Financial cooperation between Germany and ACTO through the German Development Bank - KfW

REGIONAL PROJECT FOR THE MANAGEMENT, MONITORING AND CONTROL OF WILDLIFE SPECIES THREATENED BY TRADE

**TERM OF REFERENCE
CONSULTING FOR:**

Hire a Data Science specialist for the Regional Amazonian Observatory (ORA)

**In the framework of Component 1:
National and regional information and knowledge management systems**

Position/function: Consultancy for the Regional Project for the management, monitoring and control of wildlife species threatened by trade - Bioamazon Project No. 2006-66-222

Funding agency: German Development Bank - KfW German Financial Cooperation

Executing agency: Amazon Cooperation Treaty Organization.

- Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela -

Brasilia, DF - January/2021

Terms of reference for Hire a Data Science specialist for the Amazon Regional Observatory (ARO)

1. Background and justification

The Regional Project for the Management, Monitoring and Control of Wildlife Species Threatened by Trade is based on a commitment between the Amazon Cooperation Treaty Organization (ACTO) and the German Government to fund a Regional Project in the area of biodiversity conservation, forest protection and climate change, with non-reimbursable financial cooperation funds channeled by KfW.

The objective of the project is to contribute to the conservation of the Amazon Biodiversity and especially of the species included in CITES, by increasing the efficiency and effectiveness of the management, monitoring and control of wild fauna and flora species threatened by trade in ACTO's Member Countries.

The project conception has 3 components: National and regional information and knowledge management systems; 2) Strengthening and regional harmonization of national mechanisms/systems/processes for issuing electronic permits; and 3) Strengthening of sustainable management initiatives and traceability mechanisms for Amazonian species.

ACTO's Member Countries (Bolivia, Brazil, Ecuador, Colombia, Guyana, Suriname, Peru and Venezuela), have been generating qualitative and quantitative information in different areas (Forestry, Water Resources, Endangered Species of Flora and Fauna, among others), which are visualized in their national computer systems corresponding to the Member Countries with the support of the PS/ACTO; however, such information is not yet articulated and visualized regionally. It is contemplated in component 1 of the Bioamazon Project to advance the interoperability of the referred national systems with the Amazon Regional Observatory (ARO). For this reason, the beginning of the ARO has been prioritized by PS/ACTO, as a space for articulation in different areas of information in the Amazonian countries, so it is necessary a qualitative advance with technological and operational results until mid-2021.

In this sense, ACTO needs a permanent Data Science specialist, whose fundamental objective is the management and treatment of information from the Amazon within the ARO through the computational tools that are being implemented, that meet the demands of ACTO in its relationship with the Entities of the member countries with which the exchange of information will take place since the identification, collection, standardization, storage, processing and publication of information.

2. Objectives

2.1. General Objectives

Administer and manage the components of the Amazon Regional Observatory (ARO) under the PS/ACTO guidelines that guarantee its operation over time.

2.2. Specific Objectives

- Objective 1. Carry out technical monitoring to ensure the delivery of products from companies hired by PS/ACTO for the implementation of ARO and its thematic modules and integrators, in coordination with the technological advisor Elvis Benites.

- Objective 2. Manage the exchange of data from CM entities to ARO, formalizing agreements, standards, procedures and use of available technological tools.

- Objective 3. Carry out technical activities on the tools defined and implemented for ARO in order to maintain the operating platform with updated information of interest to PM and the general public.

- Objective 4. Disseminate the benefits and advantages of the ARO platform and provide support in the use of its modules to the main users of the CM.

3. Activities

Objective 1. Carry out technical follow-up to ensure the delivery of products from companies contracted by PS/ACTO for the implementation of ARO and its thematic and integrating modules in coordination with the technological advisor Elvis Benites.

- Know the Conceptual Project of the ACTO Knowledge Management and Information System (KMIS), the preliminary project of the Amazon Regional Observatory (ARO) and the detailed project of the CITES module

- Know the objectives of the IT tools proposed for ARO and the thematic modules.

- Know the work plan, products and results that each of the companies responsible for implementing the ARO and the thematic modules must comply with.

- Monitor the activities developed by the companies in order to comply with the products within the deadlines established in the work plan.

- Support the companies responsible for the implementation, providing the information and technological resources necessary for the development of products in accordance with the provisions of the respective contracts.

- Coordinate activities with the internal public of PM entities from PS/ACTO and to support the implementation of ARO and its modules.

- Carry out technical approval reports for the stipulated products received by ACTO.

- Coordinate technical activities with the team of ARO development professionals, whether from the contracted companies or from the PS/ACTO's own staff.

Objective 2. Manage and promote the exchange of data between CM entities and ARO through the formalization of agreements, standards, procedures and the use of available technological tools.

- Identification of potential sources of information providers according to ARO themes and subthemes, focal points and main users of Information in CM.

- Identification and characterization of the thematic information provided by the CM Entities.

- Articulation with the focal points of the Member Countries for the establishment of information exchange agreements and standards with ARO.

