bonaire, Curaçao, Saint Martin, Saba, and Saint Eustatius - as departments of the Netherlands; d) Hong Kong - as a Special Administrative Region of the People's Republic of China.

all the data requested by the Portal. If any of the requested data is not included, the consulting firm will not be able to participate in this or any other selection process carried out by the Bank. If the consulting firm has previously registered, verify that it has ***all*** updated and complete EC information before submitting an EOI.

2.3. Eligible CSOs may form a Consortium/Joint Venture (JV) to improve their qualifications. The Consortium/JV will designate one of the CSOs as the representative responsible for communications, Portal registration, and submission of relevant documents.

2.4. Eligible interested ECs can obtain more information during office hours, from 9:00 AM to 5:00 PM.**(Washington, DC time** .), by sending an email to:**magdac@iadb.org**

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2.5. The Bank hereby invites eligible CFEs to indicate their interest in providing the services described below in the draft Terms of Reference for the consulting services. Interested CFEs should provide information demonstrating that they possess the necessary experience and are qualified to provide the services. To ensure that all responses can be properly evaluated, eligible CFEs should include in their submissions the information requested in the following section, with full and clear explanations.

Section 3. Consulting Services

3.1. Consulting services includethe development of the National Information System on the Integrated Management of Solid Waste (SIGIRS) in Panama, as well as providing technical and functional maintenance to the website of the Solid Waste and Circular Economy Hub, including the development of a georeferenced visualization of final waste disposal sites in Latin America and the Caribbean, as well as communication campaigns to strengthen its positioning and regional reach..

3.2. Although there is no standard format for submitting an EOI, eligible CIs must submit an EOI containing the following information:

a) Basic information: Please provide the official name of the EC, the name of the contact person, the email address, telephone numbers, and the office address of the key contact person responsible for the EOI.
b) Background: Include a description of the EC. The EC may include brochures or documents that provide information about its organization, history, mission, structure, and number of employees.
c) Experience related to the consulting services requested: Please provide all types of evidence that the EC considers appropriate to demonstrate your experience and expertise in providing services similar to those described in Annex A, Terms of Reference (e.g. brochures, reports, studies, description of similar assignments, references to cases where you have provided similar services, experience under similar conditions, availability of appropriate skills among staff, etc.)

3.3. Estimated budget:**US$45,000**

Annex A. Draft Terms of Reference

Please note that the Bank may modify the attached Terms of Reference. Shortlisted CIs will be notified of these changes.

Terms of Reference

1.Background and Justification

1.1. The Inter-American Development Bank (IDB) supports Latin American and Caribbean (LAC) countries in their efforts to universalize access to solid waste management services, promoting the transition to circular economy models, encouraging waste recovery, and ensuring proper final disposal. This support is provided through technical cooperation, investment financing, institutional strengthening, knowledge generation, and technological innovation.

1.2. With the aim of improving the availability, quality, and use of data in the sector, the IDB, with the support of the United Nations Environment Programme (UNEP) and the Global Methane Hub, launched the Solid Waste and Circular Economy Hub (http://hubresiduoscirculares.org/home), a regional open data platform that integrates statistical information, technical tools, and visual resources on solid waste management and its links to climate change, the Sustainable Development Goals, and the circular economy.

1.3. The Hub has established itself as a key instrument for the digital transformation of the sector, supporting countries in the development of their own national information systems,

promoting the harmonization of indicators and facilitating the monitoring and evaluation of sectoral performance. Digital transformation in this context involves not only the adoption of new technologies but also an institutional evolution toward the strategic use of data in decision-making, sectoral planning, and continuous service improvement.

1.4. Along these lines, the IDB supports the national government in developing an information system for comprehensive waste management, in compliance with the obligation established in Law 276 of 2021. This system will collect and analyze data related to waste generation, collection, treatment, and disposal. This system has been conceptualized as an institutional platform, managed by the Urban and Residential Cleaning Authority (AAUD).
which integrates key information on coverage, infrastructure, employment, generation, use and final disposal of municipal solid waste.

