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**REQUEST FOR PROPOSALS: Design, Manufacturing,  
Transport, and Commissioning of a Containerized  
Data Centre at the CTAO-South in Chile**

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## Table of Contents

<b>Background .....</b>	<b>3</b>
<b>General information .....</b>	<b>3</b>
Invitation.....	3
Timeline .....	3
Clarifications.....	4
Applicable Law .....	4
Canvassing and non-collusion .....	4
<b>Submission .....</b>	<b>5</b>
Language.....	5
Submission .....	5
What to submit .....	5
How to submit .....	7
<b>Selection process .....</b>	<b>7</b>
Administrative Requirements.....	7
Exclusion Grounds .....	7
Selection criteria .....	8
<i>Economic and financial capacity criteria .....</i>	<i>8</i>
<i>Technical and professional capacity criteria .....</i>	<i>8</i>
<i>Technical component of proposal (max 60 points).....</i>	<i>8</i>
<i>Financial component of proposal (max 40 points) .....</i>	<i>9</i>
Final score .....	9
Contract Signing and Performance Guarantee .....	9
<b>Annexes .....</b>	<b>10</b>

## Background

The Cherenkov Telescope Array Observatory (CTAO) is an international effort to build the next generation ground-based observatory for gamma-ray astronomy at very-high energies with more than 60 telescopes located in the Northern and Southern hemispheres. The CTAO will be the world's largest and most sensitive instrument for the detection of high-energy gamma rays. With a detailed design and preparation for construction underway it will be built with a significant number of in-kind contributions from participating institutions.

In January 2025, the [European Commission](#) established the Cherenkov Telescope Array Observatory (CTAO) as a [European Research Infrastructure Consortium \(ERIC\)](#). The ERIC legal headquarters are located in Italy and hosted by INAF in Bologna.

The CTAO Central Organization (CTAO ERIC) is in charge of the construction and operation of the Observatory. The CTAO has two telescope sites, one in the Northern hemisphere on La Palma (Canary Islands, Spain) and one in the Southern hemisphere in the Atacama Desert in Northern Chile, as well as the Science Data Management Centre in Zeuthen, near Berlin (Germany). Further information about the project can be found here: [www.ctao.org](http://www.ctao.org).

The CTAO Central Organisation is funded by scientific institutions and governmental agencies from more than [10 countries and an intergovernmental organization](#), and it works closely with the [CTAO Consortium](#), scientific collaboration that includes more than 1,500 participants from 25 countries, and the [In-Kind Contribution Collaborations](#).

The [European Southern Observatory \(ESO\)](#) is an intergovernmental astronomy organisation in Europe and the world's most productive astronomical observatory. Supported by its Member States, ESO operates advanced ground-based observatories in Chile, providing state-of-the-art research facilities to astronomers worldwide. ESO's mission is to design, construct, and operate powerful observing facilities and foster international collaboration in astronomical research, enabling groundbreaking discoveries about the universe.

## General information

### Invitation

CTAO is hereby inviting interested companies to submit their (technical and financial) proposals for the Design, Manufacturing, Transport, and Commissioning of an Intermediate Containerized Data Centre at the CTAO-South Site Chile.

### Timeline

Deadlines	Date
Deadline for request for clarifications:	25 August 2025 – 23:00*

Response to req. for clarifications by:	1 September 2025
Deadline for Submission of Proposals	<b>8 September 2025 - 23:00*</b>

\*All times Central European Summer Time (CEST).

These dates may be subject to change; any change will be promptly communicated to all suppliers.

CTAO reserves the right to cancel the procurement procedure at any time, and it is not obliged to award the contract.

## Clarifications

Any request for clarification shall be submitted in writing by email, to the following contact address: [ctao-procurement@cta-observatory.org](mailto:ctao-procurement@cta-observatory.org)

All responses, which are considered by CTAO to be of a substantive nature, will be sent in an anonymous way to all applicants invited to submit a proposal. Any questions that are of a sensitive nature must be clearly identified as such on submission.

## Applicable Law

This Request for Proposals is governed by the CTAO ERIC Procurement Policy (attached).

## Canvassing and non-collusion

CTAO reserves the right to disqualify, without prejudice to any other civil remedies available to CTAO and without prejudice to any criminal liability which such conduct by a supplier may attract, any supplier or consortium member who, in connection with this procurement:

- a) offers any inducement, fee or reward to staff members of CTAO
- b) contacts any staff member of CTAO about any aspect of this request in a manner not permitted by this document
- c) fixes or adjusts her/his submission by or in accordance with any agreement or arrangement with any other applicant or consortium member (other than its own consortium members)
- d) enters into any agreement or arrangement with any other supplier or potential supplier or consortium member of any other supplier or potential supplier to the effect that it shall refrain from making a submission or as to the conditions of any submission
- e) causes or induces any person to enter such agreement as is mentioned above or to inform the supplier or a consortium member of the supplier of the amount or approximate amount of any rival submission
- f) canvasses any person in connection with this document who is not one of its own consortium members or one of its own team
- g) offers or agrees to pay or give or does pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other submission or proposed submission.

