TO:	All Bidders	FROM:	Selma Bukvic OiC, Procurement Services Section
DATE:	3 June 2025	REF.:	RFP No. 2025-0057/MOGAPI
		TEL. NO.:	+43 1 26030 6350
		EMAIL:	procurement@ctbto.org

SUBJECT: **Etension of the Deadline and Minutes of Bidders' Conference – RFP 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil**

Dear Bidders,

In reference to request for proposal (RFP) No. 2025-0057/MOGAPI concerning "Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil", please find attached:

- The Minutes of the Bidders' Conference held on 27 May 2025 including questions and answers
- CTBTO presentation delivered during the Bidder's Conference.

- The **deadline for the submission of proposals is hereby extended** from 6 June 2025 to **Monday, 16 June 2025, 17:00 hours, Vienna (Austria) local time**.

Please take all the above and attached documentation into account in the preparation and submission of your proposal. In case you have already submitted your proposal, you are kindly requested to submit a revised proposal if needed.

We are looking forward to receiving your proposal prior to the extended deadline for the submission of proposal on 16 June 2025, 17:00 hours, Vienna (Austria) local time.

Sincerely,

Selma Bukvic
OiC, Procurement Services Section

Attachments

1. *Agenda of the Bidders' Conference*
2. *Minutes of the Bidders' Conference including Questions and Answers*
3. *CTBTO Procurement Presentation*
4. *CTBTO Technical Presentation*
5. *Station Operator (CRCN-NE) Presentation*
6. *Available Infrastructure - RN12, Recife, Brazil*

RFP No. 2025-0057/MOGAPI: Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

BIDDERS CONFERENCE

AGENDA*

27 May 2025

Virtual via Microsoft Teams Platform

Time – CET (Vienna, Austria Local Time)	Subject	Presenters/Participants
15:00-15:05	Introductions	All Participants
15:05-15:15	CTBTO Procurement Presentation	CTBTO Procurement Services Section Administration Division
15:15-15:30	CTBTO Technical Presentation	CTBTO Engineering and Development Section International Monitoring System Division
15:30-15:45	CRCN-NE Station Operator Presentation	Centro Regional de Ciências Nucleares do Nordeste
15:45-16:00	Questions & Answers	All Participants

**Notes: Subject to change*

RFP No. 2025-0057/MOGAPI: Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

BIDDERS CONFERENCE

AGENDA*

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15:45-16:00	Questions & Answers	All Participants

**Notes: Subject to change*

Bidders' Conference
RFP No. 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

Date: 27 May 2025 **Location: Microsoft Teams Platform**

Start of meeting: 15:00 hours (Vienna, Austria local time) or 10:00 hours (Recife, Brazil local time)

1. Agenda

- Introductions & Purpose of Bidders' Conference
- CTBTO Procurement Presentation
- CTBTO Technical Presentation
- CRCN-NE Station Operator Presentation
- Questions & Answers
- Conclusion

MINUTES

2. Purpose

The purpose of the Bidders' Conference was for the CTBTO, with the support of the Station Operator for RN12, to provide a presentation on the RFP formal requirements for preparation and submission of proposals and provide clarifications, as needed, on the technical requirements in order to enhance the understanding of the requirements.

3. CTBTO Procurement Presentation

The CTBTO provided an overview of the RFP, and covered the below salient points:

- Proposals shall be submitted electronically to the Email: sealed_bids@ctbto.org in two separate files (envelopes), one containing the Technical proposal and the other the Financial proposal (one file one with pricing, and the other without pricing).
- Encryption keys shall be sent to the Email: bid_keys@ctbto.org.
- Bidders were advised to refer to the Procedure for Submission of Electronic Offers in 2 Sealed Files "Attachment 4" to the RFP.
- All prices shall be net of taxes. No pricing/financial information shall be included in the Technical Proposal.
- Proposals must be submitted on time. Late submission shall not be considered.
- All questions during the solicitation period must be addressed to procurement@ctbto.org.
- All questions must be sent no later than 7 business days prior to the closing date, as indicated under point 6 of the RFP Instructions for Preparation and Submission of Proposals.
- Bidders were encouraged to review the Evaluation criteria and complete Attachment 3 "Financial Proposal Form" provided.
- Emphasis was made on the need to provide additional documents requested such as the Bidder's Statement, Statement of Confirmation, and the Vendor Profile Form.
- Bidders were provided with additional tips for preparing responsive proposals.

