ECMWF Copernicus Procurement

Invitation to Tender



Copernicus Climate Change Service

Volume II

Technical support for the management of ECMWF's ECVs Contracts

ITT Ref: C3S2 120a

ISSUED BY: ECMWF

Administration Department Procurement Section

Date: 28 June 2021

Version: Final





Table of Contents

1	Intro	oduction	. 3
	1.1	Background on the ECVs Contracts	. 3
	1.2	Scope of this ITT	. 3
2	Tech	nnical requirements	. 3
	2.1	WP1: Quality assessment of ECV Contracts deliverables and verification of Milestones	. 3
	2.2	WP2: Coordination with ECMWF and contractors of ECVs Contracts	. 4
	2.3	WP3: Role of Technical Officer for Atmospheric physics ECVs	. 5
	2.4	WP0: Management and Implementation	. 5
	2.5	Deliverables:	. 5
3	Ten	der format and content	. 5
	3.1	Page limits	. 6
	3.2	Executive Summary	. 6
	3.3	Track Record	. 6
	3.4	Quality of Resources to be Deployed	. 6
	3.5	Proposed Management Methodology	. 6
	3.6	Financial proposal	. 7
	3 7	Additional matters	7

1 Introduction

1.1 Background on the ECVs Contracts

During Q4 2021 the Copernicus Climate Change Service (C3S) plans to start five new contracts (ref. C3S2_312a, hereafter also referred to as "ECVs Contracts"), structured in 5 thematic areas, for the continuous supply of Essential Climate Variable (ECV) products derived from observations to the C3S Climate Data Store (CDS). These ECVs Contracts are intended to provide continuity to the current ECV services in C3S. Together, the contracted suppliers for ECVs Contracts will cover 22 different ECVs associated with the domains of atmospheric physics, atmospheric composition, oceans, land hydrology and cryosphere and land biosphere.

All relevant information about the ECVs Contracts, including indicative budgets and approximate timelines, can be found on the ECMWF's Copernicus Procurement Invitation To Tenders (ITT) webpage at https://www.ecmwf.int/en/about/suppliers/copernicus-procurement/update-itts, and the associated Contract Notice available at https://ted.europa.eu/udl?uri=TED:NOTICE:226751-2021:TEXT:EN:HTML. Volume II of the C3S2_312a ITT documents pack (attached as Annex 1 to this document) contains detailed descriptions of the ECVs, tasks and deliverables, Key Performance Indicators, and other technical requirements for the suppliers of those services. All five ECVs Contracts are expected to start in Q4 of 2021 with a duration of 30 months, except for the Ocean ECVs lot (Lot 3), which is expected to last 15 months.

The subject of this Invitation to Tender (ITT) is the technical and contractual management of these operational ECVs Contracts, hence bidders of this ITT shall propose experts with proven technical knowledge in an operational service environment for all domains listed above, as well as project management experience. The experts must be able to work independently in their domains but can rely on ECMWF for input from internal or external scientific specialists where needed.

1.2 Scope of this ITT

The successful Tenderer of this ITT (hereafter referred to as "Tenderer") shall proactively contract manage the ECVs Contracts by:

- the monitoring, reviewing and verification of contract deliverables and milestones of ECVs Contracts for their compliance with the technical and contractual requirements of the ITT C3S2_312a "Essential Climate Variable products derived from observations" (cf. details in section 2.1 below),
- identification and mitigation of risks such as delays,
- the use of experts with the necessary knowledge of ECVs Contracts best practices, so that they can work unsupervised whilst highest possible scientific standards are attained,
- the support of the ECMWF ECV Manager and Contract Management Officer in decision making with regards to quality of performance / deliverables, and payments.

2 Technical requirements

Technical support services are required in the following areas (as listed in sections 2.1 - 2.4):

2.1 WP1: Quality assessment of ECV Contracts deliverables and verification of Milestones

Technical deliverables of ECVs Contracts include a variety of documents that need to be checked for compliance with the scope and technical requirements of the C3S2_312a ITT, scientific integrity, readability, and fitness for purpose. Deliverables of ECVs Contracts also include access to data, i.e. to the climate data records associated with multiple ECV products, either generated by the service providers themselves or brokered from other sources (e.g. EUMETSAT SAFs, other Copernicus services). These data products deliverables must also be checked by the Tenderer for basic compliance with contractual requirements, e.g. verification of data access and readability, metadata and content. Review of the deliverables shall be completed within 5 working days after the deliverables are available, or within any other timelines agreed

Page 3 of 7 C3S2_120a Volume II

with ECMWF on a case-by-case basis. As the data will be used by the Copernicus Data Store, the Tenderer shall also provide support to the CDS team in their assessment of the compatibility of the data deliverables of the ECVs Contracts.

