

REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2025-0057/MOGAPI

(PLEASE QUOTE ON ALL COMMUNICATIONS)

Tel. No.: +43 (1) 26030-6350

E-mail: procurement@ctbto.org

Attn:

Phone:

Fax:

Email:

Date: 16 Apr 25



Subject: Establishment of Infrastructure Related to the Installation of the
Radionuclide Station RN12, Recife, Brazil

Deadline for Submission: 09 May 25

Vienna Local Time: 17:00

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the 'Commission') hereby invites you to submit a proposal that meets the requirements of the attached documents.

You are kindly requested to complete and return the acknowledgement form by email as soon as possible.

If you have any questions you should contact the email address indicated above.

Yours Sincerely,


Selma Bukvic
OiC, Procurement Services Section

ACKNOWLEDGEMENT FORM

| | |
|--|---------------------------------|
| Solicitation No: 2025-0057 | Closing Date: 09 May 25 |
| Title: Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil | Vienna Local Time: 17:00 |

Procurement Staff: Gookeditswe Mogapi

CTBTO Req. No.: 0010026307

Please complete 'A' or 'B' or 'C'
and Return

WITHIN FIVE (5) DAYS

THE PREPARATORY COMMISSION FOR THE
COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (CTBTO)

by email to
procurement@ctbto.org

A: We shall submit our proposal

By: _____
(date)

Company Name: _____

Contact Name: _____

Email/Tel: _____

B: We may submit and will advise

By: _____
(date)

Company Name: _____

Contact Name: _____

Email/Tel: _____

C: We will not submit a proposal for the following reason(s)

- ___ our current workload does not permit us to take on additional work at this time;
- ___ we do not have the required expertise for this specific project;
- ___ insufficient time to prepare a proper submission;
- ___ other (please specify) _____

Company Name: _____

Contact Name: _____

Email/Tel: _____

INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PROPOSALS

1. General

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (the Commission) with its headquarters in Vienna is the International Organization mandated to establish the global verification system foreseen under the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which is the Treaty banning any nuclear weapon test explosion or any other nuclear explosions. The Treaty provides for a global verification regime, including a network of 321 stations worldwide, a communication system, an International Data Centre and on-site inspections to monitor compliance with the Treaty.

This Request for Proposal (RFP) is for the provision of services and supply and delivery of equipment as described in the attached Terms of Reference.

The Proposal shall meet all requirements stated in the Terms of Reference and be submitted in accordance with these Instructions for Preparation and Submission of Proposals. For this project, the Commission is seeking capabilities, which will ensure that the services are delivered and the tasks are accomplished expeditiously and at a reasonable cost.

2. Documents included in this RFP

This RFP consists of the following documents:

- (a) Letter of Invitation
- (b) These Instructions for Preparation and Submission of Proposals, including the Bidder's Statement form, and the following Attachments:
 - Attachment 1: Minimum Content of Technical Proposal and Technical Compliance Matrix
 - Attachment 2: Technical Evaluation Criteria and Method
 - Attachment 3: Financial Proposal Form
 - Attachment 4: Procedure for submission of electronic offers in 2 sealed files
- (c) Vendor Profile Form
- (d) Statement of Confirmation
- (e) The Commission's Model Contract and its Annexes A – B;
 - o The Commission's General Conditions of Contract (Annex A), incorporate herein by reference, found at www.ctbto.org under [CTBTO General Conditions of Contract](#)
 - o Terms of Reference (Annex B)

Note: In the event of award, the Proposal will be incorporated as Annex C to the Contract.

3. Amendment of RFP Documents

At any time prior to the closing date for submission of Proposal, the Commission may, for any reason, modify the RFP documents by amendment. The Commission may consider extending the deadline in order to allow adequate time for considering the modifications in the preparation of the Proposal.

4. Language of the Proposal

The Proposal and all correspondence and documents relating to it shall be in English.

5. **Format and Submission of the Proposal**

The Proposal shall be typed, dated and signed by an official legally authorized to enter into contracts on behalf of your organization. The Proposal shall not contain any interlineation, erasures or overwriting except as necessary to correct errors, in which case such corrections shall be initialled by the authorized person(s) signing the Proposal.

The Proposal shall be submitted electronically according to the attached “PROCEDURE FOR SUBMISSION OF ELECTRONIC OFFERS IN 2 SEALED FILES”.

Proposals sent by regular e-mail unless clearly submitted as electronically sealed bids as indicated above and following the instructions outlined in Attachment 4 will not be considered and may lead to the rejection of the bidder from the procurement process.

The Proposal shall be received not later than the closing date indicated in the Letter of Invitation.

6. **Request for Clarifications and Contacting the Commission**

The Commission will issue clarifications, if required. Bidders are requested to e-mail any questions pertaining to this RFP as soon as possible after receipt of the solicitation documents, but in any case, no later than 7 business days prior to the Closing Date. No requests for clarifications will be entertained after this time. Questions will only be accepted via e-mail be sent to:

E-mail: procurement@ctbto.org
Subject: Request for Clarifications re RFP No. 2025-0057/MOGAPI

The Commission will make all reasonable efforts to issue the clarifications not later than **5** business days prior to the Closing Date.

Except in case of responding to a RFP clarification, no bidder shall contact the Commission on any matter relating to the Proposal after its submission and until the award of the Contract. Any attempt to influence the Commission in its evaluation of the Proposal or the contract award decision may result in the rejection of the Proposal.

7. **Eligible Goods and Services**

The goods and services (if any) to be rendered under the Contract shall have their origin in the States Signatories of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) which is available in the CTBTO website at www.ctbto.org under [Status of Signatures and Ratifications | CTBTO](#). For purposes of this paragraph, "the origin" means the place from where the materials, goods and/or from which the services are supplied.

8. **Type of Contract and Payment**

The Commission intends to conclude firm fixed unit prices contract based on the attached Model Contract. The terms and conditions of payment for services are described in Clause 12 of the attached Model Contract.

9. Preparation of the Proposal

The Proposal shall contain, but not necessarily be limited to, the information described below.

The Proposal shall be composed of the following separate parts:

- I. Technical Proposal;** and
- II. Financial Proposal**

providing, but not limited to, the following information:

PART I: TECHNICAL PROPOSAL

Please state the reference number and the date of this RFP in the Proposal and any correspondence relating to it.

The Technical Proposal shall follow Attachment 1 Minimum Content of Technical Proposal and Technical Compliance Matrix and contain but not limited to the following information.

Personnel

The Proposal shall state the contact details and address (name, telephone and fax numbers, and e-mail address) of the person/point of contact in your company dealing with this RFP.

Statement of Confirmation and Bidder's Statement form

The attached Statement of Confirmation and Bidder's Statement form shall be duly signed and submitted together with the Proposal.

Description of Services

An explanation of the Bidder's understanding of the services to be provided and an overall preliminary operational plan for the execution of the services by providing a section-by-section response to the Terms of Reference indicating how the Bidder meets or will meet each of the technical requirements.

The Proposal shall also provide any other relevant issue which the bidder would like to bring to the attention of the Commission whether or not having cost implications.

Specifications

The Proposal shall include a detailed description of the items proposed and include relevant technical literature.

The Proposal shall also provide any other relevant issue which the bidder would like to bring to the attention of the Commission whether or not having cost implications. This shall include details of warranties/manufacturer's guaranties in respect to any Equipment item.

Commission's Inputs

A description of the expected inputs/resources to be made available by the Commission and at what stage of the services.

Qualifications

Documentary evidence of your qualifications to provide the Services, which shall establish to the Commission's satisfaction that the bidder has technical capability necessary to perform the Contract and other necessary ongoing services as required.

Personnel

Curriculum vitae of key personnel proposed for this contract, including technical experience to perform the Work.

Please note that it is the bidder's responsibility alone to obtain **work permits or visa or similar** for the personnel proposed to implement this project. The Commission will make no effort nor accept any responsibility for obtaining work permits or visa or similar for the Contractor's personnel.

Use of former Preparatory Commission for the CTBTO ("Commission") employees in the preparation of Quotations:

A bidder must not, in the absence of prior written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Proposal or the procurement process if the person:

- a. At any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;
- b. At any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.

Delivery Schedule

The Proposal shall contain a bar chart indicating an estimation of the duration of the Work, including the duration of each task required by the Terms of Reference and the staff to be involved in each Work task, if applicable, as well as the deadlines for submission of all reports. The proposed time schedule shall be in accordance with the work requirements of the Terms of Reference.

PART II: FINANCIAL PROPOSAL

The Financial Proposal shall be submitted in the format set out in Attachment 3 "Financial Proposal Form" attached herewith. Bidders shall provide all the information requested in this matrix but may provide additional related content as attachments.

In presenting the cost for each item, adequate justification and calculation must be included in the cost Proposal. All individual costs shall be stated in EURO or US Dollars and be computed to constitute the relevant total price.

Note that clear and detailed explanations would enable us to evaluate the Proposal promptly and proceed with fewer requests for clarifications/justifications at a later stage. This is also a factor influencing the decision for Contract award.

Taxes

In principle the Commission is exempt from taxes. Since the arrangement under which such exemption is respected varies from country-to-country, the selected bidder will be informed by

the Commission whether tax exemption will occur at source or whether taxes paid by the selected bidder will be reimbursed by the Commission upon submission of the original supporting documentation.

(1) For Austrian companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Contract in respect of the goods/services shall be quoted separately or be separately identified on the Proposal together with information on the nature of the tax and its method of calculation.

(2) For European Union (EU) Companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Contract in respect of the goods/services shall be quoted separately or separately identified on the Proposal together with information on the nature of the Tax and its method of calculation. Due to the VAT exemption applicable to the Commission, no VAT will be charged to the Commission by the EEC Suppliers under the Contract (Ref. EU VAT Council Directive 2006/112/EC, Article 151).

(3) For Non-EU Companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Contract in respect of the goods/services shall be quoted separately or be separately identified on the Proposal together with information on the nature of the tax and its method of calculation. For deliveries to Vienna, Austria, and due to the tax exemption at source applicable to the Commission, no Taxes shall be charged to the Commission under the Contract.

10. Completeness and Correctness of the Proposal

The Commission reserves the right to verify all information furnished by the Bidder in the Proposal through a source of its choice. Any inaccurate information so given may lead to the rejection of the Proposal.

11. Validity of the Proposal

The Proposal shall be valid for 90 (ninety) days after the deadline for its submission to the Commission, unless an extension of validity has been requested by the Commission.

12. Correction of Errors

The Commission will check the Proposal for any arithmetic errors. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.

13. Evaluation of the Proposal

- (a) The Commission, based on the evaluation criteria and method given in Attachment 2, will determine the Proposal that ‘most effectively satisfies the technical and operational requirements set out in the solicitation documents’.

- (b) The Commission reserves the right, as it deems appropriate, to award to a single bidder, to award to multiple bidders in any combination or not to award to any of the bidders as a result of this RFP.

14. Negotiations of the Proposal and Award

The Commission reserves the right to request clarifications on the Proposal and to enter into negotiations regarding technical or commercial aspects of the Proposal before awarding the contract under this RFP.

15. Modification and Withdrawal of the Proposal

Bidders may modify or withdraw their Proposals after their submission, provided that written notice of the modification or withdrawal is received by the Commission by the closing date for the submission of the Proposal. The Proposal may not be modified subsequent to the closing date.

16. The Commission's Right to Reject the Proposal

The Commission reserves the right to accept or reject the Proposal or to annul this procurement process at any time prior to the award of contract without having to inform the bidders of the grounds thereof, without thereby incurring any liability to the bidders.

17. Costs of preparation and submission of the Proposal

Bidders shall bear all the costs associated with the preparation and submission of their Proposal and the Commission will not be responsible or liable for those costs, regardless of the outcome of this RFP.

18. Proprietary Information

All documentation and information contained in this RFP are proprietary to the Commission and shall not be duplicated, used or disclosed -in whole or in part- for any purpose other than to evaluate them and respond to the Commission's request for Proposal or otherwise without prior written agreement of the Commission.

BIDDER'S STATEMENT
PLEASE STATE BELOW & SUBMIT WITH PROPOSAL

Delivery Time:

Shipping weight (kg) and Volume (m³) – if applicable:

List of recommended consumables and spares including prices and details on local availability, if applicable (please tick):

☐ For one year period ☐ For a period of

Warranty period applicable (it shall be for a **minimum of 24 months**, starting from the acceptance of the goods/services by the Commission) – please tick below:

☐ For a two year period ☐ For a period of

Availability of local service in Vienna, Austria (if any):

State country of origin or assembly of all items quoted:

Quantity discount and early payment discount (if any):

Include documentary evidence of qualifications to perform the order, which shall establish to the Commission's satisfaction that the bidder has the financial, technical and production capability necessary to perform the order in its entirety and to provide spare parts and other necessary on-going services as required.

Included in this quotation : **Yes** ☐ **No** ☐

Confirmation that the bidder has reviewed the Commission's Model Contract and the Commission's General Conditions of Contract, and agreed to all terms and conditions.

Yes ☐ **No** ☐

Remarks:

With regards to the software provided with the equipment, state and confirm whether the software licenses are transferable to third parties, i.e. the Commission or the Commission's State Signatories (Member States).

Yes ☐ **No** ☐ **Not applicable** ☐

Remarks:

Name:

Name & Title of Contact Person:

Signature & date:

Attachment 1

Minimum Content of Technical Proposal and Technical Compliance Matrix

Below sets out the **Minimum content of the Proposal (PART I) and the Technical Compliance Matrix including all mandatory requirements (PART II) of the Technical Proposal**. Bidders are requested to demonstrate compliance with the requirements and add any further information in support of their Proposal. Please refer to the relevant section of the Terms of Reference for further explanation of the requirements. The information provided will form an integral part of the technical evaluation process.

Part II of this document must be completed and returned as part of the Proposal.