1.5. The Hub promotes the digitalization of key processes such as data collection, validation, analysis, and visualization; the development of modern and interoperable IT architectures; and the integration of emerging technologies such as artificial intelligence, satellite imagery, and advanced analytics. All of this enables countries and municipalities to have up-to-date, comparable, and accessible information, which is essential for designing more effective public policies, attracting investment, and moving toward sustainable, evidence-based management models.

2.Goals

2.1. The objective of this consultancy is to develop the National Information System on Integrated Solid Waste Management (SIGIRS) in Panama, as well as to provide technical and functional maintenance to the Solid Waste and Circular Economy Hub website, including the development of a georeferenced visualization of final waste disposal sites in Latin America and the Caribbean, as well as communication campaigns to strengthen its positioning and regional reach.

3.Scope of services

3.1. **Development of the National Information System on Integrated Solid Waste Management (SIGIRS) in Panama:**

In conjunction with the Urban and Domestic Cleaning Authority (AAUD), a visualization will be developed within the institutional platform (https://www.aaud.gob.pa/) to integrate key information on service coverage, infrastructure, waste generation, utilization, employment, and final disposal. This system will facilitate data uploading, validation, analysis, processing, and visualization, contributing to national planning and the monitoring of key indicators.

3.2. **Development of a georeferenced visualization of final disposal sites waste in LAC in the Solid Waste and Circular Economy Hub:**

The Hub seeks to incorporate cutting-edge technologies, such as artificial intelligence (AI) and geospatial analysis, to detect and map final disposal sites using satellite imagery. Georeferenced information previously collected by the Bank and available in the bank's GIS will be integrated into the Hub, facilitating a regional visualization of these sites, their evolution, and characteristics, through a geovisor.

3.3. **Maintenance and updating of the Solid Waste and Circular Economy Hub:**

The Hub's operation, technical updates, and content improvements will continue, ensuring its sustainability, accessibility, and relevance for users in the region, including technical support and updated indicators.

3.4. **Promotion, visibility and strategic positioning of the Hub:**

They will design and implement communication campaigns to highlight the resources available on the platform, position the Hub as a regional benchmark, and strengthen the data ecosystem for the solid waste and circular economy sector in LAC.
The provider carrying out the project must review and contract security, anti-blocking, and other processes required for the website's proper functioning.

4.Key activities

4.1. Development of the Integrated Solid Waste Management Information System (SIGIRS) in Panama, based on the manual containing the system's conceptual design, which describes the processes, information, user types, and baseline information.
The firm will work in close coordination with the consultant who developed the conceptual design, who will provide support to address any conceptual concerns that arise during this stage. The firm will also work closely with the AAUD's technical and IT teams to ensure that the system's functional and visual design meets institutional needs and is sustainable over time.

a. Functional design of the system (UX/UI).

- Design the functional and visual architecture (UX/UI) of the SIGIRS system from the design conceptual.
- Develop wireframes, mockups, and navigation structure based on the conceptual design.
- Identify user profiles and main system flows. either
  Defining the flow of data collection and upload by users external to the AAUD and defining the structure and format of the data to be uploaded are key.

  either A hierarchy of roles and access should be considered, taking into account that there will be users external to the AAUD.
- If necessary, conduct interviews and apply other methodologies to gather information that allows us to understand the AAUD's expectations and user experience.
- Identify the technological capacity of the organization
- Validate the proposal with the AAUD and the IDB team.

b. Define the technical architecture

- Design the system architecture with its components and relationships. It should include the integration of SIGIRS into the AAUD website.
- Document technical requirements for the implementation, operation, and maintenance of SIGIRS. Incorporate best practice recommendations for information security and system reliability, including, among others: acquisition and periodic renewal of security certificates, access and credential management, backups, periodic platform updates, and measures to ensure service availability and continuity.

