

# Consultation

## Mapping of European climate services

Aerospace Valley

Référence : 22-ADMIN-CS-245

Date : 29/08/2022

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## I. Introduction: presentation of Aerospace Valley

Aerospace Valley is the world's leading competitiveness cluster in the aerospace sector, serving the strategic sectors of Aeronautics, Space and Drones, in the Occitanie-Pyrénées-Méditerranée and Nouvelle-Aquitaine regions.

Ranked in the top three of the world's competitive clusters for the performance of its cooperative R&T projects (619 of which have been financed to date), Aerospace Valley's mission is to lead a dynamic network of international renown, made up of 825 members (companies, research laboratories, training institutions, universities and Grandes Ecoles, local authorities, economic development structures).

Website: [www.aerospace-valley.com](http://www.aerospace-valley.com)

## II. Context and purpose of this document

### 1- Context of the PROTECT project

The Aerospace Valley cluster is involved as a partner in the PROTECT project funded by the European Commission within the framework of the HORIZON EUROPE programme under Grant Agreement Number 101060592.

The objective of this project is to bring together a group of European public actors who could jointly purchase innovative climate services based on environmental observation data to meet the adaptation and mitigation objectives set by the Green Deal. The PROTECT project is a preliminary coordination action that aims to prepare a group of European public actors for a joint procurement of innovative climate services to be launched in 2024 (Pre-commercial Procurement). The project started in June 2022 and will end in June 2024 (24 months).

In the framework of the PROTECT project, the Aerospace Valley cluster is leader of the WP1 task "Mapping of European climate services and market intelligence". Within this framework, Aerospace Valley has to carry out a state of the art of commercial climate services using environmental observation data (Earth observation by satellite, aerial, by drones, IoT, in-situ data, citizen data...).

The objective is to propose an overview of the current market and solutions under development in order to pre-identify solution providers who could be invited to the "Open Market Consultation" procedures that initiate dialog and discussion between public purchasers and solution providers.

Within the framework of the project, Aerospace Valley also contributes to task 2.3 of WP2 "market study, awareness and capacity building of public actors". The objective is to raise awareness among public purchasers of the potential of climate services and to inform them of its evolutions thanks to a regular and analytical market and technological watch.

## 2- Purpose of the consultation

Aerospace Valley wishes to rely on a service provider to carry out a mapping of commercial European climate services (existing and under development) and to carry out a regular market and technological watch for a community of public purchasers.

The objective is therefore to have a service provider capable to provide :

- A mapping of climate services on a European scale of at least 200 service providers in the 5 key areas defined by the project.
- A market and technology watch on climate services

## III. Mapping of climate services and market intelligence

### 1- General information

The Aerospace Valley cluster must carry out a mapping of quasi-operational and operational climate services (TRL>7) or those under development (TRL 4-7) at the European level and update it during the project (at M12 - May 2024 and M15 - August 2024)

To do so, the cluster wishes to rely on a service provider to carry out a desk research to map climate services at a European scale in 5 target application areas:

#### - Energy and Utilities

Utilities include all activities related to water supply, sewage services, electricity, dams and natural gas.

#### - Sustainable urban communities

Green and sustainable urban communities harness their human, natural and financial capital to meet current and future needs in a sustainable manner, with a long-term perspective.

#### - Marine and coastal environment:

Marine environments are aquatic environments with high levels of dissolved salt. They include the open ocean, the deep ocean and coastal marine ecosystems, each with different physical and biological characteristics and therefore representing different ecosystems.

Marine and coastal environments can contain complex ecosystems whose delicate balance and prosperity depend on many environmental factors that influence each other. They are therefore an excellent example of a systematic approach to meeting climate needs (and providing

corresponding services), ensuring that the treatment of one ecosystem indicator impacts on the others in a predictable and favourable way.

### **- Agriculture, forestry and other land uses (including the bioeconomy)**

Agriculture, forestry and other land uses cover a wide range of environments and have great potential for climate services.

Unsustainable agricultural and forestry practices (e.g. overexploitation of soils, conversion of forests to agricultural land) generate large amounts of greenhouse gases and disturb the already fragile balance of local ecosystems. The use of sustainable forest and land management practices with a systemic and long-term impact can instead help these ecosystems to retain and store significant amounts of carbon and preserve their fragile balance.

The products of these sustainable practices could then feed the bioeconomy - a corollary of the circular economy, where renewable biological resources from land and sea (such as crops, forests, fish, animals, micro-organisms, etc.) are used to obtain products, processes and services in all economic sectors as part of a sustainable economic system.

### **- Security and civil protection**

Civil security and protection includes the policies, bodies and mechanisms that a country or region has in place to protect itself against new and urgent threats to the safety of people and/or the functioning of critical infrastructure.

In addition to the mapping to date, the contractor will be expected to carry out a market and technology watch for a community of uninitiated public purchasers in order to open their perspectives on climate services and future developments.