Part I - Minimum content of the Technical Proposal

| PART I - Item | Minimum content |
|--|--|
| 1. Executive Summary | Provide an overview of the proposal |
| 2. Experience, Resources and Project Management | |
| 2.1 Corporate Profile and Values | <ul style="list-style-type: none">• Brief background of the company, mission/vision, ownership, size, location, number of personnel by type profile, etc.• Company business structure and its authority to execute all Work under the Contract.• In case the Bidder requires the services of subcontractors, the Proposal shall include:<ul style="list-style-type: none">a) Relationship of the Bidder's business to any subcontractor(s) that will be used.b) Names, addresses, legal status, and qualifications of major sub-contractor(s) proposed by your organization.c) The scope of work and nature of subcontracting.d) Description of subcontractor(s)'s capability• Vendor Profile Form |
| 2.2 Corporate Experience | <p>The Proposal should detail the Bidder's experience in executing work of similar scope and complexity and in stakeholder engagement.</p> <p>Provide references of previous projects performed by the Bidder.</p> |
| 2.3 Requirements for the Contractor | <p>The Proposal should address and describe all requirements spelled out under Section 11 of the Terms of Reference (ToR).</p> |

| PART I - Item | Minimum content |
|------------------------------------|---|
| 3. Meeting the Requirements | |
| 3.1 Understanding of the ToR | <ul style="list-style-type: none"> • Please describe your understanding of the services that are to be provided under this ToR, detailing key assumptions that impact the Technical Proposal. • Please discuss how you propose to address the Work Tasks described in Section 2 (Scope of Work) of the ToR. |
| 4. Contractor's key staff | |
| 4.1. Contractor's Team | <ul style="list-style-type: none"> • The Bidder shall identify and provide details of their proposed team in accordance with Section 12 of the ToR. |
| 4.2 Documentation and Reporting | <ul style="list-style-type: none"> • Provide written assurance that all reports, documentation, and communication (written and oral) supplied to the Commission shall be in English and submitted in hard copy and electronic form. |
| 5. Model Contract | |
| | <p>A statement that the Bidder has carefully reviewed the Commission's Model Contract, General Conditions of Contract and Terms of Reference and is in agreement with all terms and conditions. Deviations, if any, shall be clearly indicated and justified in the Financial Proposal in an exception list.</p> |

Part II - Technical Compliance Matrix including all mandatory requirements

| Ref. No. ToR Sections | PART II - Technical Compliance Matrix Requirements | Bidder's Response | | |
|-----------------------------|--|-------------------|---|----------|
| | | Yes / No | Cross-reference to section/page in the Proposal | Comments |
| Overall | The bidder shall demonstrate their Understanding of the Commission's requirements by providing a good Proposal Quality and compliance with the RFP requirements. | | | |
| Overall | Previous experience of executing similar infrastructure projects within the last 5 years | | | |
| Overall | Previous experience of obtaining permits, issuing notices and stakeholder engagement (e.g., Liaison Services, Coordination Services, Support Services, as described in these Terms of Reference) | | | |
| 2 | Technical compliance and quality of the proposal in response to WORK TASK 1: LIAISON | | | |
| 2 | Technical compliance and quality of the proposal in response to WORK TASK 2: BUILDING OF THE NEW STATION INFRASTRUCTURE | | | |
| 2 | Technical compliance and quality of the proposal in response to WORK TASK 3: SUPPORT DURING TRANSPORT, STORAGE, AND INSTALLATION | | | |

| Ref. No. ToR Sections | PART II - Technical Compliance Matrix Requirements | Bidder's Response | | |
|-----------------------------|---|-------------------|---|----------|
| | | Yes / No | Cross-reference to section/page in the Proposal | Comments |
| 5 | Technical compliance and quality of the proposal in response to the requirements for Optional Services | | | |
| 6 | Technical compliance and quality of the proposal in response to the requirements for DOCUMENTATION | | | |
| 7 | Technical compliance and quality of the proposal in response to the requirements for REPORTING | | | |
| 8 | Technical compliance and quality of the proposal in response to the requirements for INSPECTION | | | |
| 10 | Technical compliance and quality of the proposal in response to the requirements for TIME SCHEDULE AND ACCEPTANCE OF WORK | | | |
| 11 | The Bidder is an established company with previous experience in the establishment of infrastructure projects as set out in these Terms of Reference and has been operational for a period of at least 3 consecutive years within the last 5 years. | | | |
| 11 | Bidder's proposal demonstrates knowledge of relevant Local Laws, Codes, Regulations, etc. to allow successful completion of the Work | | | |

| Ref. No. ToR Sections | PART II - Technical Compliance Matrix Requirements | Bidder's Response | | |
|-----------------------------|---|-------------------|---|----------|
| | | Yes / No | Cross-reference to section/page in the Proposal | Comments |
| 11 | The bidder shall confirm that all documentation will be prepared and submitted in the English language | | | |
| 11 | The bidder shall demonstrate their ability to carry out the local work in Recife, Brazil. | | | |
| 11 | The bidder shall demonstrate their ability to communicate in Portuguese language with local stakeholders of the project. | | | |
| 12 | Project Manager - demonstrated experience of at least three (3) years of managing projects of similar scope and complexity as described in this ToR | | | |
| 12 | Other key project staff and CVs | | | |

Technical Evaluation Criteria and Method - RFP No. 2025-0057/MOGAPI

STEP1: MANDATORY REQUIREMENTS (PASS/FAIL)

Compliance with all mandatory requirements is required in order to pass stage 1 of the technical evaluation and to be further considered for stage 2 of the evaluation process

| No. | Ref No. in TOR | Technical Evaluation: PASS/FAIL Criteria | Points and Scoring | | |
|-----|----------------|---|--------------------|--|--|
| | | | PASS/FAIL | | |
| 1 | 11 | The Bidder is an established company with previous experience in the establishment of infrastructure projects as set out in these Terms of Reference and has been operational for a period of at least 3 consecutive years within the last 5 years. | PASS/FAIL | | |
| 2 | 11 | Bidder's proposal shall demonstrate knowledge of relevant Local Laws, Codes, Regulations, etc. to allow successful completion of the Work | PASS/FAIL | | |
| 3 | 11 | The bidder shall confirm that all documentation will be prepared and submitted in the English language | PASS/FAIL | | |
| 4 | 11 | The bidder's propsal shall demonstrate their ability to carry out the local work in Recife, Brazil. | PASS/FAIL | | |
| 5 | 11 | The bidder shall demonstrate their ability to communicate in Portuguese language with local stakeholders of the project. | PASS/FAIL | | |

STEP2: WEIGHTED CRITERIA

Only bidders who pass all above criteria will be considered for stage 2 of the technical evaluation process.

Failing one of the criteria in Step 2 will not result in the entire technical proposal failing provided that the technical proposal obtains a minimum score of 300.

| No. | Ref No. in TOR | Technical Evaluation: Weighted Criteria | Points and Scoring | | |
|-----|----------------|--|--------------------|---------------|-----------|
| | | | Max Points | Weight/Factor | Max Score |
| 6 | Overall | The bidder shall demonstrate their Understanding of the Commission’s requirements by providing a good Proposal Quality and compliance with the RFP requirements. | 5 | 10 | 50 |
| 7 | Overall | Previous experience of executing similar infrastructure projects within the last 5 years | 5 | 9 | 45 |
| 8 | 2 | Technical compliance and quality of the proposal in response to WORK TASK 1: LIAISON | 5 | 9 | 45 |
| 9 | 2 | Technical compliance and quality of the proposal in response to WORK TASK 2: BUILDING OF THE NEW STATION INFRASTRUCTURE | 5 | 10 | 50 |
| 10 | 2 | Technical compliance and quality of the proposal in response to WORK TASK 3: SUPPORT DURING TRANSPORT, STORAGE, AND INSTALLATION | 5 | 8 | 40 |
| 11 | 6 | Technical compliance and quality of the proposal in response to the requirements forDOCUMENTATION | 5 | 9 | 45 |
| 12 | 7 | Technical compliance and quality of the proposal in response to the requirements forREPORTING | 5 | 8 | 40 |
| 13 | 8 | Technical compliance and quality of the proposal in response to the requirements forINSPECTION | 5 | 7 | 35 |

| | | | | | |
|------------------------------|---------|--|---|---|-----|
| 14 | 10 | Technical compliance and quality of the proposal in response to the requirements for TIME SCHEDULE AND ACCEPTANCE OF WORK | 5 | 8 | 40 |
| 15 | 5 | Technical compliance and quality of the proposal in response to the requirements for Optional Services | 5 | 7 | 35 |
| 16 | Overall | Previous experience of obtaining permits, issuing notices and stakeholder engagement (e.g., Liaison Services, Coordination Services, Support Services, as described in these Terms of Reference) | 5 | 8 | 40 |
| 17 | 12 | Project Manager - demonstrated expriance of at least three (3) years of managing projects of similar scope and complexity as described in this ToR | 5 | 7 | 35 |
| TOTAL - Technical Evaluation | | | | | 500 |

Evaluation Method

The minimum **scoring weight** to pass the technical evaluation is 300 score.

The technical evaluation process will be done in two steps:

Step 1: Technical proposals will first be evaluated against the mandatory requirements outlined in the Sheet “Table 1 - Evaluation Criteria”, on a PASS/FAIL basis. Compliance with all mandatory requirements is required in order to pass Step 1 of the technical evaluation and to be further considered for Step 2 of the evaluation process.

Step 2: The technical proposals that have passed Step1 of the technical evaluation process, will be evaluated against the weighted criteria set forth in the Sheet “Table 1 - Evaluation Criteria”.

In order to pass this stage, bidders must obtain a **minimum score of 300** and in accordance with the scoring table indicated below.

Failing one of the criteria in Step 2 will not result in the entire technical proposal failing provided that the technical proposal obtains a**minimum score of 300**.

TABLE 2

| Points | Explanation - to be considered when assigning the points/scoring |
|--------|--|
| 0 | Unsatisfactory - Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion. |
| 1 - 2 | Weak - Does not meet the minimum technical, functional, or performance related criterion. |
| 3 | Good - Meets the minimum requirements of the criterion. |
| 4 | Very good - Exceeds the criterion in some areas. |
| 5 | Excellent - Exceeds the criterion in all areas. |

2. Financial Evaluation and Commercial Evaluation

Once the technical evaluation is finalized, the financial offers of the technically compliant bidders will be evaluated in accordance with the formula given below:

X= Max Available Points * Y/Z

Legend:
X= points to be assigned to the offer being evaluated
Y= price of the lowest priced, technically compliant offer
Z= price of the offer being evaluated

The weight of the technical and financial components is 70% and 30% respectively, subject to contractual and commercial acceptability.

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Attachment 3 - Financial Proposal Form

- 1 All individual costs should be stated in Euro or US Dollars.
- 2 The bidder is requested to submit the dully signed Financial Proposal Form in PDF format.
- 3 The bidder is also requested to submit the Financial Proposal Form in Excel format.
- 4 In principle the Commission is exempt from taxes. The bidder shall state that Taxes are NOT included in the prices;
or no taxes are applicable under the contract, or the Financial Bid includes no taxes.
- 5 **This Attachment 3 is only a price summary, and the bidder shall provide a detailed breakdown of each cost component to allow the Commission to fully evaluate the respective financial proposal.**

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Attachment 3 - Financial Proposal Form

| Item No. | Description | Price in EUR or USD | Comments/Breakdowns |
|-------------|---|---------------------|---------------------|
| 1 | WORK TASK 1: LIAISON | | |
| 2 | WORK TASK 2: BUILDING OF THE NEW STATION INFRASTRUCTURE | | |
| 3 | WORK TASK 3: SUPPORT DURING TRANSPORT, STORAGE, AND INSTALLATION | | |
| 4 | Additional Work Tasks - air conditioning is installed; air conditioning units, circuit breakers, and cabling shall also be provided. | | |
| 5 | Additional Work Tasks - Sufficient space for UPS, RASA, and rack cabinet is guaranteed. | | |
| 6 | OPTIONAL - a visit of their staff, and a potential subcontractor’s staff, to the Commission’s Equipment Supplier’s premises located in Chantilly, VA, United States (maximum 2 days on-site and 2 persons). | | |
| Grand Total | | | |

Bidder’s statement of the total amount of the financial proposal:

This financial proposal is presented in the total amount of EURO/US\$ (Euro/United States Dollars) *[Insert amount(s) in words and figures]* ,
[add if applicable] and [indicate the applicable Tax] in the amount of [EURO/US\$] _____ *[Insert amount(s) in words and figures]*.

“Procedure for Submission of Electronic Offers in 2 Sealed Files”

The Commission invites you to submit your sealed offer (Bid, or Proposal) in response to the solicitation forming part of this request.

Please be sure to follow the instructions below very carefully, so that the documents you submit are encrypted, and cannot be opened without an encryption key (password). If the documents are not encrypted, they will not be accepted as part of this tender process.

CRITICAL INFORMATION:

Create separate zip files for the technical offer and the financial offer (labelling them clearly in the title) with different encryption keys. Instructions for how to do this are provided below.

Step 1: You provide the encryption key (password) for the *Technical Offer only* (in accordance with the below instructions)!

Step 2: After the Commission has performed the evaluation of the Technical Offer, if your Technical Offer is considered to be acceptable, the Commission will request the encryption key (password) for the Financial Offer you have already submitted by the tender Deadline.

Should you have any questions, please send an email to procurement@ctbto.org.

We recommend that you leave yourself plenty of time to complete the below process (including getting any necessary assistance from the Commission), as late offers will not be accepted.

INSTRUCTIONS:

1. In a **WINDOWS** environment, one way of meeting the requirements is as follows.

We recommend using the open-source, free software **7-zip**, but if you are comfortable with other tools, the result should be the same, as long as you can apply encryption to the archive. In the below, we'll use 7-zip as an example. (You can download the 7-zip code for Windows at: 7-zip.org)

2. In **LINUX** environment, you can use, for instance, “sha1sum” on the command line.

Creating the archives for submission

Regardless of whether the offer is a single file, or a collection of files, the files are easier to manage if delivered as a single, compressed file. Compressing the archive is a common way to meet size limitations in email systems.

As an example of how to submit your offer in the required format: assuming you are supplier “SOFTCOMP” and have the following files related to the offer for “RFP 2020-0010/EDWALD”. (*You will need to replace these elements with the real information for your actual offer in line with the relevant Instructions for Preparation and Submission of Proposals/Bids.*) Assuming further that you have installed the 7-zip software on the Windows system you are using.

We will only go through the creation of the Technical Offer (Proposal/Bid) component; the Financial Offer (Proposal/Bid) component is similar.

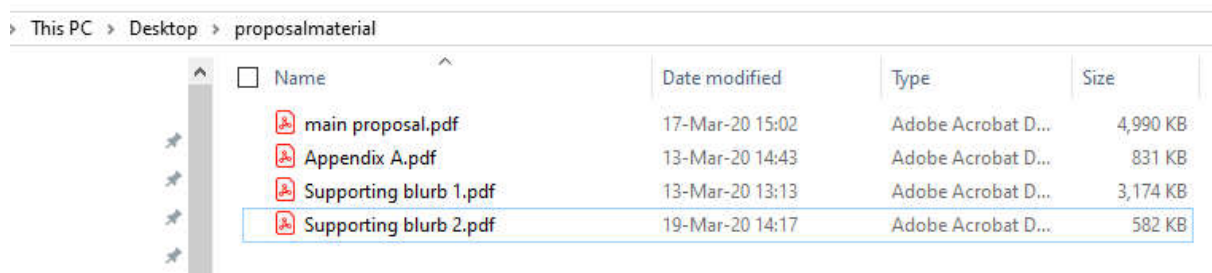


Figure 1 An example set of files to be submitted

Select the four files and right-click; a Dialog box pops up, with one of the options being “7-ZIP >”. Hover your cursor over the “>” part and a few more options appear, select the “Add to archive” option.

Another dialog box pops up (see ‘Figure 2, Creating an Archive’, next page):

Using the standard Windows methods, select a suitable location for the archive (if you don’t change it, the archive gets created right where the selected files are), and give it a name in the form of: “SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID”, of course replacing all the elements with the true values for the offer in question: the actual company indicator, and the actual RFP/ITB identification string. Note that it is not possible to put a slash “/” in the file name, and therefore put a dash “-” instead. Leave the file extension “.zip” as is.