Further in-depth evaluation of the overall scientific quality and fitness for purpose of the ECVs Contracts data products with respect to the C3S programmatic requirements will be carried out independently by other contracted parties as part of the Evaluation and Quality Control function of C3S.

Tenderers shall also undertake monitoring and verification of the ECVs Contracts milestones in order to track potential delays, and assess the knock-on effects of such on the service provision. These shall then be reflected in an updated risk and mitigation plan by the Tenderer.

The Tenderer of this ITT shall provide input and advice to the relevant Copernicus Contract Management Officer in assessing and compiling the Payment Milestones Verification Reports (PMVRs) in scope of payments under ECVs Contracts. At the start of this contract, the appointed Tenderer shall establish the best tracking tools/practices to enable timely implementation of those checks. An evolving ECMWF Content Management Tool and other relevant ECMWF Contract Management System (i.e. Open Text Core or a newly purchased system (ECMWF is currently negotiating for such) shall be used as a reference tool for the assessment of delivered ECV data products as well as deliverables tracking of ECVs Contracts.

The Tenderer of this ITT will need to allow for some flexibility in organizing the contractual checks due to delays in planned provision of documents/products by the contractors responsible for the ECVs Contracts, or in scope of further developments in workflow optimizations and automatizations of the data streams between the contractors of ECVs Contracts and the CDS repository as introduced by the CDS team or the Evaluation and Quality Control activities.

Finally, the experts proposed by the Tenderer shall also liaise with C3S Technical Officers for final approval of contractual deliverables.

2.2 WP2: Coordination with ECMWF and contractors of ECVs Contracts

Regular interactions between the Tenderer with the service managers of each ECVs Contracts, as well as with the ECMWF ECV Manager and Copernicus Contract Management Officer, will be required to help plan for the schedule of deliverables of ECVs Contracts, to deal with technical challenges of ECVs Contracts as they arise, and to develop contingency plans/mitigate any problems, etc. The Tenderer shall produce and maintain the master schedule, actions database and risk register for each of the ECVs Contracts in order to ensure effective monitoring.

The "follow-up" files and/or Content Management Tool (which is currently under development) is to form the basis for a master schedule of deliverables reviewed /rejected / amended that shall be kept up-to-date by the Tenderer throughout the life of the ECVs Contracts, through frequent consultation with ECMWF and the individual ECV contractors.

As a means to share information and ensure consistency of the standards of the deliverables of ECVs Contracts, ECMWF have established a Cross-CDR Working Group (see Section 2.7.2 of Volume II of C3S2_312a ITT) that meets quarterly (or as needed) via teleconference. In addition, quarterly review meetings are organized by ECMWF individually with each ECVs Lot for an approximate duration of an hour. The successful Tenderer shall arrange and attend these quarterly meetings, and shall be responsible for the taking, production and circulation of the minutes, and for monitoring the completion of action points that result from the meetings. Additionally, participation of the Tenderer to the ECVs Contracts' internal project meetings (1 per year, at the premises of the ECV contractors) and to the C3S General Assembly will be required.

Page 4 of 7 C3S2_120a Volume II

2.3 WP3: Role of Technical Officer for Atmospheric physics ECVs

Technical support of ECV contracts is a crucial task to ensure timely provision of state-of-the-art products. ECMWF requires an expert(s) to take on the role of Technical Officer for Atmospheric physics ECVs (Precipitation, Surface Radiation Budget, Water Vapour, Cloud Properties and Earth Radiation Budget). The proposed expert(s) shall conduct the following main tasks:

- Provision of technical support for contract management
- Final approval of all deliverables and milestones
- Liaising with CDS / data provider to ensure smooth preparation of data products in the CDS catalogue. Note: The Technical Officer will not be responsible for the final publication in the CDS catalogue),
- Liaison with the ECV manager, as required, in order to manage unexpected delays that may arise in the operational schedule and delivery of data products.

2.4 WP0: Management and Implementation

As part of the general project management description, the Tenderer shall include the following elements:

- Contractual obligations as described in the Framework Agreement Clauses (Reporting).
- Proposal for payment plan.

The Tenderer shall provide a description of the planned management activities that they will undertake relating directly to this ITT, including the following aspects:

- Quality assurance and control of the technical support services provided;
- Communication and meetings with ECMWF and ECVs contractors on the technical support activities;
- Resources management: planning and tracking tools on workload and performance of the proposed experts;
- Expert selection procedure in case experts need to be replaced or added;
- Conflict resolution, risk assessments and mitigation plans of the contract awarded under this ITT.