## **2- The need**

### **a- Mapping of European climate services market**

The contractor will have to produce a mapping of the European climate services market that is readable and usable by the PROTECT project consortium. The following information shall be collected for each identified service:

- Name of the service
- Name of the provider
- Contact person
- Location of the service provider
- Web site
- Logo
- Field of application (among the 5 defined in the PROTECT project, cf III.1)

- Type of climate service (according to the taxonomy to be provided by the PROTECT consortium)
- Technologies used (satellites, drones, aircraft, ground sensors, IoT, citizen data...)
- Technological Readiness Level :
  - Very upstream solutions with significant technological barriers that could be overcome in the medium term (TRL <4)
  - Solutions that are not yet mature but have a high potential for operationalisation in the next 4 years (TRL 4-5-6)
  - Solutions in pre-commercialisation or operational phase (>TRL7)

The service provider may use the data collection methodology of its choice. The use of an automated data collection tool available on the web is a plus.

Projects already funded by European and international schemes should be of particular interest (ESA portfolio, CORDIS, ESA BIC Networks, Space Climate Observatory...).

The mapping deliverable will be expected at M6 (end of November 2022), with an update at M12 (May 2023).

The service provider undertakes to make the results of the study and an analytical report available in Excel (csv) format.

## **b - Market and technological watch**

In addition to the mapping, Aerospace Valley wishes to set up a market and technological watch to regularly supply the community of public purchasers with publications and newsletters on the state of the art in terms of climate services. This monitoring will have to be carried out on all the member countries of the European Union at two levels:

- on climate services under development (TRL <7) and in the process of becoming operational (TRL>7)
- on new environmental observation technologies (Earth observation by satellite, aerial observation, drones, IoT, in-situ data, citizen data, etc.) which will open up perspectives for the development of future climate services. E.g.: launch of the Microcarb mission to measure CO2 sources and sinks

The service provider will have to deliver the following elements:

- 18 market watch newsletters (monthly) presenting the latest European climate services projects and new technologies under development that could open up new perspectives for the development of climate services (improved image resolution, refresh rate, lower costs, etc.)

A monthly deliverable (newsletter) will be expected from November 2023 (M6) to May 2024 (M24).

- 10 prospective analysis articles on the climate services market and the potential for the years to come (2 articles per application area)

A deliverable will be expected at M8, M9, M10, M11, M12, M13, M16, M17, M18, M19.

#### **IV. Financial conditions**

The proposed budget (30k€) has been validated within the Eu PROTECT project. It is supposed to allow the realisation of the whole proposal. However, if this does not seem sufficient for the bidder, he can propose a two-part response including:

- The achievable work for the sum of 30k€ (details of deliverables and actions)
- The estimated cost of carrying out the entire service requested. The tenderers will bear the costs of preparing their offers and Aerospace Valley will not be held to any compensation in case of rejection of an offer or if it decides not to retain any offer.

The invoicing procedure and the payment schedule will be defined by the contract.

#### **V. Tendering dates**

Submission of tender: 29/08/2022

Submission of proposals: 26/09/2022

Announcement of the successful bidder: 30/09/2022

Signature of contract: 05/10/2022

Responses must be submitted to [guibert@aerospace-valley.com](mailto:guibert@aerospace-valley.com) in electronic format (PDF or compatible) by **26/09/2022**.

Tenderers must comply precisely with the indications in the call for tenders, in order to ensure the admissibility of their responses. Late submission, beyond the deadline for responses, will result in the response not being accepted.

#### **VI. Formulation of the response**

Proposals must be written in English.

Tenders must contain the following sections:

- Section 1: Administrative proposal and presentation of the tenderer;
- Section 2: Technical proposal, meeting the specifications of the call;
- Section 3: Financial proposal.

The administrative section must provide the following information:

- Identification of the tenderer: present the name of the tenderer and the name of the single contact person in relation to this call for tender.
- Provision of a KBIS extract less than 1 year old or an identification card proving registration in the trade register
- If the tenderer is a natural person, he must provide a copy of his identity card or passport and proof that he is covered by the social security system as a self-employed person.

The technical section must cover all aspects required in the tender specifications. Proposals that deviate from the requirements or do not cover all the requirements may be excluded as not complying with the tender specifications and will not be evaluated.

The financial section must indicate the tender price in Euros. Prices must be quoted free of all duties, taxes and other charges, including VAT, although the amount of VAT may be quoted separately.

The price offered must be a fixed amount. This price must include all charges (fees, meetings, administrative costs, overheads, travel and subsistence, materials, equipment). No additional claims for reimbursement of the above costs will be accepted.

The financial proposal must be made in accordance with the contract price offer stipulated in this document.

## VII. Evaluation and selection

The evaluation of the responses received will be based on the information provided in the contract offer submitted and will be carried out as follows:

- An evaluation committee will be set up within Aerospace Valley and will meet between 26 and 30 September 2022 to examine the proposals received in order to decide on the choice of the service providers.
- The results of this evaluation will be communicated to the bidders as from 30 September 2022.
- The contracts will be established for a start of activities on October 05 at the latest.

Aerospace Valley reserves the right to put an end to the continuation of the mission if the progress of the work does not meet the objectives previously fixed and recalled in the contractual documents.

Aerospace Valley reserves the right to extend this call.

Aerospace Valley reserves the right not to contract at the end of the consultation.