Leave all the other settings as is, except: **add a password to the encryption** (see figure 2 below). This is done by typing the same password (of your choosing) twice in the two text fields in the lower right hand corner.

Make a note of this password. You must choose different passwords for the two zip archives, that is, the Technical and the Financial Proposal/Bid.

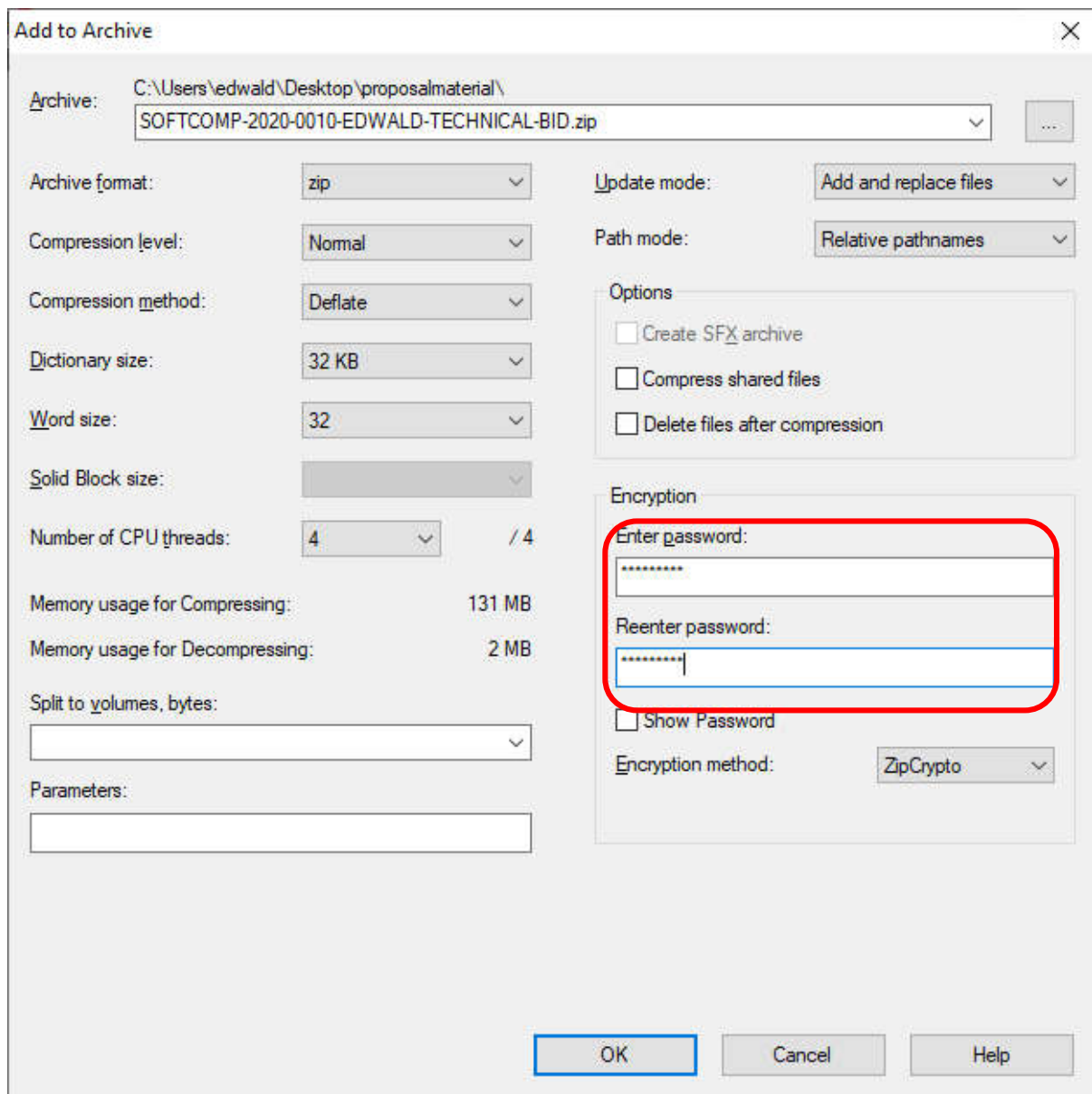


Figure 2 Creating an Archive

Now, we seek the “SHA1 Hash”, and electronic fingerprint of the archive you have just created. The hash is a string calculated from your file(s) and can be used to guarantee that the file has not been modified since you created it. Any change to the file will result in a different hash value.

There are many ways of calculating this; two common options are described below.

If the appropriate functionality is available in your Windows environment: Select the compressed archive in the Windows file manager, (eg. SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip) and right click. One of the options to select is “CRC SHA >”. Hovering over the “>” brings a few more options to light, select the **SHA-1** option. A smaller dialog pops up: (see Figure 3, *SHA1* below). Clicking Ctrl-C grabs the contents of this box. You can close the box after copying the contents. (You can paste the contents into a mail message, for instance.)

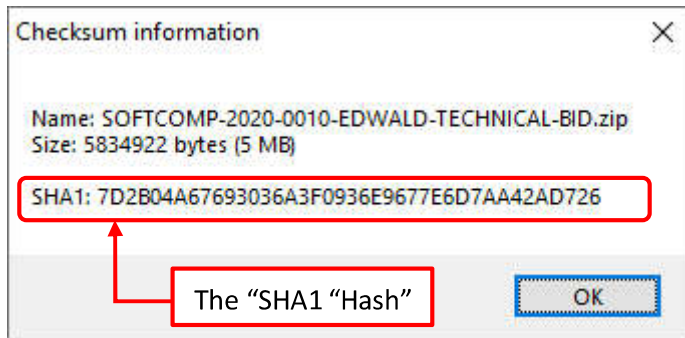


Figure 3 *SHA1*

If this CRC SHA function is not available by ‘right-click’ on your Windows version, you can also do this from ‘the command line’, a slightly more complicated way. Open a CMD window (see sidebar below), move to the folder where your archive is, and execute the command: “certutil -hashfile *SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip* sha1” where you obviously replace the name of the file with your real file name. The output of this command is the SHA1 “hash”. You can copy-and-paste the string for use in the email (below).

Sidebar: How to open a CMD window in Windows:

The way to open a Command window (or ‘terminal’) depends on the version of Windows you have. The different methods are very clearly described in the following article, but a quick internet search will find multiple descriptions.

<https://www.lifewire.com/how-to-open-command-prompt-2618089>

Finally,

1. Create a new email, Subject: example- “SOFTCOMP-2020-0010-EDWALD”. Add the two compressed archives, that is, the Technical Offer and the Financial Offer archives as attachments. The text of the email should contain the SHA1 information for both archives.
SEND THIS TO: sealed_bids@ctbto.org (note that there is an underscore “_” between “sealed” and “bids”). (Should the email become larger than your mail system allows, you can

try sending the two archives in separate emails. Take care to include the right SHA1 information with each file.)

2. Create a new email, Subject: example- "SOFTCOMP-2020-2010-EDWALD-Technical Offer" the contents of which must contain the Encryption Key for the Technical Offer (the password you used when creating the Technical Offer). (Again, note the underscore between 'bid' and 'keys'.)

SEND THIS TO: bid_keys@ctbto.org

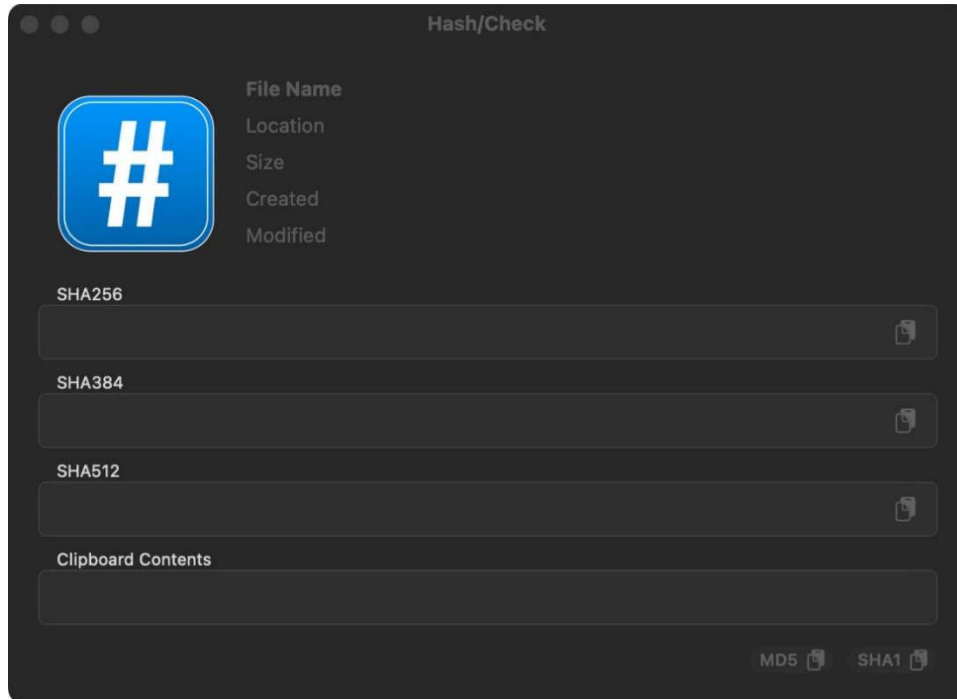
IMPORTANT NOTE: As stated above, only send the Encryption Key for the Technical Offer to the bid_keys@ctbto.org mailbox when sending your Technical and Financial Offer to the sealed_bids@ctbto.org mailbox. **You shall only send the Encryption Key for the Financial Offer to the Commission if and when informed by the Commission that your Technical Offer had been evaluated as "technically acceptable".**

The Financial Offer Encryption Key will need to be provided by you to the same e-mail (bid_keys@ctbto.org) within 48 hours of the Commission's request, clearly marked in Subject: Encryption Key for (example): "SOFTCOMP 2020-2010 EDWALD-Financial Offer". If your Offer is not considered "technically acceptable", the Commission will not request an Encryption Key for your Financial Offer, and it will remain unopened.

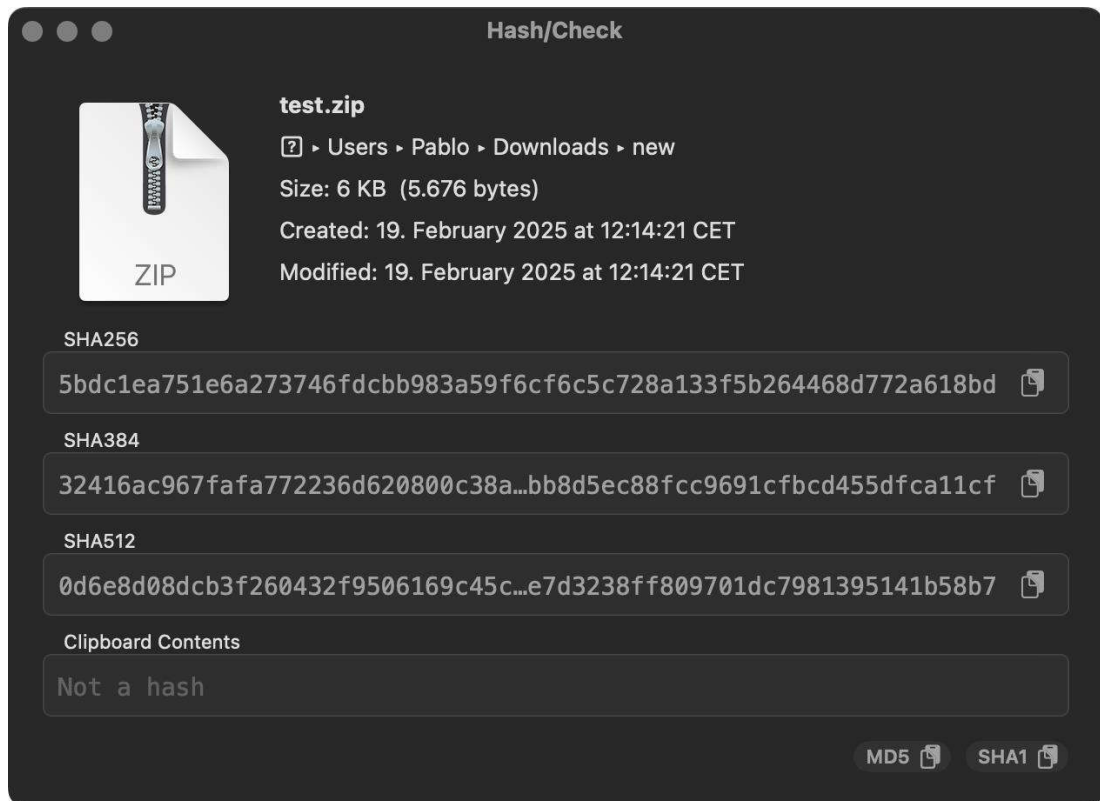
As mentioned above, should you have questions or difficulties, please send an e-mail to procurement@ctbto.org.

For MAC users:

1. Please download Hash/Check app:
<https://apps.apple.com/at/app/hash-check/id1550525767?l=en-GB&mt=12>
2. It is very simple to use. After installing, just open the app and click on “File” to open the zip file you want to inspect.