- Coordinate and work with CM thematic specialists to define protocols and technical standards that allow the exchange of approved information made available by ARO and CM.

- Design of specific operational procedures between ARO and CMs for the collection, interoperability and storage of specific thematic information, using the technological tools already available.

- Promote specific automation in CM entities that allows the automatic exchange of information between ARO and the Entities.

- Conception and functional recommendations within the comprehensive and thematic modules of ARO.

Objective 3. Carry out technical activities on the tools defined and implemented for ARO in order to maintain the operating platform with updated information of interest to CM and the general public.

- Administration of documentary, tabular and geographical information available on the ARO technological platform.

- Head the ARO information security module

- Perform technical operational activities of collecting, loading, processing and analyzing tabular, tabular and geographic information through the use of computer tools that are defined in the ARO for this purpose.

- Reporting of information on demand by PS/ACTO in the integrated databases of ARO.

- Perform functional tests of the projects delivered by the companies participating in the implementation of the ARO before its acceptance.

- Recommend adjustments and improvements to platforms aimed at strengthening information services.

- During ARO operation, survey of technical and functional requirements for adjustments or improvements to ARO modules.

- Organize software engineering activities in the case of activities or projects that require support from software development professionals

Objective 4. Disseminate the benefits and advantages of the ARO platform and provide support in the use of its modules to the main users of the CM.

- Participate in ARO socialization events and collaborate in outreach activities with the PS/ACTO communication area.

- Train primary CM users to use ARO tools.

- Provide support in the use and exploration of platforms to ACTO's internal and external users.

- Provide proactive and reactive support to the implemented solutions in order to guarantee the desired conditions for using them.

4. Products

Monthly reports of the works and results obtained periodically, they must contain the following:

- the tasks execution schedule
- Activities carried out during the month
- Summary of progress on ORA implementation
- Identified risks and proposed mitigation
- Conclusions and recommendations
- Rescheduling activities (if necessary)

Each report/product must be presented in Spanish in two (2) hard copy originals (Arial 11 font, printed) and magnetic/digital media accompanied by relevant supporting documentation (documents and annexes with drawings and graphics, tables, jpg maps, photos, interviews, contact lists, shapefiles, Excel or other databases, etc.).

Each report/product must contain at least the following document structure: 1-Background; 2-Methodology; 3-Results; 4-Conclusions/Recommendations/Proposals; and 6-Annexes, considering the descriptions in this ToR.

<u>Review, adjustment and approval deadlines</u>

The Technical Support Unit (TSU) as well as the EU-PS/ACTO will evaluate and approve the products and will have a maximum of five (5) working days for review and comments.

The adjustments and observations, if any, will be made by the consultancy within a maximum period of five (5) working days to present a new version with the modifications.

The reports must be approved by the Technical Support Unit (TSU), and by the Executing Unit of the Bioamazon Project of the PS/ACTO.

5. Modality of work and form of payment

The consultant will develop his work for the fulfillment of the results at the ACTO headquarters in twelve (12) months of work from the signing of the contract, the execution of which will be planned with the supervisory body of the PS/ ACTO. For follow-up, regular weekly or fortnightly meetings will be held to determine the progress of the implementation of ARO, the problems and the results obtained.

The following distribution of products and payments was determined by reference:

Payments	Product	% monthly payments	Comments
Monthly payment	Delivery and approval of monthly reports	8,33 %	Each monthly report will be paid 8.33% for 12 months until reaching 100%

6. Application requirements

The proponent must present a letter of introduction with a document of a maximum of 05 (five) pages containing a brief description of his professional experience and the work carried out, as well as the work plan and strategy for the development of consultancy products.

The proponent must present his documents as provided for in annexes 1 to 5 of this Term of Reference.

The selected bidder must be available to start work immediately. For the effective performance of the consultancy service, the consultant or consulting firm must have the following minimum requirements:

6.1. Professional qualification

- Professional with at least 5 years of undergraduate or engineering-level training in computer science / informatics, geographer, statistics, biology or similar.
- Courses on topics related to GIS, Business Intelligent, data processing, digital platforms, Big Data and others.

6.2. Experience Required

- Experience of at least 3 years in technical activities: compilation, processing, standardization, migration, loading and / or analysis of statistical, documentary and / or geographical data.
- Experience of at least 1 year in monitoring projects related to information technology in private companies and / or public entities.

- Experience in planning and organizing work, as well as the ability to monitor the progress of activities and meeting deadlines.
- Experience and advanced knowledge of tools: MS Excel, SQL, Business Intelligent tools like Power BI or similar, GIS geographic information management tools, data processing tools like SPSS, R, BIGData tools and others.
- Experience with evidence for communication (spoken and written), including ability to write reports;
- Ability to relate and communicate fluently remotely and personally to transfer knowledge.
- Knowledge of Spanish, English (spoken and written) and Portuguese (desirable).

