

# TERMS OF REFERENCE

## I. General information

Assignment name	Consultancy services for developing a Catalogue of relevant <i>referential European Earth Observation open-source solutions</i> for knowledge transfer within the <i>Digital &amp; Green Innovation Project</i> led by Expertise France in Chile, Panama and Colombia
Beneficiary	Expertise France
Countries	Europe (for reference open source solutions)
Total estimated number of days	20 man-days over a period of 10 weeks

## II. Context and justification of the need

### 1. EXPERTISE FRANCE

Expertise France ([www.expertisefrance.fr](http://www.expertisefrance.fr)) is the public agency for international technical cooperation. The agency addresses the technical assistance needs of partner countries in the main fields of public action: democratic and financial governance, security, sustainable development, and human development. Through its action in the field, it contributes to the objectives of solidarity and influence of French and European development policy.

With a turnover of 390 million euros, Expertise France (EF) operates in 147 countries and manages more than 350 projects. Expertise France has more than 450 employees at its Paris headquarters and more than 600 partners worldwide. In Latin America, Expertise France primarily intervenes in regional projects, with its office in the region established in Bogota, Colombia, in 2018.

### 2. THE DIGITAL & GREEN INNOVATION PROJECT

Today, the challenges related to climate change are omnipresent, and the search for innovative solutions to strengthen resilience and foster adaptation has never been more crucial. It is in this context that the “Digital & Green Innovation” (DGI) Action, co-financed by the European Union, BMZ and AFD and implemented by a consortium composed of GIZ, Enabel, ESTDEV, Expertise France and AFD, fits into this context. This program aims to promote digital innovation to foster the “Twin Transition” (digital for climate and digital ecology) by supporting entrepreneurial projects.

To meet the challenges of climate change, decision-makers need reliable and innovative data to orient and to take action in the short and long term. To support the development of solutions that improve resilience and adaptation to climate change, the use of available Earth observation data and services will be essential, especially within the framework of the European Copernicus program. Indeed, only satellite data can provide free, reliable and recurrent climate information on a large geographic scale and over long periods of time.

Expertise France’s activities will focus on identifying and accompanying innovative solutions based on geospatial data for climate in Latin America (Output 1.3: “Improved capacities for the integration of Earth observation (EO) technologies and data (Copernicus) by Business support organizations (BSOs) as well as green and digital innovators in Latin America and the Caribbean” which aims to foster the prototyping of advanced, digital and space-based solutions to face climate change challenges).

The main objective of the project led by Expertise France is therefore to strengthen resilience to climate change and scale up adaptation efforts by supporting the development of innovative climate space applications in Latin America and the Caribbean, in particular **in Chile, Panama and Colombia**. Expertise France's operational activities of the DGI project (output 1.3) will be managed by a project Leader based in Bogota, Colombia with the support of its headquarters in Paris. For this purpose, EF will launch a call/Innovation challenge-competition to identify and select 20 companies based in the 3 target countries, at different stage of maturity interested in using EO data from Copernicus for their business. The applications domains will be in line with the global objective of the project and useful for the countries and the whole LAC region. The selected companies and start-ups will be supported by the providing of tailored services, financed by the project.

To select these services, Expertise France will launch a major call for tenders to select European and local companies able to offer appropriate services to accompany companies in the development of their innovative ideas. In addition, Expertise France will develop a specific support and capacity building activities to 6 Business Support Organizations (BSOs), based in the 3 target countries, in the use of EO data for entrepreneurship. The aim is to support the creation of "space incubators" across Latin America, able to specifically support the creation and development of companies using EO data.

The "Digital & Green Innovation" (DGI) project, implemented by Expertise France, focuses on promoting innovative digital and space-based solutions to address climate change challenges in Latin America and the Caribbean (Chile, Panama and Colombia), leveraging Earth Observation (EO) technologies and data use, especially existing relevant digital solutions and the Copernicus program.

To further this mission, there is a need to create an exhaustive catalogue of results, open-source solutions, and services developed in Europe and by local LAC stakeholders. This catalogue will facilitate the transfer of knowledge to local businesses, support innovation, and strengthen the entrepreneurial ecosystem (particularly BSOs) on space EO-based solutions support in the 3 target countries (Chile, Panama, Colombia).

### III. Objectives and desired results

#### 1) General objective

The consultancy aims to develop a catalogue of relevant referential innovative Earth-Observation (EO) open-source tools and solutions projects, developed in Europe that can support knowledge transfer to local businesses and foster entrepreneurship in the 3 targeted countries of the DGI project. The catalogue should focus on solutions that utilize EO technologies and address climate challenges, digital transformation, business development and sustainability.

#### 2) Specific objectives

1. **Catalogue development:** Compile a detailed inventory of relevant open-source EO tools and solutions from Europe. The catalogue will align with DGI's focus on the climate challenges and opportunities in the 3 targeted countries, addressing the trainings and support needs of start-ups, enterprises, and BSOs. The consultant will assess the relevance and applicability of these tools to the specific needs of the companies that may benefit from the project. The catalogue will include only selected open sources able to be transferred to DGI companies beneficiaries from the three priority countries of the project So, a criteria list will be proposed and approved by EF at the beginning of the project.

2. Propose practical recommendations for each selected open-source and services to facilitate the transfer of these solutions to local businesses/innovators, and BSOs, including how these can be integrated into the current LAC entrepreneurial ecosystems, particularly into the three priority countries of the project.
3. For each selected open-source modules and services, identify the partners (such as research laboratories-universities, companies, etc.) that can be mobilized to facilitate and provide the necessary services for an efficient transfer and use.