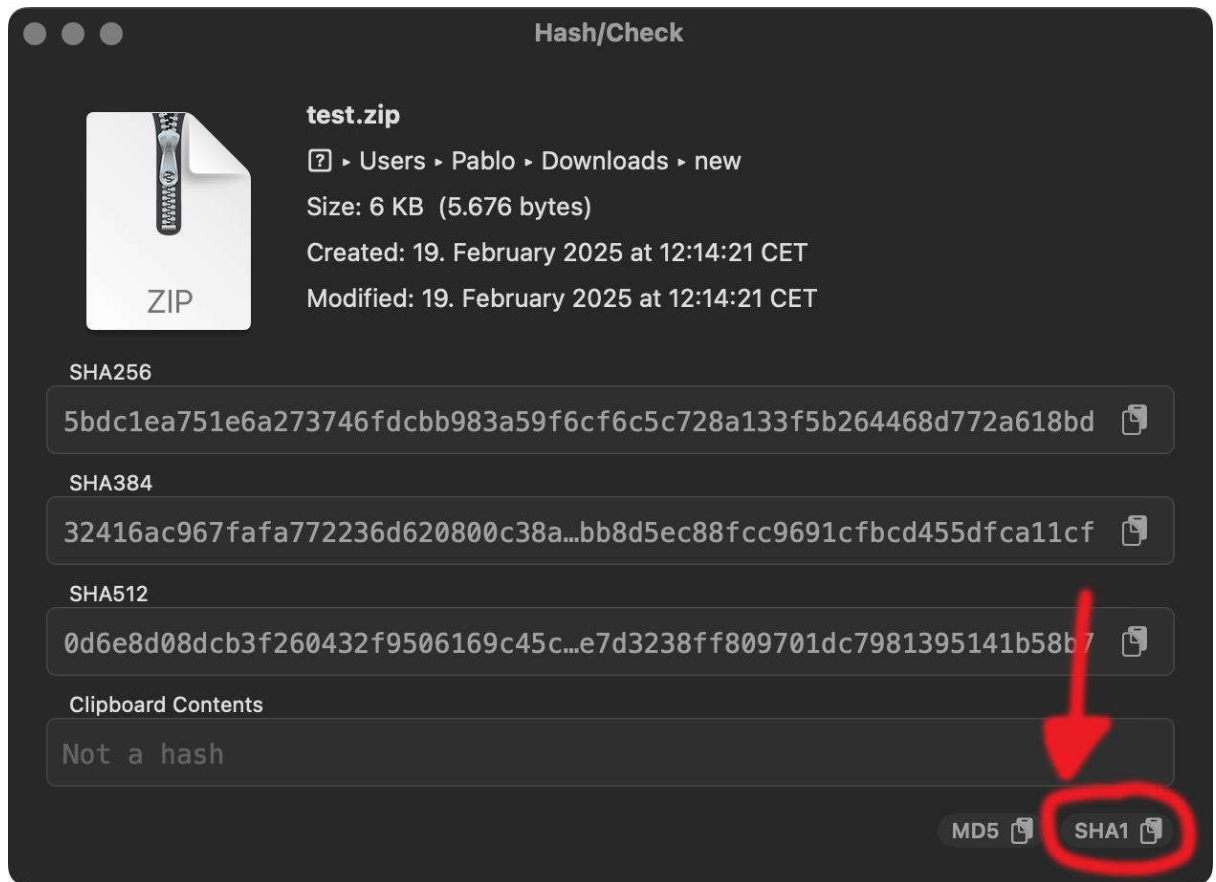


3. Please use your submitted technical and financial proposals

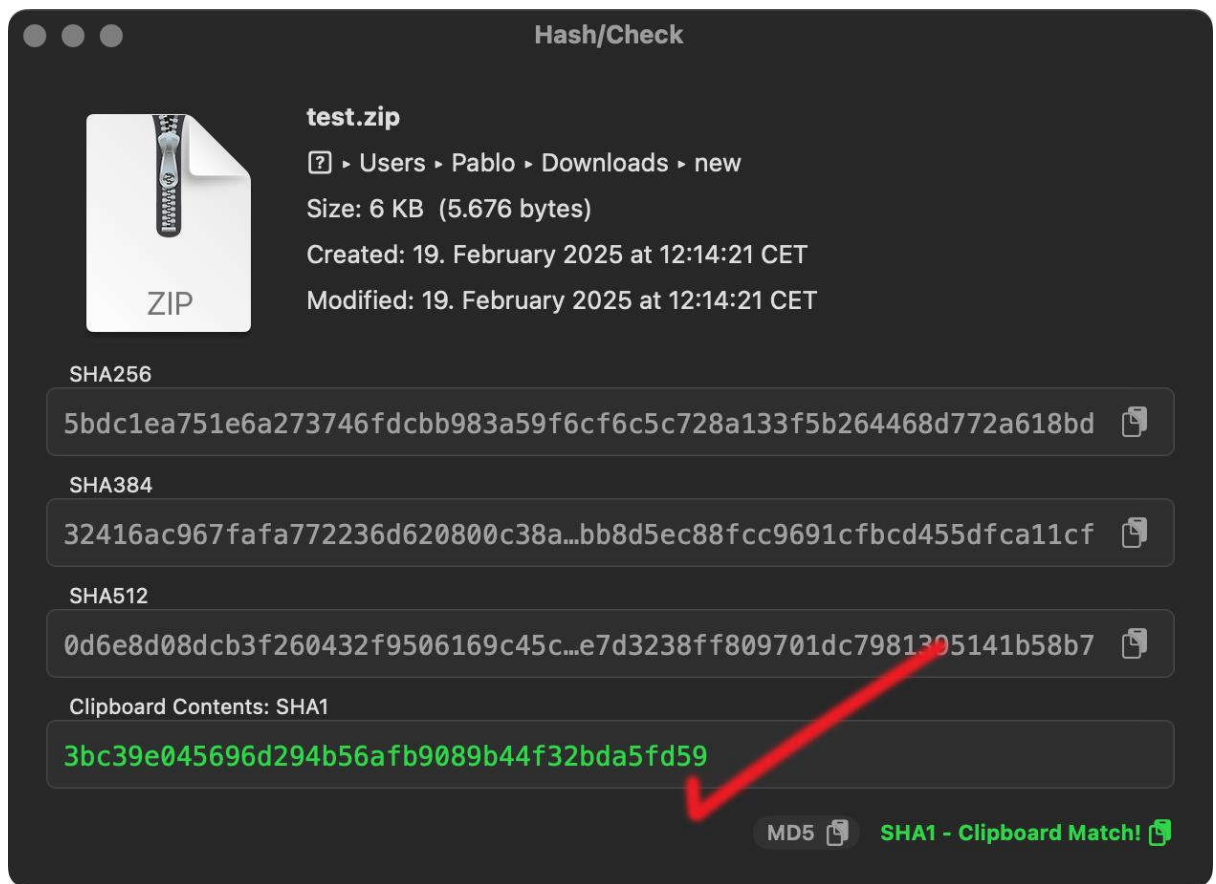


4. And it automatically creates several different hash values ... --- But the one we need SHA1 is not there ...

So you press on the little SHA1 icon on the bottom right ...



5. The SHA1 hash is calculated and copied to the clipboard automatically for further use.



-----OR-----

Another alternative would be to use the terminal and the command: shasum /path/to/file
Here is a little tutorial on how to use it. It is strait forward and simple to use. Please see
attached the instructions as a pdf as well.

<https://osxdaily.com/2012/02/05/check-sha1-checksum-in-mac-os-x/>

Finally,

1. Create a new email, Subject: example- "SOFTCOMP-2020-0010-EDWALD". Add the two compressed archives, that is, the Technical Offer and the Financial Offer archives as attachments. The text of the email should contain the SHA1 information for both archives. **SEND THIS TO:** sealed_bids@ctbto.org (note that there is an underscore "_" between "sealed" and "bids"). (Should the email become larger than your mail system allows, you can try sending the two archives in separate emails. Take care to include the right SHA1 information with each file.)

2. Create a new email, Subject: example- "SOFTCOMP-2020-2010-EDWALD-Technical Offer" the contents of which must contain the Encryption Key for the Technical Offer (the password you used when creating the Technical Offer). (Again, note the underscore between 'bid' and 'keys'.)

SEND THIS TO: bid_keys@ctbto.org

IMPORTANT NOTE: As stated above, only send the Encryption Key for the Technical Offer to the bid_keys@ctbto.org mailbox when sending your Technical and Financial Offer to the sealed_bids@ctbto.org mailbox. **You shall only send the Encryption Key for the Financial Offer to the Commission if and when informed by the Commission that your Technical Offer had been evaluated as "technically acceptable".**

The Financial Offer Encryption Key will need to be provided by you to the same e-mail (bid_keys@ctbto.org) within 48 hours of the Commission's request, clearly marked in Subject: Encryption Key for (example): "SOFTCOMP 2020-2010 EDWALD-Financial Offer". If your Offer is not considered "technically acceptable", the Commission will not request an Encryption Key for your Financial Offer, and it will remain unopened.

As mentioned above, should you have questions or difficulties, please send an e-mail to procurement@ctbto.org.

-----O-----

STATEMENT OF CONFIRMATION

On behalf of (name of firm or organization): _____, I hereby attest and confirm that:

- a) The firm/organization possesses the legal status and capacity to enter into legally binding contracts with the Commission for the supply of equipment, supplies, services or work.
- b) The firm/organization is not insolvent, in receivership, bankrupt or being wound up, and not under administration by a court or a judicial officer, and that it is not subject to the suspension of its business or legal proceedings for any of the foregoing reasons.
- c) The firm/organization has fulfilled all its obligations to pay taxes and social security contributions.
- d) The firm/organization has not, and that its directors and officers have not, within the last five years been convicted of any criminal offense related to professional conduct or the making of false statements or misrepresentations as to their capacity or qualifications to enter into a procurement or supply contract.
- e) The Commission, in the event that any of the foregoing should occur at a later time, will be duly informed thereof, and in any event, will have the right to disqualify the firm/organization from any further participation in procurement proceedings.
- f) The firm/organization did not/will not attempt to influence any other bidder, organization, partnership or corporation to either submit or not submit a proposal/bid/quotation.
- g) The firm/organization will not, in the absence of a written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Quotation/Bid/ Proposal or the procurement process if the person:
 - a. at any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;
 - b. at any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.
- h) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) have been identified on, or associated with any individual, groups, undertakings and entities identified on, the list established pursuant to the UN Security Council Resolution 1267 (Consolidated Sanctions List).¹
- i) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) are subject to any form of sanction imposed by an organization or body within the United Nations System, including the World Bank.

¹ The Consolidated United Nations Security Council Sanctions List can be found on the following website:
<https://www.un.org/securitycouncil/content/un-sc-consolidated-list>

- j) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any), is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
- k) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) will use the funds received under contracts/purchase orders with the Commission to provide support to individuals, groups, undertakings or entities associated with terrorism.
- l) The prices in the firm/organization's proposal/bid/quotation have been arrived at independently, without consultation, communication or agreement with any other interested companies, competitor or potential competitor with a view to restricting competition.
- m) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings, if it offers, gives or agrees to give, directly or indirectly, to any current or former staff member of the Commission a gratuity in any form, an offer of employment or any other thing of service or value, as an inducement with respect to an act or a decision of, or a procedure followed by, the Commission in connection with a procurement proceeding.
- n) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings if it does not disclose to the Commission any situation that may appear as a conflict of interest, and if it does not disclose to the Commission if any official or professional under contract with the Commission have an interest of any kind in the firm/organization's business or any kind of economic ties with the firm/organization.
- o) The firm/organization expressly agrees to abide by the United Nations Supplier Code of Conduct.¹

Name (print): _____

Signature: _____

Title/Position: _____

Place (City and Country): _____

Date: _____

¹ <https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct>

VENDOR PROFILE FORM (VPF) – FOR PRODUCTS/SERVICES/WORK

| | | |
|---|--------------------------------------|--|
| 1. Name of Company: | | |
| 2. Street Address: | 3. Telephone: | |
| P.O. Box: City: | 4. E-Mail: | |
| Zip Code: Country: | 5. Website: | |
| 6. Contact Person: Title: | | |
| 7. Legal Status (e.g. Partnership, Private Limited Company, Government Institution) PLEASE INCLUDE A COPY OF THE CERTIFICATE OF INCORPORATION | | |
| 8. Year Established: | 9. Number of Employees: | |
| 10. Gross Corporate Annual Turnover (US\$m)*: | 11. Annual Export Turnover (US\$m)*: | |
| 12. Type of Business/Products: Manufacturer <input type="checkbox"/> Sole Agent <input type="checkbox"/> Supplier <input type="checkbox"/> Other <input type="checkbox"/> (please explain) | | |
| 13. Type of Business/Services/Work: Engineering <input type="checkbox"/> Civil Work <input type="checkbox"/> Governmental Institution <input type="checkbox"/> Other <input type="checkbox"/> (please explain) | | |
| 14. References (your main customers, country, year and technical field of products, services or work): ** | | |
| 15. Previous Supply Contracts with United Nations Organizations (over the last 3 years)** <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> Organization: Value in US\$ Equivalent: Year: </div> <div style="display: flex; justify-content: space-between;"> Organization: Value in US\$ Equivalent: Year: </div> | | |
| 16. Summary of any changes in your company's ownership during the last 5 years: | | |

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
 ** Please provide supplementary documentation on these items.

| | |
|---|----------------------------------|
| 17. List of Products/Services/Work offered: | |
| Product/Service/Work # | Product/Service/Work Description |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

18. This section shall be **signed and stamped** by an official legally authorized to enter into contracts on behalf of your organization:

| | | | |
|-------|--------|------------|-------|
| Name: | Title: | Signature: | Date: |
|-------|--------|------------|-------|

| | |
|--|--|
| Bank Details Bank Name: Bank Address: Exact Account Holder Name: | Beneficiary Details Beneficiary Name: <small>(exactly as stated on bank statements)</small> IBAN: <small>(if applicable)</small> Account number: SWIFT/BIC: ABA/Sort Code: |
|--|--|

Additional Details (if applicable)

 Correspondent bank:

 Correspondent account number:

 Correspondent SWIFT/BIC:

 Tax Identification Number:

| | | |
|---------------------------|----------|-------|
| FOR CTBTO USE ONLY | | |
| Evaluated By: | Initials | Date: |
| Updated By: | Initials | Date: |
| Remarks: | | |

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
 ** Please provide supplementary documentation on these items.



MODEL CONTRACT No. XXXX-XXXX

between

**THE PREPARATORY COMMISSION
FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY
ORGANIZATION**

and

(INSERT NAME OF THE CONTRACTOR)

for

the provision of services pertaining to
**ESTABLISHMENT OF INFRASTRUCTURE
RELATED TO THE INSTALLATION
OF THE
RADIONUCLIDE STATION RN12, RECIFE, BRAZIL**

This Contract comprises this cover page, a table of contents, 12 (twelve) pages of text , a signatories page, a List of Annexes and 3 (three) Annexes (A to C)

April 2025

Contract No. XXXX-XXXX, Month Year

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[TO BE UPDATED ONCE SPECIFIC CONTRACT IS PREPARED]]

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MODEL CONTRACT

This CONTRACT is entered into between the PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (hereinafter referred to as the “Commission”), having its office located at Wagramer Strasse 5, 1400 Vienna, Austria, and _____ (hereinafter referred to as the “Contractor”), having its registered office located at _____ [address] (both hereinafter individually referred to as the “Party” and collectively as the “Parties”).

The Parties hereto mutually agree as follows:

1. DEFINITIONS

In this Contract, words and expressions shall have the same meanings as respectively assigned to them in the General Conditions of Contract and the Terms of Reference. In addition, the following words and expressions shall have the meanings hereby assigned to them:

“Annex A” means the Commission’s General Conditions of Contract.

“Annex B” means the Commission’s Terms of Reference.

“Annex C” means the Contractor’s Proposal

“Contract” means this document, its Annexes and any further modifications or such further documents as may be expressly incorporated in this Contract by the Parties in accordance with Clause 20 below.

“Contractor” means the legal entity named in the preamble of this Contract or its successors. The Contractor shall be the only interface for all matters pertaining to execution of the work under this Contract.

“Party(ies)” means the Commission and/or the Contractor, as the context requires.

“Rule(s)” means any regulation(s), official directive(s), ordinance(s), guideline(s), customs and practices.

“Services” means the activities or tasks to be performed by the Contractor under the Contract as requested by the Commission.

“Taxes” means all direct and indirect taxes (including value added tax, general sales tax or goods and services tax), assessments, fees, customs duties, liens and charges in as much as they are levied in conclusion or implementation of the Contract, including customs restrictions and charges of similar nature in respect of articles imported or exported for the Commission’s official use.

“**Work**” means all the goods and services to be provided by the Contractor, including its affiliates and/or subcontractors, in order to fulfil all its obligations under the Contract, and the remedying of any defects therein.

2. AIM OF THE CONTRACT

The aim of this Contract is to conduct the “Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil” (hereinafter referred to as the “Services” or “Work”), for the Commission.