7. Service execution site

The consultant will carry out his activities mainly from the PS/ACTO office and remotely, and must carry out videoconferencing interactions with the ACTO technical team, according to the established schedule and when the PS/ACTO requests during the term of the contract.

The consultant must develop his / her work at the PS/ACTO headquarters.

8. Coordination and supervision

The consultant will render his services to the Permanent Secretariat of the Amazon Cooperation Treaty Organization, under the responsibility and operational monitoring of the Executing Unit of the Bioamazon Project and the designated technical team of the Technical Support Unit (TSU) of the PS/ACTO.

9. Duration of the consultancy

The term for carrying out the activities will be 12 (twelve) months from the signing of the contract. If necessary, an additive can be signed with the consultant, after evaluation of this contract and justification that justifies its extension.

The bidder must be available to start work immediately.

10. Price of the consultancy

The consultancy will cost between **USD 36,000.00 (thirty-six thousand US dollars) and USD 48,000.00 (forty-eight thousand US dollars)**, depending on professional experience, **with a monthly fee between USD 3,000.00 (three thousand US dollars) to USD 4,000.0 (four thousand US dollars)** which includes all direct and indirect costs related to fees, as well as supplies, equipment and everything necessary for its successful completion.

11. Presentation of the proposal.

All the documentation must be presented in A4 format, with an index, numbered pages, presenting at the end a final declaration indicating the number of pages that make up the documentation.

The proposal to be submitted must follow the script according to **ANNEX I.**

12nsul. Proposal evaluation

The criteria and scores to be considered in the evaluation of proposals are described in **ANNEX II.**

ANNEX I - ROUTE FOR THE DRAFTING OF THE TECHNICAL PROPOSAL

Article	Detailing
1. Title	Name of the technical proposal
2. Consultant qualification	Name Mailing address: Web page: Identity Mobile Phone/WhatsApp E-mail:
3. Consultant Experience	Presentation of the consultant's professional experience, presenting in detail his experience in the topics related to the Term of Reference (maximum 5 pages). Current summary of services performed according to **Table 01.**
4. Consultant CV	Present the Curriculum Vitae as per **Table 02.**

ANNEX II - CRITERIA FOR EVALUATING AND JUDGING PROPOSALS

Candidates will be assessed for training and professional experience and according to the following criteria:

DESCRIPTION		MAXIMUM SCORE
ACADEMIC QUALIFICATION	Professional with at least 5 years of undergraduate or engineering-level training in computer science / informatics, geographer, statistics, biology or similar. (5 years = 10 points; more than 5 years, 1 point will be credited for an additional year, up to a maximum of 5 points)	15
	Master's degree in technology, information management or similar to the position.	5
	Courses on topics related to GIS, Business Intelligent, Digital platforms, processing, Big Data among others. (1 point per course, up to a total of 5 points)	5
PROFESSIONAL EXPERIENCE	Experience of at least 3 years in technical activities: collection, processing, standardization, migration, loading and/or analysis of statistical, documentary and/or geographical data. (10 points for each year of demonstrated experience)	30
	Minimum experience of 1 year in monitoring projects related to information technology in private companies and / or public entities.	10
	Experience in planning and organizing work, as well as ability to monitor the progress of activities and meeting deadlines.	10
	Experience and advanced knowledge of tools: MS Excel, SQL, Business Intelligent tools such as Power BI or similar, GIS geographic information management tools, data processing tools such as SPSS, R, BIGData tools and others.	10
	Experience with evidence to communicate (spoken and written), including the ability to write reports in Spanish and English.	10
	Ability to relate and communicate fluently remotely and personally to transfer knowledge.	05
MAXIMUM NOTE		**100**

TABLE 01	LIST OF SERVICES IN PROGRESS OR PERFORMED BY THE COMPANY				
ORDER NUMBER (1)	IDENTIFICATION OF SERVICES EXECUTED OR IN PROGRESS COMPATIBLE WITH THE PURPOSE OF THE TERMS OF REFERENCE	EXECUTION PERIOD		CONTRACTING PARTY (Name and address)	CERTIFICATE (2)
		BEGINNING (Month/Year)	END (Month/Year)		
DATE:	CONSULTANT NAME: SIGNATURE:				

(1) In chronological order of start dates

(2) Attach copies of the certifications provided by public or private law legal entities duly certified indicating in the column the order number of the corresponding certification.

TABLE 02	PROFESSIONAL IDENTIFICATION, TRAINING AND EXPERIENCE		

Consultant Name: | | **ID Number** |

Specialization: | **Birth date:** | **Nationality:** | **Address:**

INSTRUCTION (COLLEGE DEGREE ONLY), COURSES, IMPROVEMENT, POST GRADUATION, ETC.

No.	Description	Educational institution or entity	Duration	Year of graduation

PROFESSIONAL EXPERIENCE

Identification of the services provided (Object / Nature; Location; Extent; Quantitative	Role played	Execution Period		Contractor	Final Client
		Month/Year	Month/Year		

Suitable for the function:	Signature

ACTO reserves the right to require, for verification purposes, original documents to support the information provided.