# Submission

## Language

The proposal, all correspondence and documents related to the tender exchanged by the tenderer and CTAO must be in English.

## Submission

Costs incurred to prepare a proposal must be borne solely by the tenderer. Nothing contained within this Request for Proposal is indicative of intent by CTAO to reimburse the tenderer, in whole or in part, for any costs associated with preparation, submission, or presentation of proposals.

The proposal submitted must remain valid for a period of 60 (sixty) days after the submission deadline.

## What to submit

Proposals shall contain the following documents:

- 1) Identification Form (Annex II)**
- 2) Declaration of Honour on Exclusion and Selection criteria (Annex III)**
- 3) Technical Proposal**

It shall include:

- Design and Architecture of Containerized Data Centre:
  - Detailed layout and design of the containerized data centre,
  - Structural integrity and compliance with site-specific environmental conditions (e.g., seismic activity, temperature, humidity),
  - Dimensions, materials, and reference to licenses for the proposed technical solution (if applicable).
- Power Systems:
  - Interface with CTAO provided power system,
  - UPS architecture,
  - Power distribution within the container.
- Cooling and Environmental Controls:
  - Proposed HVAC system details, including MTBF values,
  - Methods for managing heat and maintaining optimal operational temperature and humidity.
- Fire Safety and Security:
  - Safety Plan, referencing CTAO on-site Safety Plan,
  - Proposed fire detection and suppression system,
  - Physical Security Measures.
- Implementation Plan:
  - Quality Plan,
  - Timeline for manufacturing, installation, and commissioning.

- List of Equipment and Machinery:
  - For use on the CTAO-South site,
  - For use in testing and calibration.
- Warranty and Maintenance:
  - Warrant coverage details,
  - Maintenance and support plans, including consumables
- Documentation and Training:
  - Technical documentation, including manuals and schematics and plans,
  - Training for personnel on all provided systems.

Any other information needed to allow the assessment of the award criteria described below under “Award criteria – Technical component of proposal”.

The Technical Proposal shall not include any price or financial information.

#### **4) Financial Proposal Form**

It shall include a breakdown of the following prices:

- Prices for the hardware including documentation and testing reports,
- Transportation costs,
- Licenses and prices (for 3 years with optional 2-year extension),
- Installation and commissioning prices.

The fees shall be indicated in EURO, in figures and in words and shall be net of VAT (which will be indicated separately when billing) and other taxes and charges. Where there is a discrepancy between the amount in words and the amount in figures, the amount in words shall prevail.

Payment under the Contract will be made in EURO.

#### **5) References relating to Selection criteria.**

All pages of the forms must be returned within the proposal submission: please do not remove any pages. Proposals containing changes or additions will be excluded from evaluation.

## How to submit

Applicants must send an email, including all the required forms duly completed, to the following email address: [ctao-procurement@cta-observatory.org](mailto:ctao-procurement@cta-observatory.org)

All communications between applicants and CTAO are to be made only through the abovementioned email address.

## Selection process

The evaluation of proposals submitted will be carried out in successive steps:

- 1) Administrative requirements check.
- 2) Verification of non-existence of exclusion grounds.
- 3) Assessment of compliance to selection criteria.
- 4) Evaluation of technical and financial proposal.

Proposals that are excluded due to invalidity, the existence of exclusion grounds, or because they do not meet the eligibility requirements will not be taken forward in the evaluation.

## Administrative Requirements

Verification of the validity of the Proposal: proposals will be excluded from the evaluation, for example, if:

- they were received after the deadline
- the documents are not in English
- they do not include the documentation requested initially or by follow-up request
- changes or additions have been made to the tender documents.