3. ENTRY INTO FORCE AND DURATION OF THE CONTRACT

This Contract shall enter into force upon the date of the last signature by the authorized representatives of the Parties (hereinafter referred to as the “Effective Date”) and it shall remain in force until the Parties fulfill all their obligations hereunder.

4. COMMENCEMENT AND COMPLETION OF THE SERVICES

The Contractor shall commence the Services [on the Effective Date](#). The Services shall be completed not later than thirty (30) weeks after entry into force of the Contract.

5. STANDARD OF WORK

The Contractor shall furnish the highest skill and judgement and cooperate with the Commission, including all the Commission’s consultants and agents, in best furthering the interests of the Commission and the aim of this Contract. The Contractor shall provide efficient business administration and supervision, and perform the Work in the best way and in the most expeditious and economical manner consistent with the requirements set forth in this Contract.

6. RESPONSIBILITIES OF THE CONTRACTOR

- (a) The Contractor shall provide the Services described in Annex B and C.
- (b) The Contractor shall provide qualified English-speaking personnel as necessary to perform the Services under this Contract. The key persons shall be available for possible tasks related to the Services throughout the duration of the Contract period. Any replacement of the key personnel shall be made in accordance with Clause 7 of Annex A.

7. WARRANTY

The provisions of Clause 28 of Annex A shall apply to the Services performed by the Contractor.

8. PERMITS, NOTICES, LAWS AND ORDINANCES

- (a) The Contractor shall obtain and pay for all permits and inspections necessary for the proper execution and completion of the Work that are customarily obtained upon

execution of this Contract and that are legally required at the time the Proposal is received by the Commission.

- (b) The Contractor shall give all notices required by the nature of the Work.
- (c) If the Contractor notices that the Work or any part thereof required under this Contract is not in accordance with applicable laws and Rules, or with technical or safety standards, it shall promptly notify the Commission thereof in writing.

9. PROTECTION OF PERSONS AND PROPERTY

- (a) The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programmes in connection with the Work.
- (b) The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury and loss to:
 - (i) all employees on the Commission's premises and all other persons who may be affected thereby;
 - (ii) all the Work, Equipment, its spare parts, materials and supplies to be incorporated therein, whether in storage on or off the Commission's premises, which are under the care, custody or control of the Contractor or any of its subcontractors; and
 - (iii) other property on the Commission's premises or adjacent thereto.
- (c) The Contractor shall give all notices and comply with all applicable laws and Rules bearing on the safety of persons and property and/or their protection from damage, injury and loss.
- (d) The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for the safety and protection of persons and property, including posting danger signs and other warnings against hazards and promulgating safety regulations.
- (e) When the use or storage of combustible, explosive or other hazardous materials is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- (f) The Contractor shall be responsible for the prevention of accidents on the Commission's premises during the execution of the Work.
- (g) In any emergency affecting the safety of persons or property, the Contractor shall promptly act to prevent threatened damage, injury and loss.
- (h) The Contractor shall promptly remedy all damage and loss to any property, referred to in Sub-Clause (b) above, caused in whole or in part by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Sub-Clause (b) above, except damage and loss attributable to the acts or omissions of the Commission or

anyone directly or indirectly employed by it, or of anyone for whose acts the Commission may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Clause 9 of Annex A.

10. RESPONSIBILITIES OF THE COMMISSION

The Commission shall designate members of its staff to act as points of contact for the Contractor to ensure that the Services are carried out in accordance with Annexes B and C, and shall promptly notify the Contractor thereof. The Commission shall respond promptly to requests for information by the Contractor regarding the Services.

11. CONTRACT PRICE

- (a) The Commission shall pay to the Contractor, in consideration of the full and proper performance of its obligations under the Contract, a firm fixed price of [EURO/US\$] _____ [in numbers and words], hereinafter referred to as the “Contract Price” for provision of the Work in accordance with Annexes C.
- (b) The Contract Price shall cover all costs and expenses, excluding Taxes, incurred by the Contractor for the full and proper performance of all obligations under the Contract (including travel, allowances, management and remuneration of the personnel, national income tax, medical insurance, and social security contributions). It also includes work performed by the Contractor’s personnel outside the Commission’s normal working hours.
- (c) The Contract Price shall be firm and fixed and shall not be subject to escalation. The Contractor shall not do any work, provide any materials or equipment, or perform any services which may result in any charges to the Commission over and above the Contract Price without the prior written consent of the Commission and a formal written amendment to this Contract.
- (d) **[PLEASE IDENTIFY WHETHER TAXES ARE APPLICABLE UNDER THIS CONTRACT AND SELECT ONE OF THE FOLLOWING OPTIONS AT THE TIME OF AWARD]:**

The Contractor shall be reimbursed by the Commission for such taxes on the basis of actual amounts paid and duly documented by the Contractor as per Clause 12 (e).

OR

No Taxes are applicable under this Contract.

12. PAYMENT

- (a) The Contract Price shall be paid in accordance with the following payment schedule and subject to the following conditions:

[A progress payment schedule based on milestone deliveries may be included in the proposal. Any applicable Taxes shall be identified separately, and not be included in the

Contract amount, i.e. “Upon [milestone] the amount of [EURO/US\$] _____ [in numbers and words], and [indicate the applicable Tax] in the amount of [EURO/US\$] _____ [in numbers and words].

- (b) The Commission shall make the payments to the Contractor on the basis of an invoice submitted by the Contractor as per 12 (d) below. All payments shall be made within 30 (thirty) days of the receipt and acceptance of the invoice, provided that the Work has been satisfactorily completed and has been accepted by the Commission.
- (c) The making of any payment hereunder by the Commission shall not be construed as an unconditional acceptance by the Commission of the Work accomplished by the Contractor up to the time of such payment.
- (d) The Contractor shall submit an invoice electronically, from the Contractor’s official e-mail address in PDF format, duly signed and sealed by the Contractor and submitted to the Commission’s email address specified in Clause 21 below. Each invoice shall contain the Contract number (CTBTO and SAP numbers), detailed banking instructions, including the name and address of the Contractor’s bank, account number, account holder’s name and SWIFT, IBAN and/or ABA codes for payment by electronic transfer.

[NOTE: PARAGRAPH (e) BELOW ONLY APPLIES IF THERE ARE TAXES (SEE CLAUSE 11 (d) ABOVE). IF NO TAXES ARE APPLICABLE UNDER THIS CONTRACT, PARAGRAPH (e) SHOULD BE OMITTED.]

- (e) Applicable Taxes payable by the Contractor and/or its subcontractor(s) in respect of the Work shall be invoiced separately or be separately identified on the invoice. Actual payment of the Taxes must primarily be supported by original documentation such as invoices, bank account statements, transfer orders, or receipts issued by the local tax or customs authorities. If submission of such original documentation is not possible for justifiable reasons, their copies could be accepted by the Commission provided that they are duly signed and certified by local tax or customs authorities. In case the currency in which the Taxes are levied is not the currency of the Contract, bank statements (or equivalent) showing the exchange rate used for the conversion should be submitted to the Commission, in addition to any other supporting documentation.

13. TEMPORARY SUSPENSION OF WORK

The Commission may, at any time, temporarily suspend the Work, in whole or in part, being performed by the Contractor under this Contract by giving 30 (thirty) days’ advance notice in writing to the Contractor. The Work so suspended shall be resumed by the Contractor on the basis of a revised time schedule and on terms and conditions to be mutually agreed upon between the Parties.

14. DELAYS AND EXTENSION OF TIME

- (a) If the Contractor is delayed at any time in the progress of the Work by any act or omission of the Commission or by any of its employees, or by any other contractor employed by the Commission, or by changes in the Work ordered by the Commission, or by any causes

beyond the Contractor's reasonable control, or by any other cause which the Commission determines may justify the delay, then the time for completion of the Work shall be extended by an amendment to this Contract in accordance with Clause 20 below for such reasonable time as the Commission may determine.

- (b) Any request for extension of the time for reasons referred to in Clause 14 (a) above shall be submitted to the Commission not later than 20 (twenty) days after the commencement of the delay, otherwise said request shall be deemed to be waived. Such request shall state grounds for the delay and shall provide an estimate of the probable effect of such delay on the progress of the Work.

15. CONTRACTOR'S CLAIMS AND REMEDIES

In no event shall the Contractor make any claim against the Commission for or be entitled to additional costs or compensation resulting from any delays in the progress or completion of the Work or any portion thereof, whether caused by the acts or omissions of the Commission, including, but not limited to, damages related to overheads, loss of productivity, acceleration due to delay and inefficiency. The Contractor's sole remedy in such event shall be an extension of time for completion of the Work, provided the Contractor otherwise meets the requirements and conditions set forth in this Contract.

16. ENTIRE AGREEMENT

This Contract represents the final agreement in respect of the Services and shall supersede all prior agreements and representations between the Parties in this respect. Annexes A to C shall constitute integral parts of this Contract and shall be of full force and effect.

17. DISCREPANCIES

If there are discrepancies or conflicts between any of the documents that are part of this Contract, the document to prevail shall be given precedence in the following order:

- (i) this document;
- (ii) General Conditions of Contract (Annex A);
- (iii) Terms of Reference (Annex B);
- (iv) Contractor's Proposal (Annex C).

18. SEVERABILITY

If any term and/or provision of this Contract is or becomes invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Contract shall not in any way be affected or impaired thereby.

19. NO WAIVER

Failure by a Party to enforce a right shall not be deemed to be a waiver of that right unless otherwise expressly provided in this Contract.

20. CONTRACT AMENDMENT

No modification of, or change in, this Contract, or waiver of any of its provisions, or additional contractual relationship with the Contractor shall be valid unless approved in the form of a written amendment to this Contract, signed by duly authorized Representatives of the Contractor and of the Commission.

21. TRANSMISSION OF NOTICES AND OTHER DOCUMENTS

Notices, invoices, reports and other documentation under the Contract shall be delivered or sent to the relevant Party as follows (or to such person/title, address, facsimile number or email address as the Party may substitute by notice after the date of the Contract):

(a) The Commission:

For Contractual Issues:

*Chief, Procurement Services Section
Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6350
E-mail: procurement@ctbto.org*

For invoices:

*Accounts Payable
CTBTO Financial Services Section
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6292
E-Mail: Payable_Invoices@ctbto.org*

For related enquiries:

Payments@ctbto.org

(b) The Contractor:

*Name and Title
Address
Email:
Tel:*

22. EFFECTIVENESS

- (a) Except as provided below, any communication in connection with the Contract will be deemed to be given as follows:
 - (i) if delivered in person, at the time of delivery;
 - (ii) if by registered mail or courier, when received;
 - (iii) if by electronic communication, when retrievable by the Commission in document form.
- (b) A communication given under Clause 22 (a) above that is received or becomes retrievable on a non-working day or after business hours at the seat of the Commission will only be deemed to be given on the next working day of the Commission.

[Remainder of page intentionally left blank]

IN WITNESS hereof, the duly authorized Representatives of the Parties have executed this Contract:

For and on behalf of the **PREPARATORY COMMISSION FOR THE COMPREHENSIVE
NUCLEAR-TEST-BAN TREATY ORGANIZATION:**

[Name, Position/Title]

Date: _____

Place: _____

For and on behalf of **[CONTRACTOR]:**

[Name, Position/Title]

Date: _____

Place: _____

LIST OF ANNEXES

ANNEX A: THE COMMISSION'S GENERAL CONDITIONS OF CONTRACT

ANNEX B: THE COMMISSION'S TERMS OF REFERENCE

ANNEX C: THE CONTRACTOR'S PROPOSAL

ANNEX B

**PREPARATORY COMMISSION FOR THE
COMPREHENSIVE NUCLEAR-TEST-BAN TREATY
ORGANIZATION**

TERMS OF REFERENCE

FOR THE

**ESTABLISHMENT OF INFRASTRUCTURE
RELATED TO THE INSTALLATION
OF THE
RADIONUCLIDE STATION RN12, RECIFE, BRAZIL**

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1 BACKGROUND INFORMATION

- (a) The International Monitoring System Division (IMS) on behalf of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the “Commission”), intends to establish the Radionuclide Particulate Station RN12 at Recife, Brazil (the “Station”). This Station has been designated as a facility of the radionuclide particulate network of the Comprehensive Nuclear-Test-Ban Treaty. The location description is given in Attachment I.
- (b) The Station will be established in a new building to be built on land within the premises of the Centro Regional de Ciências Nucleares do Nordeste - *CRCN-NE* (hereinafter referred to as “CRCN” or “The Station Operator” or “SO”) at Recife, Brazil. The station coordinates are 8.058° S, 34.949° W. Station infrastructure will be established, and an automatic radionuclide air monitoring station (RASA) system will be installed.
- (c) The installation of the Station will be achieved in several steps and involves several contractors. The infrastructure will be built by the Contractor. The RASA system (hereinafter referred to as the “System”) will be delivered, installed, and tested by another contractor (hereinafter referred to as the “Commission’s Equipment Supplier(s)”). The global communication links to the Commission will be established by a contractor selected by the Commission (hereinafter referred to as the “GCI Contractor”).
- (d) The Commission intends to establish a Contract for the “Establishment of Infrastructure related to the installation of the upgraded Radionuclide Station RN12 (RASA System), Recife, Brazil” (hereinafter referred to as the “Work” and/or “Services”) in accordance with these Terms of Reference (ToR). The Contractor shall work with the Commission, its other contractors, and designated local institutions. The Contractor shall provide the new infrastructure, and support related to infrastructure to the other contractors and the Commission’s Equipment Supplier(s) during the installation of the RN12 Station; if required by the Commission, shall provide logistical support during transport, storage, and installation of the System, and provide services until the end of the installation of the System.
- (e) This ToR defines the technical framework of all related activities to be performed during the delivery of Services and contains all technical requirements for the activities that shall be carried out by the Contractor.
- (f) The Contractor shall carry out the Work in accordance with this ToR and in the most cost-effective manner possible. For all work tasks, the Contractor must inform the Commission and CRCN of the appropriate and current points of contact, including contacts for: 1) technical matters, 2) logistics matters, and 3) commercial matters. If these points of contact change during any phase of the Work Tasks, the Contractor must inform the Commission and CRCN immediately in writing.

2 SCOPE OF THE WORK

2.1 General Requirements:

The Work shall be divided into four (4) tasks in accordance with the requirements of this ToR. The Contractor shall submit to the Commission a description and timetable for each Work Task to assure that the Work is carried out in the most appropriate and cost-efficient manner.

The Contractor shall perform the Work meeting all specifications and requirements of the Work Tasks as set out in this ToR. The below-mentioned Work Tasks shall be delivered by the Contractor as follows:

- (a) WORK TASK 1: LIAISON with the CRCN, the Commission, the Commission's Equipment Supplier(s), any other contractors working on this Project, and local institutions, as set out in Section 3 of these ToR, throughout the whole duration of the Contract.
- (b) WORK TASK 2: BUILDING OF THE NEW STATION INFRASTRUCTURE, as set out in Section 4 of this ToR.
- (c) WORK TASK 3: SUPPORT DURING TRANSPORT, STORAGE, AND INSTALLATION, as set out in Section 5 of this ToR.