- Raise the first version of the solution's maintenance and operation plan.
- Validate the proposal with the AAUD and the IDB team.

c. Development of the web system frontend

- Program the user interface of the web portal in Spanish.
- Implement validated UX/UI design.
- Enable data upload forms, navigation filters, and basic display.
- Validate the frontend with technical and functional users.

d. Backend development and data structure

- Develop the system backend (server logic, APIs, database integration, etc.).
- Program user validation, authentication, and authorization functionalities.
- Integrate mechanisms for loading, storing, and structured data management.
- Ensure interoperability and secure data flows.

e. Development of interactive visualizations

- Design of interactive dashboard visualization (Power BI or equivalent tools).
- Incorporate key indicators: coverage, infrastructure, employment, generation, utilization, disposal, among others defined.
- Integrate download buttons (PDF, Excel) and infographics derived from the analyses.
- Validate visualizations with the AAUD.

f. Implementation of the operational management of the system

- Schedule the system update and administration module.
- Enable validation flows for new data and external requests.
- Prepare the SIGIRS user and technical administration manual.
- Train the AAUD team in the operation, maintenance, and management of the system.

During the development and implementation process and project execution, the security standards declared by ISO 27001 must be followed.

4.2. Development of a georeferenced visualization of municipal waste final disposal sites in LAC, including their design, assembly, and testing, with corresponding infographics available for download in PDF format. This information is based on information collected (metadata, codes, images, and a designed model) by the IDB's solid waste final disposal site detection project using AI and machine learning, previously uploaded and stored in the IDB's Geographic Information System (C4D).

4.3. Preventive and corrective maintenance and updating of the Solid Waste and Circular Economy Hub website, with a 10-hour monthly budget to ensure its functionality and the infrastructure required for its operation. Hours not used for this purpose may be used for Hub updates and development. A monthly analytics report will be submitted on the performance and use of the site, including metrics on visits, downloads, and access to the different sections. Regular content updates will include the addition of new publications, blogs, partner contributions, and documents emerging from the Hub.

4.4. The following service levels are established for incident and request handling:

Table No. 1 Attention to incidents and requirements of the Hub website

Category	Description	Time maximum of answer	Maximum time of solution
Critic – Site fallen	The website is unavailable.	1 hour	2 hours
Critical – Error blocker	Error that prevents navigation or use of the site (example: form not working, login blocked).	2 hours	8 hours
High - Performance	Significant slowness attributed to the website (not infrastructure).	4 hours	16 hours
High - Deployment	Problems arising from updates or deployments.	4 hours	16 hours
Half - Settings functional	Minor changes in content or functionality without complex programming.	1 business day	3 business days
Half - Consultations of use	Questions or requests for validation regarding new features or system usage.	2 business days	According to analysis (max. 5 days) skillful)
Low – Improvements	Changes that imply programming or new non-critical functionalities.	3 business days	Estimate according to scope (it is plan with him IDB)

4.5. Promotion, visibility and strategic positioning of the Hub through the implementation of**3** paid campaigns.

5.Expected results and products

5.1. SIGIRS platform implemented to the client's satisfaction. The following must also be delivered:

to.Complete technical documentation of the system, including: either

Frontend and backend: languages, frameworks, and libraries used, with versions and dependencies.

either Database structure: data model, table dictionary, and relationships. Data location

either and code repositories: instructions for accessing source code and system versions.

either Access keys and credentials: for servers, databases, cloud hosting, third-party services, and code repositories, following secure transfer protocols.

eitherBackup scheduling: frequency, storage location and restoration procedure.

either Security certificates: list of active certificates, expiration date, and renewal procedure.

either Guidelines for updates and new developments, with guidelines on how to maintain compatibility and security over time.

b.SIGIRS maintenance and operation plan.

c.SIGIRS user manuals and guides for end users and administrators.

d.Training for SGIRS users at AAUD and other interested users.

5.2. Implementation of GIS visualization to customer satisfaction.

5.3. Maintenance activity report and monthly data analytics report, including recommendations for improvement.

5.4. Three paid campaigns and their results report, including recommendations for improvement.