## Exclusion Grounds

Suppliers shall be excluded from participation where:

- a) They (or, in case of legal person, a member of their administrative, management or supervisory body) have been convicted by a final judgment relating to:
  - participation in a criminal organisation
  - corruption
  - fraud
  - terrorist offences
  - money laundering or terrorist financing
  - child labour and other forms of trafficking in human beings
- b) They are in any of the following situations:
  - in breach of obligations relating to the payment of taxes/social security contributions
  - bankrupt or subject of insolvency or winding-up proceedings
  - guilty of grave professional misconduct, which renders their integrity questionable
  - have entered into agreements with other economic operators aimed at distorting competition

- where a conflict of interest cannot be effectively remedied by other less intrusive measures
- where a distortion of competition from the prior involvement of the economic operators in the preparation of the procurement procedure cannot be remedied by other, less intrusive measures
- have shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity or a prior concession contract which led to early termination of that prior contract, damages or other comparable sanctions
- have been guilty of serious misrepresentation in supplying the information required for the verification of the absence of grounds for exclusion or the fulfilment of the selection criteria, have withheld such information or are not able to submit the supporting documents required
- have undertaken to unduly influence the decision-making process of the contracting authority, to obtain confidential information that may confer upon them undue advantages in the procurement procedure or to negligently provide misleading information that may have a material influence on decisions concerning exclusion, selection or award.

## Selection criteria

Tenderers must have the necessary eligibility for the proper performance of the contract, in terms of economic and financial standing and technical and professional ability.

### *Economic and financial capacity criteria*

- a) Turnover of the last two financial years above 1mil EUR (per annum).
- b) Adequate Professional Risk Indemnity insurance cover.

### *Technical and professional capacity criteria*

- a) Minimum of 5 years in the manufacturing and installation of containerized Data Centre Solutions.
- b) Minimum of 3 similar projects done in the last 3 years (provide references).

## Award criteria

The proposals submitted by the tenderers that are not concerned by any of the exclusion criteria and that meet the selection criteria, are assessed against the following award criteria: most economically advantageous proposal.

The most economic advantageous proposal shall be determined on the basis of the tender offering the lowest price-quality ratio. The award decision will be based on the following:

### *Technical component of proposal (max 60 points)*

The following elements will be considered:

#	Criteria	Max Points (60/100)
1	Overall Compliance with Procurement Specifications	25/60



2	Delivery and Deployment Time: Proposals will be evaluated on the lead time for production, shipping, and commissioning.	10/60
3	Mean Time between failure (MTBF) of HVAC components	5/60
4	Manufacturing and Test Facilities: Description of facilities where the data centre container will be constructed and tested.	5/60
5	Vendor Experience & Track Record: Previous successful deployments, reliability, and service support.	5/60
6	Suitability of Safety and Quality Plan	5/60
7	Service Strategy	5/60

### *Financial component of proposal (max 40 points)*

Scoring: the maximum number of points allocated to the financial offer is given to the lowest priced proposal. All other financial offers receive points in inverse proportion, e.g. according to the following formula:  $p = y * (x/z)$

where:

p = points for the financial offer being evaluated

y = maximum number of points for the financial offer

x = price of the lowest priced proposal

z = price of the proposal being evaluated

NOTE: The import of all items to Chile will be custom tax-free for the Contractor. The European Southern Observatory (ESO) will handle the custom clearance, and its privileges will therefore apply. It is mandatory for the Contractor to strictly follow the *ESO Packing and Shipping Instructions* (as detailed in the Special Conditions of the Contract).

### Final score

The final score of the proposal will be the sum of the points obtained. The proposal obtaining the overall highest score is the most economically advantageous proposal.

### Contract Signing and Performance Guarantee

Within 30 (thirty) days of receipt of the contract already signed by CTAO, the selected tenderer must sign and date the contract and return it, with the performance guarantee to CTAO. On signing the contract, the successful tenderer will become the contractor, and the contract will enter into force.

If the tenderer fails to sign and return the contract and any financial guarantee required within 30 (thirty) days after receipt of notification, CTAO may consider the acceptance of the tender to be cancelled, without prejudice to CTAO's right to invoke the guarantee, claim compensation or pursue any other remedy in respect of such failure, and the successful tenderer will have no claim whatsoever on CTAO.

The performance guarantee is set at 10% of the amount of the contract and must be presented in the form specified in Annex VII, except where it takes the form of a certified cheque or a cash deposit. It will be released in accordance with the special conditions of contract.

This invitation does not constitute a contract in its own right. By submitting the proposal, the tenderer implicitly accepts CTAO General Terms and Conditions.

## Annexes

- I. STATEMENT OF WORK AND SPECIFICATIONS
- II. IDENTIFICATION OF THE TENDERER
- III. DECLARATION ON HONOUR ON EXCLUSION AND SELECTION CRITERIA
- IV. SPECIAL CONDITIONS OF CONTRACT - *DRAFT*
- V. CTAO GENERAL CONDITIONS OF CONTRACT
- VI. ESO ROUTING AND PACKING INSTRUCTIONS
- VII. ADVANCE PAYMENT GUARANTEE FORM
- VIII. PERFORMANCE GUARANTEE FORM