3 WORK TASK 1: LIAISON

3.1 Liaison Requirement

- (a) The Contractor shall liaise with CRCN, the Commission, the Commission's Equipment Supplier(s), any other contractors working on this Project, and any local institutions as required, during all phases of the Work.
- (b) The Contractor shall keep the Commission informed of any exchange of relevant information between the Contractor, CRCN, the Commission's Equipment Supplier(s), and any other contractors and local institutions.
- (c) The Contractor shall coordinate with CRCN and with the Commission the scheduling of a coordination meeting (hereinafter referred to as the "Coordination Meeting") between the Contractor, CRCN, the Commission's Equipment Supplier(s), the GCI Contractor (if required by the Commission), and the Commission. The Coordination Meeting shall be held for a period of two (2) full days at the site of the Station after completion of infrastructure preparation work and before installation of the Commission's Equipment.

3.2 Local Laws, Codes, Regulations, etc.

- (a) The Contractor shall ensure that the Work is performed in compliance with any national, municipal, or local regulations, laws, building codes, licensing, or permitting requirements that relate to the Work Tasks to be performed in accordance with this Terms of Reference. This requirement shall include contracts with the local power supplier if required.
- (b) The Contractor shall obtain licenses, permits, or authorizations needed to carry out the Work under this Project.
- (c) The infrastructure will be built within the premises of CRCN; therefore, the Contractor shall obtain from CRCN any licenses and permits necessary to perform the Works in

accordance with CRCN regulations.

3.3 Support Services during Inspection

The Contractor shall ensure that the Commission's staff or its representatives are granted access to the site/Station at any time to inspect field operations and progress of work. The Contractor shall support and facilitate all works of the Commission related to the inspection of the Station that will take place after completion of the Work. The Contractor shall assist and support the other contractors and Commission's Representatives if the Commission deems further visits to the Station necessary.

4 WORK TASK 2: BUILDING OF THE NEW STATION INFRASTRUCTURE

The Contractor shall provide power connection, the Station Housing, and communication infrastructure, as specified in this Section. The power and infrastructure requirements for the Commission's Equipment are specified in Attachments II and III to these ToR. The System will be installed by the Commission's Equipment Supplier(s).

4.1 POWER MANAGEMENT

- The main power supply

The Contractor shall ensure the main power system provides a reliable power supply with a minimum capacity of 20 kW (recommended capacity: 25 kW) to meet the requirements of all Station equipment. The following specifications, requirements, and actions shall be adhered to:

(a) Power System Specifications and Compliance

The power connection to the Station must comply with national and local standards. All electrical works, equipment, accessories, and fittings shall be designed and manufactured for continuous operation under the following conditions:

- Voltage:
 - Single-phase: 220V, $\pm 6\%$ tolerance.
- Note: The CRCN area typically operates on a 220V system for three-phase and 127V or 220V for single-phase configurations. The Contractor shall confirm the exact voltage requirements with the local utility company to ensure compatibility and compliance.
- Frequency: 60 Hz, $\pm 4\%$ tolerance.
 - Neutral Grounding: Solidly earthed with a maximum resistance of 25 ohms.
 - Fault Level: Approximately 31 MVA at 380V based on urban distribution characteristics. The Contractor shall verify this value for the specific CRCN site.
 - Fault Duration: Fault-clearing time must not exceed 0.5 seconds.

To ensure power stability and protect connected equipment:

- A voltage stabilizer shall be installed, incorporating surge arresters, manual bypass, and overload protection.
- The stabilizer shall meet or exceed the technical specifications of the ORTEA model VEGA 10-15 or an equivalent unit.

Voltage Stabilizer Specifications:

- Input: 230 VAC, 1 Phase, 60 Hz
- Output: Single Phase, 230 VAC, 50/60 Hz
- Features: Surge arresters, manual bypass, overload protection

(b) Equipment Compatibility and Connection Readiness

The Contractor shall ensure the main power system is ready to connect both the Contractor's and the Commission's Equipment. Specifications provided by the Commission's Equipment Supplier (see Attachment II) must be strictly followed.

(c) Additional Infrastructure Requirements

The Contractor shall ensure availability and, if necessary, supply and install the following:

1. Cables: Sufficient gauge to handle the Station's power supply requirements.
2. Grounding:
 - A common grounding point in accordance with local regulations and soil characteristics.
 - Construct an earth pit to maintain a grounding resistance of no more than 25 ohms.
3. Lightning and Surge Protection: Implement measures to prevent electrical currents caused by lightning from infiltrating the building.
4. Power Meter: Install a meter to monitor power consumption from the main supply.

(d) Voltage Stabilizer Space Allocation

The infrastructure design must include sufficient space and readiness for a voltage stabilizer.

- Estimated Dimensions: 410 x 670 x 1200 mm³
- Estimated Weight: approximately 100kg
- The exact installation location for the stabilizer will be proposed by the Contractor and agreed upon with the Commission.

4.1 STATION HOUSING

The Station housing shall be built on a piece of land within the following coordinates [8.058° S; 34.949° W](#), within the premises of CRCN; see Attachment I for details.

The Contractor shall:

- (a) Develop and submit a comprehensive plan for the civil works required to establish the complete Station including the housing of the Contractor's and Commission's equipment. The plan shall include detailed information on construction measures, location, dimensions of major system components, and protection measures. If required, the Contractor shall collaborate with CRCN during the preparation of this plan. The completed plan must be submitted to the Commission and CRCN for review. Upon receiving the Commission's approval, the Contractor shall ensure full and precise implementation of the agreed plan.
- (b) Construct the Station housing for the Commission's Equipment according to local regulations and perform the work in accordance with the plans described in paragraphs (a) and approved by CRCN and by the Commission.
- (c) Ensure that the openings of the housing are wide enough to allow the entry of all the Commission's Equipment (1.30 m is the minimum recommended door width).
- (d) Ensure that the housing is ready at the time of installation of the Commission's Equipment.

(e) Ensure that the following requirements for the Station Housing are complied with:

(i) The minimum requirement is 20 m² for the Commission's Equipment room and 30 m² for the total Station Housing including storage space; the suggested layout of the rooms in the building size is described in Attachment II to these ToR and shall be considered in the proposal; the minimum room height is 2.5 m (recommended 2.6m) and the maximum distance between room floor and outside rooftop shall be less than 3.5 m (recommended 3.2 m). The suggested minimum distance from the RASA Equipment to any other pieces of equipment or walls is 130 cm.

(ii) A storage space is allocated within the Station Housing, consisting at a minimum of a 3m x 3m area hosting 2 tall cabinets/cupboards and/or shelving (optimizing the vertical room space, sufficient for spare parts and tools);

(iii) Openings for the inlet and outlet of the Commission's Equipment shall be provided. The position of the openings and the details of their implementation shall be identified during the Coordination Meeting. The intake of the RASA (Ø=25.4 cm and <3.5 m length) shall be straight and vertical, therefore a hole in the ceiling is required. The roof opening shall be made in such a way that it is easily accessed and easily sealed. The outlet of the RASA system (Ø=25.4 cm and 3.5 m length) and of the air conditioning shall be installed on the lee side. The RASA outlet may have bends and be outside the enclosure; support brackets, each capable of supporting 22.7 kg, shall be provided.

(iv) Conducts and sockets for electrical cables and network connections shall be installed at several points. The exact number and location of the sockets will be determined during the Coordination Meeting. For RASA, two electrical outlets, one at 25A and one at 20A (208-240V, 50 or 60 Hz, Single Phase), and one earth ground for the RASA chassis.

(v) Cable dust to sensors outside the Station Housing shall be laid (i.e. meteorological sensors, VSAT cable).

(vi) The building materials for the Station Housing are of such quality that they withstand the local environmental conditions.

(vii) Tamper sensors on the access doorways to the station shall be installed.

(viii) Doors shall be lockable and shall be water/sand proof, tightly sealed when closed.

(ix) Some forms of protection against inadvertent or malicious intrusion shall be installed.,

(x) The inside of the Station housing is protected from any adverse environmental influences like sand, water, sea salt, insects, etc.

(f) Supply and install adequate illumination to have adequate lighting of the equipment and working areas. Sockets for electrical cables and network connections shall be installed on each wall.

(g) Supply stable and reliable power, supply and install adequate lightning and surge protection; the Commission recommends SPD (Surge Protection Device) Type 1 outside the station, and an SPD Type 2 inside the main distribution box. Measures shall be implemented to prevent infiltration of electrical currents into the building in case of lightning, e.g. data cables from outside the Station Housing shall be optically coupled to the indoor equipment.

(h) Supply and install fire protection in the room where the Equipment is installed, ensuring that:

- (a) CO₂ fire extinguisher(s) with a total capacity of at least 5 kg is available at all times.
- (b) a fire alarm system is installed; and
- (c) a fire alarm system is set up in a way that prompt and effective actions can be taken, i.e. connected to the security guard at the main building of CRCN.
- (i) Supply and install a redundant climate control system, made of three split units, each of them solely capable of maintaining inside the RASA equipment room:
 - (a) The maximum temperature variation $\leq 3^{\circ}\text{C}$ in 24 hours (temperatures below 27°C are recommended, ideally between 18°C and 25°C)
 - (b) the relative humidity $> 20\%$ and $< 80\%$,
taking into account that the heat generated inside the Station Housing will be 6 kW maximum.
- (j) Supply and install sensors to measure the indoor temperature and humidity.
- (k) Cable infrastructure for an Internet connection (minimum bandwidth of at least 10 Mbps) shall be established between the Station Housing and the CRCN main building. The distance to the closest switchboard at CRCN main building is $> 100\text{m}$, so a technical solution such as fibre optic cable or equivalent shall be taken into utilized for the communication line to the station.
- (l) Provide furniture for the Station Housing as outlined in Attachment III

4.2 SUPPLY OF MISCELLANEOUS CONTRACTOR EQUIPMENT AND OF SPARE PARTS AND MAINTENANCE TOOLS FOR THE CONTRACTOR EQUIPMENT

The Contractor shall:

- (a) supply a state-of-the-art computer with the following minimum PC Specifications:
 Motherboard: Form Factor: ATX or mini-ITX.
 Processor (CPU): Minimum: Intel Core i5 (12th generation) or AMD Ryzen 5 (5000 series).
 Recommended: Intel Core i7 (12th generation) or AMD Ryzen 7 (5000 series).
 Memory (RAM): Minimum: 16 GB DDR4, Recommended: 32 GB DDR4.
 Storage: Primary Drive: 1 TB NVMe SSD, Secondary Drive (optional): 1 TB HDD for additional storage.
 RAID Controller: Required if implementing RAID configurations.
 Network Connectivity: Dual 1 Gbps Ethernet ports.
 Optical Drive: Internal DVD-RW drive.
 Operating Temperature Range: 0°C to 40°C .
 Connectors:
 1 x USB 3.2 Gen 2 Type-C.
 2 x USB 3.2 Gen 2 Type-A.
 2 x USB 2.0.
 2 x RJ-45 Ethernet ports.
 Minimum 2 x RS-232 serial ports.

Peripherals: Keyboard and mouse.

Operating System: Windows 11 Pro.

Monitor: 24-inch or larger LCD/LED display with a minimum resolution of 1920 x 1080 pixels.

- (b) supply a colour laser printer, 1200 x 1200 dpi, A3 size, including scanning capability, with USB 2.0 and/or Ethernet connection.
- (c) supply a vacuum cleaner adequate to clean the station.
- (d) supply an initial depot of consumables (including paper sheets, pens, pencils, etc), spare parts, safety equipment, and maintenance tools estimated to be necessary for the upkeep and maintenance of the Station Housing and Contractor Equipment referred to in Section 4 for a period of 2 (two) years including consumables for all printers

4.3 ADDITIONAL WORK TASKS

The Contractor shall also ensure that:

- (a) air conditioning is installed; air conditioning units, circuit breakers, and cabling shall also be provided.
- (b) Sufficient space for UPS, RASA, and rack cabinet is guaranteed.
- (c) The Contractor shall include in their proposal as an option a visit of their staff, and a potential subcontractor's staff, to the Commission's Equipment Supplier's premises located in Chantilly, VA, United States, in order to assess in advance any technical aspects or details of the project that may not be addressed by these Terms of Reference. Such a technical assessment visit shall be limited to max. 2 days on-site and 2 persons. The visit will be ordered as option by the Commission if deemed necessary.

5 WORK TASK 3: SUPPORT DURING TRANSPORT, STORAGE AND INSTALLATION

Optional Services:

If requested by the Commission, the Contractor shall:

- (i) Upon delivery of the Commission's Equipment to the site/Station, provide storage for the Commission's Equipment.
- (ii) Provide support to the Commission's Equipment Supplier(s) during transport, of the Commission's Equipment at the Site (estimated 2 days).
- (iii) Provide support to the Commission's Equipment Supplier(s) for the duration of installation and setup of the Commission's Equipment (estimated 3 days)
- (iv) Provide all consumables and tools expected to be necessary to ensure reliable and continuous operation, troubleshooting, and maintenance of the Station infrastructure until successful completion of the System installation and initial testing.

6 DOCUMENTATION

The Contractor shall:

- (a) Ensure that all documentation produced by the Contractor under the Contract is in English.
- (b) Ensure that all documentation sent to the Commission, as specified in Section 8, is also available at the Station. All this documentation shall be provided to CRCN and kept in a safe and clean place in the Station Housing.
- (c) Ensure that all drawings are made with straight edges and drawing tools, or computer-aided drawing programs. Titles and any text shall be in the English language. In general, all drawings shall be of the same size. All dimensions shall be clearly labelled in metric units. All location-related drawings shall indicate the North.
- (d) Ensure that the decimal metric system and the International System of Units (SI) is used in any documentation.

All required plans, drawings, pictures, and station-specific documents shall comply with the requirements as described in Attachment V to this ToR.

7 REPORTING

Reports, plans, and any other documentation shall be submitted as described in this Section. All reports and communications shall be in English and reports shall be submitted in hard copy and electronic version. The Commission has to review and accept these reports in written form in order to consider Work Tasks completed. In the event that the Commission is not satisfied with the submitted report, the Commission may instruct the Contractor to carry out remedial action pursuant to the latter's commitment under this Contract. The Contractor shall remedy the defects and re-submit the revised report within the timelines set out in the sections below.

The Contractor shall submit to the Commission:

- (a) A detailed plan for the Station Housing, as described in chapter 4.1(a) above; if required, the Contractor shall provide the official acceptance of CRCN of the plan;
- (b) A detailed plan for civil works, as described in chapter 4.1(a) above; if required, the Contractor shall provide the official acceptance of CRCN of the plan;
- (c) A Progress Report 1/Revised Progress Report 1, as described in chapter 8.1 below;
- (d) A Final Report/Revised Final Report, as described in chapter 8.2 below;

7.1 Progress Report 1/ Revised Progress Report 1

- (a) The Contractor shall submit a first Progress report (hereinafter referred to as "Progress Report 1") with sufficient information for the Commission to determine that the Work Tasks, as referred to in Sections 4.1, 4.2, 4.3, and 4.4 above, have been carried out and that the site is ready for installation of Equipment.
- (b) This Progress Report 1 shall contain:
 - (i) Description of the legal requirements necessary to perform the Work described in this ToR, as referred to in Sections 3 and 4 above;
 - (ii) A final detailed plan of the infrastructure and a narrative of the Work described in paragraph 4.1;
 - (iii) Architectural Drawings, with drawings and plans of all structures with a scale at

least 1:100. These drawings shall include the position and the size of the main components, and the characteristics of structural elements; External landscaping and infrastructure are part of the scope of works including any flood fighting measures.