### 3) Anticipated results and deliverables

- ✓ **A comprehensive catalogue**, including a listing of relevant European open-source tools, and selected solutions from Europe stakeholders, service providers and trainers (with detailed descriptions and contacts, case studies, and use cases for each), and a categorization of solutions by theme (for ex. EO data processing, climate resilience, digital transformation).
- ✓ **A final report and a presentation** summarizing the findings, including practical recommendations for integrating the identified solutions into local innovation ecosystems, specifically targeting DGI's business beneficiaries, as well as recommendations for capacity-building activities for BSOs to promote the adoption of these solutions by local start-ups and companies.

## IV. Description of the assignment

### 1) Planned activities

The senior Expert will be responsible for carrying out this mission, and shall undertake the following tasks:

#### A. Kick-off meeting:

- Organize a kick-off meeting with Expertise France to present and discuss the work plan, methodology and selection criteria of open source tools.

#### 2. Selection Criteria

- Propose a selection criteria map for the open source tools. This selection criteria will be discussed and approved by EF. *Open source tools & services selection criteria should include level of maturity and transfer potential, entity support and relevance to identified challenges.*

#### B. Desk research and European open sources tools assessment:

- Conduct extensive desk research on existing EO project results, open-source tools from Europe (for ex. EO data processing, climate resilience, digital transformation). Focus, but non only, on initiatives utilizing Copernicus data and services for climate change.

#### C. Stakeholder mapping:

- Identify relevant stakeholders/companies, university Labs and service providers in Europe who have developed or are using innovative open-source solutions related to Earth Observation.

### D. Catalogue compilation:

- Select following the selection criteria, compile, categorize, and develop the comprehensive catalogue with relevant descriptions, practical examples and contacts. *For each selected open-source modules and services, identify the partners (such as research laboratories, companies, etc.) that can be mobilized to facilitate and provide the necessary services for an efficient transfer and use.*

### E. Final report and presentation:

- Prepare a final report summarizing the findings including a well laid-out formatted catalogue, and deliver a presentation to Expertise France.

## 2) Coordination

The service provider shall designate a single contact person for project implementation purposes. The Project Leader of the DGI project (Output 1.3) part of the Sustainable and Inclusive Economy Department will be the service provider's sole contact person for Expertise France. Telephone and E-mail will be mentioned within this assignment' contract.

A launch meeting shall be held one week after the contract award has been notified. Close collaboration must take place between the service provider through its designated senior expert and Expertise France's Project Leader, technical expert and also Project Officer from assignment preparation right up to completion. Furthermore, regular exchanges must take place on assignment progress and any difficulties that may be encountered.

## V. Place, duration and terms of performance

- 1) **Implementation period:** 10 weeks
- 2) **Estimative start date:** February 2025
- 3) **End date:** March/April 2025
- 4) **Schedule/programme:**

The provisional programme for assignment implementation is as follows: *20 man/days over a period of approx. max. 10 weeks.* The consultant will work under the supervision of the DGI Project Leader and maintain regular communication. Deliverables will be submitted for review and validation according to the following timeline:

1. **Inception report:** One week after the start of the assignment, outlining the proposed work plan, methodology, and selection criteria of open source solutions.
2. **Preliminary catalogue:** By week 5, submission of a preliminary catalogue for review.
3. **Final laid-out catalogue and report:** By week 9, submission of the final catalogue and report with recommendations.

## VI. Required expertise and profile

### 1) Number of experts per assignment: 1

*Application may be submitted by individual consultants or consultancy firms/offices, the firm or consultant must provide in the application the name and profile (CV) of the assigned expert.*

### 2) Profile of the designated expert responsible for contract execution:

#### ❖ Expert Researcher in Geospatial & Earth Observation-based solutions

##### A. Qualifications and skills:

- Master's degree or equivalent (bac+5) in Earth Observation (EO), Geospatial Sciences, Environmental or Climate Sciences, Geography, Agronomy, Engineering, or a related discipline.
- Specialized training or certification in Innovative program Management, GIS (Geographic Information Systems), satellite imaging, or other Earth observation tools would be an advantage.

Excellent qualities/capacities in:

- Communication
- Teamwork and interpersonal skills
- Knowledge transfer
- Analysis and reporting
- Problem identification and resolution
- Decision-making and taking initiatives
- Excellent written and oral communication skills in English, Spanish and/or French is an added value.
- Ability to map, engage and interview key stakeholders in the target countries.

##### B. General professional experience

- At least 7 years' professional experience in the space and geospatial sector (Earth observation-EO, remote sensing, GIS, or related fields), managing databases, fostering innovation, engaging the private sector, and promoting open data access;
- Experience working with EO and digital open-source tools and facilitating knowledge transfer;
- Strong network of regional contacts in European countries, including BSOs, university' labs, incubators, start-ups & companies, relevant initiatives and open-source solutions and services in digital and geospatial fields;
- Proven experience in conducting assessments and studies (methodology, desk research, assessments, stakeholder's engagement and interviews, reporting and recommendations), particularly in digital innovation, and/or Earth Observation technologies;
- Experience in analyzing innovation projects and working with start-ups and Business support organizations and supporting start-ups or innovation hubs is highly desirable;
- Experience working on projects related to climate change challenges;
- Knowledge of the Copernicus program and its data & services is an asset;
- Familiarity with international cooperation agencies and Latin American countries is an asset.

## VII. Practical information

***- A technical and financial proposal including:***

- ***A CV of the assigned expert highlighting the skills and experience corresponding to those required for this assignment (max. 5 pages), its current individual consultant status or carried by a firm, together with contact details from three professional references of similar missions.***
- ***A summary note (max. 4 pages) detailing the elements required to understand the mission, the methodology envisaged and an indicative timetable for completion (with the number of days of expertise proposed per activity), and including a financial proposal (daily fees in Euro).***