As part of the plan, the Tenderer is required to be available for a kick-off meeting (teleconference or face-to-face) and quarterly progress meetings (teleconference or face-to-face) with ECMWF to evaluate the quality and progress of the provided technical support.

2.5 Deliverables:

The Tenderer shall deliver the following deliverables:

- Creation and maintenance of the master schedule, the action list and the risk register in relation to each ECVs Contract live documents to be updated at least on a weekly basis.
- Arranging and managing the Kick-Off and Progress Meetings of the ECVs Contracts to include agendas, minutes, action lists and follow up.
- Arranging and managing the CDR Working Group telecoms to include agendas, minutes, action lists and follow up. Completed reviews of the ECVs Contracts deliverables.
- Inputs to PMVRs, to include a summary and deliverable status reconciliation of ECV contracts, as directed by ECMWF.

3 Tender format and content

General guidelines for the tender are described in Volume IIIB. This section describes specific requirements to prepare the proposal for this tender, along with guidelines for minimum content expected to be included in the proposal, additional to the content described in the general guidelines of Volume IIIB. This is not an exhaustive description and additional information may be necessary depending on the Tenderer's response.

Page 5 of 7 C3S2_120a Volume II

3.1 Page limits

As a guideline, it is expected that individual sections of the Tenderer's response do not exceed the page limits listed below. These are advisory limits and should be followed wherever possible, to avoid excessive or wordy responses.

Section	Page Limit
Executive Summary	1
Track Record	2 (for general) and max. 2 (per entity/expert)
Quality of resources to be	1 (excluding Table 1 in Volume IIIB and CVs with a maximum length of
Deployed	2 pages each)
Work Packages	10 (Table 2 in Volume IIIB, the section on references, publications, patents and any background IP is excluded from the page limit and has no page limit)
Management and	6 (excluding Table 4 and Table 5 in Volume IIIB) + 2 per each work
Implementation	package description (Table 3 in Volume IIIB)
Pricing Table	No limitation

Table 1: Page limits

3.2 Executive Summary

The Tenderer shall provide an executive summary of the proposal, describing the objectives, team and service level.

3.3 Track Record

The Tenderer shall demonstrate for itself and for any proposed experts that they have experience with relevant projects in the public or private sector at national or international level. The Tenderer shall describe in brief terms its company's (including its subcontractors', if any) history and track record in the relevant domain of expertise, as well as recent provision of services in the sector(s) relevant to this ITT. The Tenderer must supply a list of up to three customers to whom similar services to those requested in this ITT have been provided. ECMWF may ask for evidence of performance in the form of certificates issued or countersigned by the competent authority.

3.4 Quality of Resources to be Deployed

The Tenderer shall propose a team providing the skills required for providing operational services that meet the technical requirements set out in Section 2. The team shall include a Service Manager with at least 5 years of experience in management of large-scale projects. The Tenderer shall describe the experience of the Service Manager and the technical project team in performing activities related to the various aspects of this tender.

Please give details of your staff numbers, skills and locations relevant to the services requested (cf. Section 2).

The Tenderer shall insert short summaries and full CVs for the experts they propose to use with details on the technical domains relevant to this ITT they are expected to cover.

The quality of reports and deliverables shall be equivalent to the standard of peer-reviewed publications and practice.

3.5 Proposed Management Methodology

The Tenderer shall outline and justify the proposed management methodology for this ITT in support of ECVs Contracts. The Tenderer shall provide a list of its quality assurance processes and management systems and if applicable, any quality related accreditations or certifications it holds.

Page 6 of 7 C3S2_120a Volume II

3.6 Financial proposal

The Tenderer shall provide an all-inclusive price for the requested services together with a breakdown specifying all constituent elements, such as unit price, quantity/volume, etc. Unit prices shall be firm and fixed and quoted in Euro (€) net of taxes and VAT. For further instructions please see Volume IIIA.

The pricing table (Volume IIIA of this ITT) should provide sufficient details on the costs to be incurred under the contract, including Personnel, travel and other expenses. In the case of Personnel costs, please specify name(s) of the person(s) who is(are) going to provide the activity specified in the "Resource Description".

3.7 Additional matters

The Tenderer may set out any additional information or other relevant matters which they think have not been adequately addressed in the RFP and/or merit further consideration in your proposal.

Page 7 of 7 C3S2_120a Volume II