(iv) Electrical Drawings with layout drawings showing locations and connections of all electrical equipment installed by the Contractor, including generators, transformers, motors, controls, grounding points, and backup electrical storage facilities. Details shall include main routings for cabling, including burial depths and locations where applicable, and a description of all cabling;

(v) Photographs, with descriptive captions, of the Station Housing and the Contractor's Equipment

(c) Progress Report 1 shall be submitted within 1 (one) month after completion of Work Task 2.

(d) If the Commission, after review of the Progress Report 1 requires further information and/or remedial action, the Commission will instruct the Contractor to provide such additional information and/or respective remedial action. The Contractor shall submit such additional information or information on remedial actions taken in a Revised Progress Report 1 within 2 (two) weeks of the Commission's instruction.

All required plans, drawings, pictures, and documents shall comply with the requirements as described in Attachment V to this ToR.

7.2 Final Report/Revised Final Report

(a) The Contractor shall submit a Final Report with sufficient information for the Commission to determine whether the Work referred to in this ToR and not covered by Progress Report 1 has been completed.

(b) This Final Report shall contain:

(i) a full description of the Work performed in accordance with all Sections of this ToR, except for issues covered by the Progress Report 1;

(ii) technical documentation for the Contractor's Equipment, including names of manufacturers, model numbers, and technical details;

(iv) a complete list of spare parts and maintenance tools, including prices and suppliers;

(v) an itemized inventory of installed Contractor's Equipment, stating the value and year of acquisition for each item.

(vi) a complete list of all the documentation available at the Station;

(vii) a list of institutions, suppliers, and sub-contractors that took part in the Work and their role throughout each phase of the Project;

(viii) any other information relevant to the Work.

(c) The Final Report shall be submitted within 2 (two) weeks after completion of all Work Tasks.

(d) If the Commission, after the review of the Final Report, comes to the conclusion that any part of the Work has not been performed in accordance with the ToR or the Contractor's Proposal and/or the Commission requires further information or a remedial action on the part of the Contractor in respect of any part of the Work, the Commission shall instruct the Contractor to submit such additional information and/or to carry out relevant remedial action within 2 (two) weeks of the receipt of the instruction from the Commission or at the time of the Inspection, referred to in Section 8, whichever is earlier

(e) If during the review of the Final Report or during the Inspection, the Commission

determines that remedial action and/or additional information is required, the Contractor shall provide a Revised Final Report that incorporates the course of action taken to satisfy the findings of the Commission. The Contractor shall submit such additional information in the form of the Revised Final Report within 2 (two) weeks of the Commission's instruction.

All required plans, drawings, pictures, and documents shall comply with the requirements as described in Attachment V to this ToR.

8 INSPECTION

(a) An inspection (hereinafter referred to as the "Inspection") by representatives of the Commission and/or institutions appointed by the Commission to confirm that the Work Tasks have been carried out in accordance with the Contract shall take place within 3 (three) months of the receipt of the Final Report by the Commission, referred to in Section 7.2(c) above.

(b) During the Inspection the documentation described in Section 7 shall be available at the Station in order to ease the Inspection procedures.

(c) If the Inspection reveals that the Works are not in accordance with the Contract, the Commission shall instruct the Contractor, during the Inspection or within 2 (two) weeks after the Inspection, to take the necessary action to remedy the defects within 2 (two) weeks of the instruction by the Commission.

9 ACCEPTANCE OF PLANS AND REPORTS

Plans:

- a) The Commission will notify the Contractor about the acceptance of the plans referred to in paragraphs 4.2(a) within 2 (two) weeks after receipt.

Reports:

- b) In cases referred to in paragraphs 7.1(d) and 7.2(e) above, the Contractor shall, after completion of the tasks referred to in paragraphs 7.1 and 7.2, submit to the Commission a Revised Progress Report (7.1(c)) and/or Revised Final Report (7.2(c)) within 2 (two) weeks of the date of the completion of the required actions.
- c) The Commission will notify the Contractor about the acceptance of the Final Report / Revised Final Report. The acceptance of the Final Report/ Revised Final Report is subject to the completion of the Works in accordance with the Contract and to the satisfaction of the Commission.

10 TIME SCHEDULE AND ACCEPTANCE OF WORK

(a) Work Task 1: "LIAISON SERVICES" under Section 3 of this ToR shall be delivered throughout the entire duration of the Contract to ensure that the other Work Tasks are meeting the required timelines as set out in this ToR. The completion of Work Task 1 is marked by the acceptance by the Commission of Final Report/Revised Final Report.

(b) Work Task 2: "BUILDING OF THE NEW STATION INFRASTRUCTURE" under Section 4 of this ToR, including the submission of the required Plans and Progress Report 1, shall be completed within 30 (thirty) weeks after the Contract enters into force. The completion of Work Task 2 is marked by the acceptance by the Commission of the Progress Report 1/Revised Progress Report 1.

(c) Work Task 3: "SUPPORT DURING TRANSPORT, STORAGE AND INSTALLATION"

under Section 5 of this ToR shall be completed in accordance with the time schedule agreed and approved by the Commission at the Coordination Meeting, as referred to in Section 3.1(c) of this ToR. The Commission will ensure that the System will be delivered within the timelines agreed at the Coordination Meeting. The completion of Work Task 3 is marked by the acceptance by the Commission of Final Report/Revised Final Report.

11 CONTRACTOR'S REQUIREMENTS AND QUALIFICATIONS

The Contractor shall meet the following requirements and qualifications:

- a) Be an established company with previous experience in the establishment of infrastructure projects as set out in these Terms of Reference and has been operational for a period of at least three (3) consecutive years within the last five (5) years.
- b) Demonstrated knowledge of relevant Local Laws, Codes, Regulations, etc. to allow successful completion of the Work.
- c) Confirmation that all reports, documentation, and communication (written and oral) submitted to the Commission shall be in English and submitted in hard copy and in electronic form.
- d) Demonstrated ability to carry out the local work in Recife, Brazil.
- e) Demonstrated ability to communicate in Portuguese language with local stakeholders of the project.

12 CONTRACTOR'S TEAM

The Contractor shall provide details of staff (including the Project Manager and other key project staff) that are expected to be involved in the performance of Work on-site and/or off-site under this Contract. At a minimum, the following information shall be provided for each of these staff:

- Name
- Role
- Employed since
- Type(s) of service(s) or work which the staff will perform.
- Curriculum Vitae
- Details of Sub-contractor(s) (if applicable)

The Project Manager shall demonstrate at least three (3) years of experience managing projects of similar scope and complexity as described in this Terms of Reference.

13 LIST OF ATTACHMENTS

The following attachments are part of this ToR and all information included in attachments shall be taken into account:

- (a) Attachment I: Location Description for the Site of RN12 Station
- (b) Attachment II: Infrastructure Requirements for the Commission's Equipment
- (c) Attachment III: Requirements for RASA System housing at RN12
- (d) Attachment IV: Station Management for Particulate Station in Case of Power Failure
- (e) Attachment V: Production of Station Specific Documentation (SSD) for IMS Stations

ATTACHMENT I - LOCATION DESCRIPTION FOR THE SITE OF RN12 STATION

General Overview

The proposed site for the RN12 Station is located within CRCN in Recife, Pernambuco, Brazil. The CRCN-NE compound provides a secure and well-equipped environment, supported by robust technical infrastructure and proximity to key urban facilities.

Geographical and Technical Characteristics

- Coordinates: 8.058° S 34.949° W
- Altitude: 10 m above sea level
- Locality: Recife, Pernambuco, Brazil
- Terrain: Flat with grassy vegetation interspersed with some trees. The area is free of significant obstructions, with only minor structures such as a short meteorological mast and an air dose meter.
- Climate: Hot and humid. The rainy season extends from April to August, with an annual rainfall of approximately 210 cm.
- Access and Proximity:
 - Airport: Recife International Airport (8 km)
 - Seaport: Recife Port (9 km)
 - Road Access: Year-round accessibility with flat terrain conducive to transportation.
 - Preferred Transport: Heavy equipment can be transported via air or sea, while personnel are best served by air travel.

Site Infrastructure and Operational Capabilities

- Power Supply: Connected to CRCN-NE's infrastructure (220/380 VAC, 60 Hz, it is essential to confirm the exact voltage requirements for CRCN with the local utility company, to ensure proper compatibility and compliance), supported by a backup generator. The site has experienced minimal power interruptions.
- Network Connectivity: Cable infrastructure must be established. Internet provision will be handled by the station operator.
- Technical Support: CRCN technicians are available on-site during weekdays.

Environmental and Safety Considerations

- Seismic Activity: None reported.
- Flood Risk: The site is not prone to flooding. Due to possible heavy rainfall it is required to have the Station Housing built on an elevated concrete fundament.
- Lightning Protection: Required due to potential increases in thunderstorms caused by climate change.
- Industrial Pollution: Minimal, as the surrounding area is dominated by educational and research facilities.
- Noise and Waste Regulations: No specific noise regulations; general adherence to Brazilian environmental guidelines is expected.

ATTACHMENT II - INFRASTRUCTURE REQUIREMENTS FOR THE COMMISSION'S EQUIPMENT

Housing and Facility Characteristics for RN12 RASA System

- Proximity to Obstructions:
 - The housing shall be positioned such that the distance to the nearest obstructions (e.g., trees, buildings) is at least 5 to 10 times their height (refer to Figure 1 for illustration).

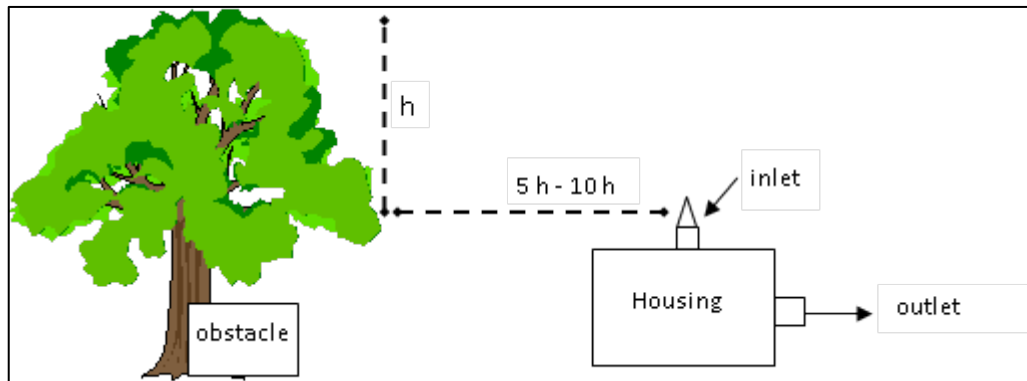


Figure 1 Inlet distance from the nearest obstacle

- Facility Layout:
 - Floor Space: Minimum floor area shall be 6 m x 6.5 m (recommended 6.5 m x 7 m).
 - Floor Loading: The average floor loading over a 0.9 m x 1.8 m area should be 440 kg/m².
 - Point Loading: The average point loading at the location of the system's feet should be 5 kg/cm².
 - Ceiling Height: The minimum ceiling height shall be 2.5 m.
 - Floor to Rooftop Distance: The maximum distance from the floor to the outside rooftop shall not exceed 3.5 m.

Note: The RASA system is supported on eight large feet. If the localized load at these feet becomes problematic, it is recommended to install a 0.6 cm thick metal plate under the system as a precaution.

- Access to RASA System:
 - Doors and passageways must be wide enough to allow for the system's framework to pass through without disassembly. The doors should be double doors for easier access.
 - A minimum walk-around space of 1.3 m is required around the system to ensure proper ventilation and ease of operation and maintenance, which can be performed through the front panel.
- Intake and Exhaust Ducting:
 - The maximum allowable length for the intake ducting is 3 m, and the intake must be vertical.
 - The intake duct must go through the roof, with the roof opening measuring approximately 26 cm in diameter. This opening shall be easily sealable after installation.
 - The exhaust duct shall have a straight section of at least 4 m, with a preferred length of 7.6 m. The anemometer, which shall be installed externally to the duct, shall be a minimum of 2.6 m downstream of the RASA main body. Therefore, the exhaust duct inside the room should be approximately 3 m in length.

- The exhaust duct shall pass through a wall, with an opening of approximately 26 cm in diameter.

- The building holes for the intake and exhaust ducts must not be cut until the RASA system is in place, ensuring that the exact positions can be determined. The RASA system can be moved aside during the hole-cutting process.

- Ideally, the intake and exhaust ducts should be separated by at least 10 m.

- Meteorological Equipment (METS): The METS consists of an ultrasonic wind sensor that measures wind speed, wind direction, temperature, humidity, pressure, and precipitation. The sensor should ideally be installed at least 2 m above any objects within a 300 m horizontal radius.

- Noise: The RASA system generates a noise level below 80 dBA, with a peak of around 350 Hz. Sound absorption materials can reduce the noise at the operator's console to about 65 dBA.

- Transportation: If a dock, forklift, hand trucks, and elevator are available at the installation site, the equipment can be shipped in a single crate measuring 1x2x2 meters.

- Alternatively, the equipment can be transported in smaller packages that can be safely handled by two people, except for the UPS, which weighs 51 kg. Refer to Table 2 for further details.

- Infrastructure Requirements: The minimum infrastructure requirements for the RASA system, as specified by General Dynamics (the Commission's Equipment Supplier) on 24 July 2015, are summarized in Table 1.

- Station Power Needs and Requirements: The following power needs must be addressed:

- Power requirements for the RASA system equipment, as described in Table 1.

- Power requirements for 3 climate control systems, as outlined in paragraph 4.4(a) of the ToR. These systems should be selected based on local availability, CRCN requirements, and local regulations. Typically, one-phase power and cooling capacity of 6 KW per system are recommended.

- Power needs for any additional items listed in this ToR, which will be provided by the Contractor.

Recommendation:

- Two main power circuits are required for the RASA system. Ideally, a third main power circuit should be provided for other items, including the VSAT and climate control systems.

Table 1 – RASA infrastructure minimum requirements (General Dynamics)

| RASA | Characteristic | Requirement/Capability |
|--------------------------|---|--|
| RASA Physical Dimensions | Length, (front to back) | 114 cm [45 inches] |
| | Width | 183 cm [72 inches] |
| | Height | 188 cm [74 inches] |
| | Weight | 700 kg [1540 lbs.] |
| Facility Requirements | Distance of Intake from nearest obstruction | >5 times intake height above ground Figure 1 |
| | Working room around RASA | ~1m [3 ft.] on all sides |
| | Floor Space Minimum | 25 sq. m [269 sq. ft.] RASA only 40 sq. m [430 sq. ft.] RASA and Nobel Gas |
| | Minimum facility length or width | |
| | Floor Loading Average | 440 kg per sq. meter over 1m x 2m area [90 lbs./sq. ft.] over [3 ft. x 6 ft. area] |
| | Point-Loading Average | 4.5 kg per sq. cm at the location of the feet [64 lbs./sq. in. at the location of the feet] |
| | Ceiling Height Minimum | 2.4m [8 feet]. |
| | Room Access Opening Minimum | 122 cm [48 inches] prefer double door |
| | Building layout examples | See Figure 2: RN70. |
| Power Requirements | Two power (Mains) circuits | <ul style="list-style-type: none"> • 200 to 240V • 50 or 60 Hz • Single Phase • One circuit with 25A • One circuit with 20A |
| | Earth ground for RASA chassis | Resistance to ground < 25 ohms (10 –25 recommended). All power and signal wires going to the RASA must be shielded and grounded. Power cables must be carried in electrically-continuous ferrous conduit |
| | Power load (RASA only) | 3 KW maximum, typically running less than 1 KW |
| | Breakers | 25A - Any type 20A – HACR, Slow Blow |
| | | |
| Connectivity | Data | 1 data line UTP 5 connected to the GCI VSAT |
| | Telephone | Mobile or landline for Help Desk support to local operators |
| Intake Duct | Orientation | Straight and vertical. |
| | Diameter | 25.4cm [10 inches] |
| | Length | Less than 4m [13 ft.] long |
| | Intake hole in ceiling | Slightly larger than 25.4cm [10 inches] diameter directly over RASA location |
| Exhaust duct | Orientation | Any |
| | Diameter | 25.4 cm [10 inches], may be as small as 15cm [6 in] if necessary |
| | Length | May be any length, have bends and be outside the enclosure |
| | Hole in ceiling or wall | Sized for exhaust duct |
| | Requirement for flow meter | A straight section for the flow meter. Recommend length is ~3.8m [12 ft.] but must be no less than 2m [7 ft.] |
| Climate control | Support | Brackets for each 1.5m [5 ft.] section capable of supporting 22.7 kg [50 lbs.] |
| | RASA heat burden to building | ~1 KW |
| | Allowed room temperature range | 18°C to 28°C [65°F to 82°F] |
| | Recommended room temperature | below 24°C [75°F] |
| | Allowed room temperature variation | 3°C [5°F] in 24 hours |
| | Relative humidity | < 80%, non-condensing |
| System Access | Access to the Site | Installation simplified by loading dock, forklift, hand trucks, elevator etc. |
| | | Media replacement (filter, sealing rolls) required every 11 months. |
| | | Inspection recommended every two weeks |

Table 2 – RASA typical shipping crates (General Dynamics)

| Shipping Crates (typical) | Weight | Size |
|---------------------------|---|---|
| | Note the entire RASA installation assembly encompasses 10 crates and ~2700 kg | |
| System framework | 500 kg 1100 lbs. | 175cm X 135cm X 218cm [69in X 53in X 86in] |
| Misc. Parts | 400 kg 900 lbs. | 183cm X 89cm X 183cm [72in X 35in X 72in] |
| System lead | 680 kg 1500 lbs. | 94cm X 89cm X 48cm [37in X 35in X 19in] |
| Detector system | 90 kg 200 lbs. | 102cm X 102cm X 102cm [40in X 40in X 40in] |
| Ups equipment rack | 68 kg 150 lbs. | 102cm X 84cm X 165cm [40in X 33in X 65in] |
| Consumables | 68 kg 150 lbs. | 183cm X 89cm X 104cm [72in X 35in X 41in] |
| Blower | 104 kg 230 lbs. | 81cm X 86cm X 81cm [34in X 32in X 34in] |
| Installation | Weight varies by location | Crates vary by location |

ATTACHMENT III – REQUIREMENTS FOR RASA SYSTEM HOUSING AT RN12

(a) Floor Dimensions: The minimum required inside floor dimensions for the RASA room are 7.5 m x 4.5 m, with a recommended height of 2.5 m. The maximum distance between the equipment room floor and the outside rooftop shall not exceed 3.5 meters.

(b) Door Dimensions: The minimum effective opening of the doors must be 1.30 m to accommodate the entry of the equipment. The door can be partially closed, with half kept open as necessary.

(c) Cleanliness and Separate Entrance: To maintain cleanliness, a separate entrance is highly recommended. This entrance should prevent the entry of dust, insects, sand, salt, and other contaminants. Additionally, this entrance can be used for wet jackets or shoes.

(d) Intake Specifications: The intake (diameter = 25.4 cm, length <3.5 m) must be straight and vertical. A hole in the ceiling is required for this configuration.

(e) Air Conditioning and Outlet Specifications: The outlet for both the air conditioning and the RASA system (diameter = 25.4 cm, length 6-7 m) shall be positioned on the lee side of the room. Bends are allowed, and the outlet shall be placed outside the enclosure. Support brackets, each capable of supporting 22.7 kg, must be provided.

(f) Electrical and Network Connections: Conduits and sockets for electrical cables and network connections shall be installed at various points. The RASA system requires two electrical outlets (25A and 20A, 208-240V, 50 or 60 Hz, single-phase) and one dedicated earth ground for the RASA chassis.

(g) Noise Insulation: The room must be equipped with sufficient noise insulation to ensure that the noise level produced by the RASA system complies with local laws and regulations.

(h) Vibration Control: The floor must prevent the propagation of vibrations produced by the RASA system blower to other parts of the building. A dedicated vibration-absorbing platform (2m x 1m) is recommended within the system area. Any vibration control solutions must be included in the infrastructure plan and discussed with the Commission and the Equipment Supplier(s) before implementation.

(i) Climate Control: A redundant climate control system is required to maintain appropriate temperature and humidity levels. In addition to the air conditioning system, a dehumidifier may be necessary to ensure the room's humidity levels are appropriately controlled.

The exemplary layout (not to scale!) for the housing of the RASA System is provided in Figure 2, along with a reference illustration of housing, is provided in Figure 3

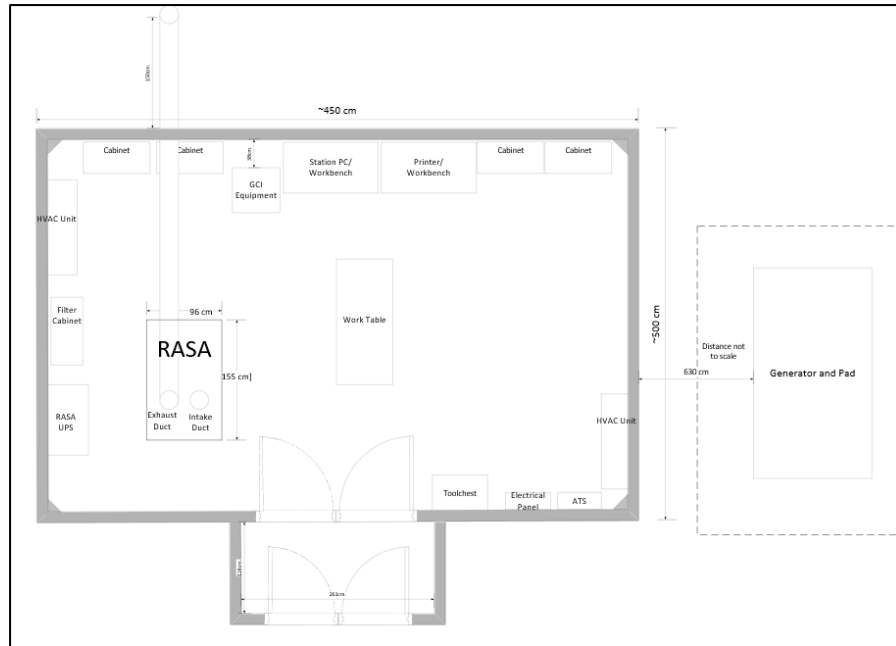


Figure 2 Recommended layout for the housing of the RASA System

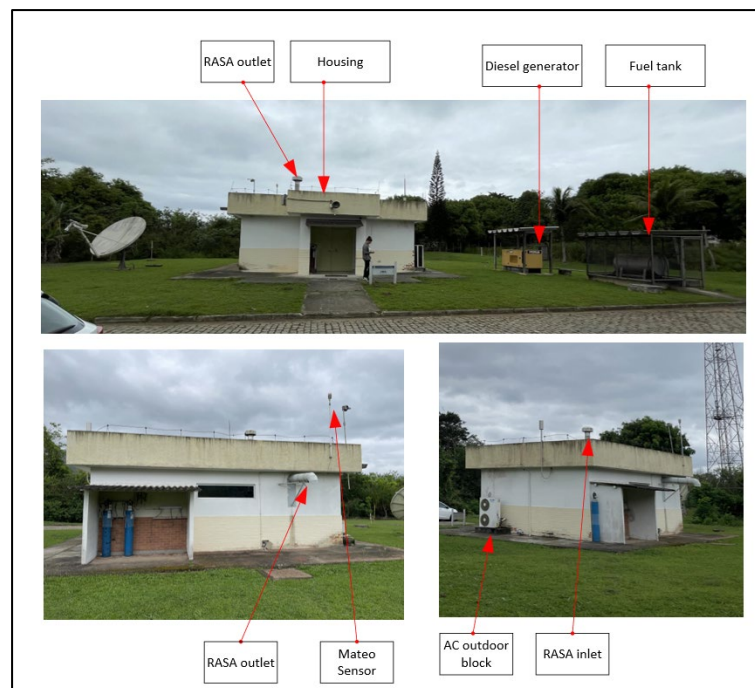
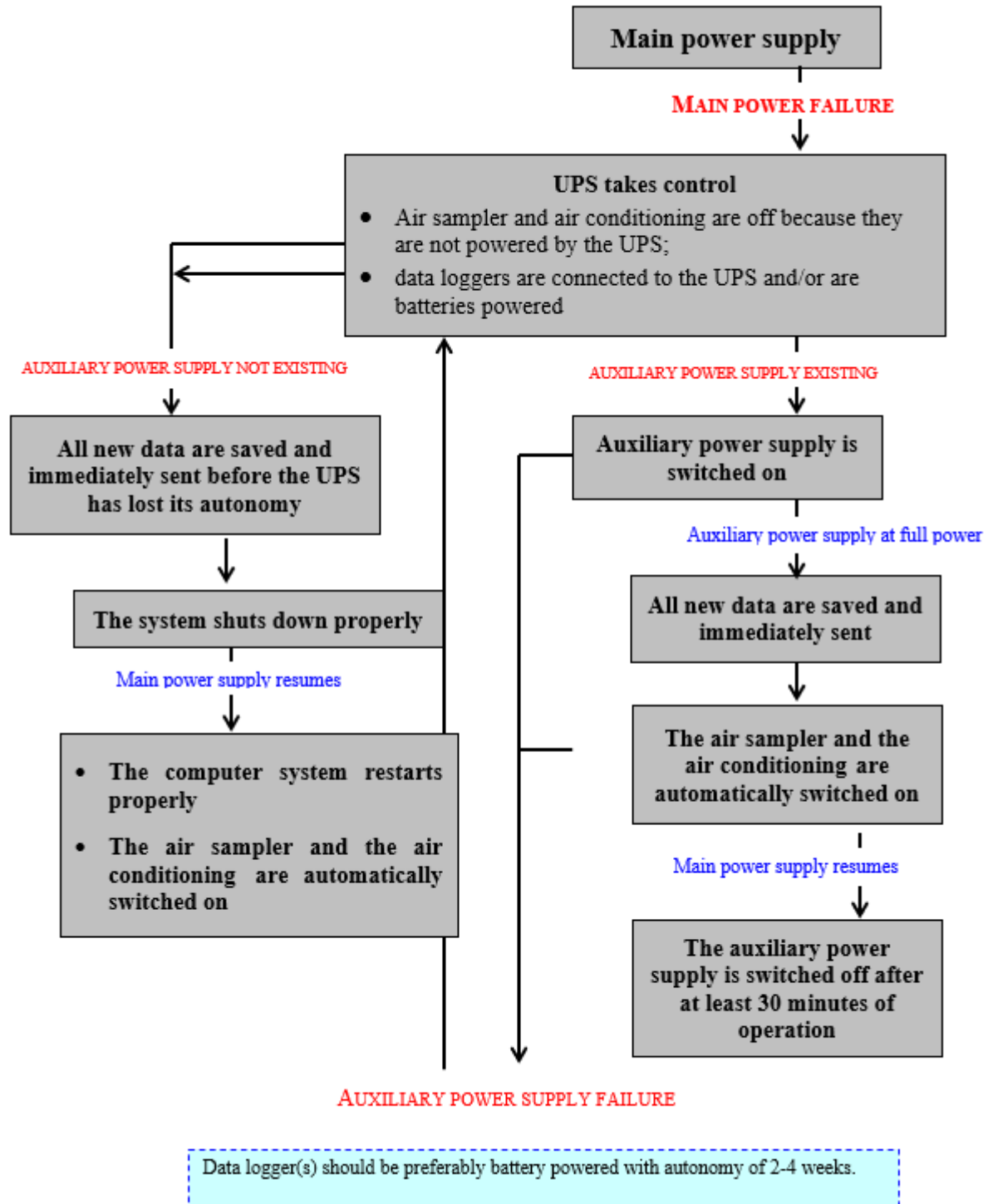


Figure 3 Reference illustration of the housing for a RASA system

ATTACHMENT IV - STATION MANAGEMENT FOR PARTICULATE STATION IN
CASE OF POWER FAILURE



ATTACHMENT V - PRODUCTION OF STATION SPECIFIC DOCUMENTATION (SSD) FOR IMS STATIONS

The Contractor shall produce the station-specific documentation for the radionuclide station infrastructure components under this contract. The Contractor shall generate the following drawings using Microsoft VISIO:

- Station Block Diagram
- Station Electrical Diagram
- Station Network Diagram (if applicable)
- Station Data Flow (if applicable)
- Set of documented photographs

SSD Drawings Requirements

Station Block Diagram (SBD): The SBD represents the station by blocks indicating the main station equipment components and the relationships between them. The SBD shall also indicate the communication topology to the IDC.

Electrical Power Diagram (EPD): The EPD is a simplified graphical representation of the power supply to the elements of the station. The EPD displays the following elements: mains power, generators, uninterruptible power supplies, transfer switches, circuit breakers, grounding, surge protectors, power outlets. IEC 60617 graphical symbols shall be used for the diagram. The most common symbols are available in a Microsoft VISIO shape library saved with the template file available from the PTS. The EPD shall also include the following information:

- Equipment power rating: phases, voltages and frequency, capacity/load.
- Grounding.
- Circuit breaker current ratings.
- Cable types, lengths and diameters.
- Main switchboard and air conditioner phase and neutral connections.

Data Flow Diagram (DFD): The DFD is a graphical representation of the data flow through the station. It shows where the data comes from and goes to and where the data will be stored.

Network Diagram: The network diagram includes IP addresses, gateways and netmasks of all IP devices. It represents the station's local network.

Examples of the above-listed diagrams in the SSD format can be provided by the Commission to the Contractor upon request.