4. CTBTO Technical Presentation

Bidders' Conference
RFP No. 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

The CTBTO provided an overview of the technical requirements as specified in the Terms of Reference (ToR), and covered the below salient points:

- Emphasized that the successful Bidder, cum Contractor, will need to closely coordinate with the CTBTO, Station Operator, and the Commission's Equipment Supplier of the RASA system.
- Stressed the importance of organizing the Coordination Meeting at the site of the Station to discuss and align the technical and logistical aspects of the project for all stakeholders involved.
- Explained the usefulness of the optional visit to the Commission's Equipment Supplier of the RASA system, which is a first of its kind approach for this kind of projects, which will help the successful Contractor understand in detail, the interface of the RASA system and the infrastructure to be established.
- Emphasized the importance of Work Task 3: Support During Transport, Storage and Installation.
- Clarified that it is critical to prepare a civil works plan, for review and approval by the Commission, before any construction works begins.
- Covered the types of reports specified in the ToR, and the need for timely submission of all reports.
- Explained the expectations of the Commission during the Inspection Visit.
- Demonstrated examples of existing RASA stations at RN40, Kuwait City, Kuwait and RN75, Charlottesville, United States, which have similar configurations to those specified in the RFP.

5. CRCN-NE Station Operator Presentation

The Station Operator presented an overview of the RN12 station. Further, different videos of the facility were shown to the Bidders. Below are the salient points covered, in addition to the video presentation:

- Provided an overview of the station, and layout.
- Described the current infrastructure such as electrical boxes and internet cables.
- Provided information on the weather persistence which the Contractor will need to take into consideration.
- Explained some of the challenges that Bidders may face during excavations and construction.
- Stressed the need for the successful Contractor to ensure that they independently identify and obtain all necessary regulatory authorizations to carry out the work as the Station Operator is unable to provide administrative support due to limited resources.

6. Questions & Answers

The below is a tabulation of all the Questions and Answers deliberated on during the Bidders' Conference:

Bidders' Conference
RFP No. 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

No.	QUESTION	ANSWER
1	Are the costs of the optional works tasks going to be considered under the financial scoring, or will only the costs for the mandatory work tasks be considered?	The costs of the optional work tasks will be considered for the purposes of financial proposal scoring/ranking since they would count towards the overall maximum amount of the contract price.
2	Regarding Work Task 1 (Liaison), section 3.2 (b) "*The Contractor shall obtain licenses, permits, or authorizations needed to carry out the Work under this Project*"; are there any permits [*and licenses or authorizations*] already solicited or obtained by the Station Operator?	The Station Operator has not obtained any licenses, permits, or authorizations related to the work. As per the CTBTO General Conditions of Contract and further stipulated in the Model Contract (Article 8 "Permits, Notices, Laws and Ordinances"), the Contractor shall perform the work in accordance with the laws and regulations of a specific country. It is therefore incumbent on the Contractor to identify which licenses, permits, or authorizations will be required for the Work, and obtain the same.
3	Would it be possible to have Bidders visit the site at RN12 to assess	The Commission will make all materials from the Bidders' Conference available to the market. If, after a detailed review, Bidders still require a site visit, they must submit a written request to procurement@ctbto.org, specifying the key elements they wish to examine during the visit.

End of meeting: 16:05 hours

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Bidders' Conference
RFP No. 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

Date: 27 May 2025 **Location: Microsoft Teams Platform**

Start of meeting: 15:00 hours (Vienna, Austria local time) or 10:00 hours (Recife, Brazil local time)

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- Questions & Answers
- Conclusion

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- Proposals must be submitted on time. Late submission shall not be considered.
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Bidders' Conference
RFP No. 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

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- Stressed the importance of organizing the Coordination Meeting at the site of the Station to discuss and align the technical and logistical aspects of the project for all stakeholders involved.
- Explained the usefulness of the optional visit to the Commission's Equipment Supplier of the RASA system, which is a first of its kind approach for this kind of projects, which will help the successful Contractor understand in detail, the interface of the RASA system and the infrastructure to be established.
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Bidders' Conference
RFP No. 2025-0057/MOGAPI - Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil

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End of meeting: 16:05 hours

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COMPREHENSIVE
NUCLEAR-TEST-BAN
TREATY ORGANIZATION

BIDDERs CONFERENCE – RFP 2025-0057/MOGAPI

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

SUBMISSION DEADLINE: 6 JUNE 2025 – 17:00 hrs

EMAIL SUBMISSION:

The Proposal shall be submitted electronically to the Email: sealed_bids@ctbto.org

The Encryption keys shall be sent to the Email: bid_keys@ctbto.org

Bidders shall note that the Proposal shall be submitted in **two separate** envelopes:
1 - **Technical envelope** (**no prices at all**); and
2 - **Financial envelope** (one with pricing, and the other without pricing)

Please refer to the Procedure for Submission of Electronic Offers in 2 Sealed Files "Attachment 4" to the RFP.

The subject of the email shall contain the following:

"RFP 2025-0057/MOGAPI – Establishment of Infrastructure Related to the Installation of the Radionuclide Station RN12, Recife, Brazil"

No pricing/financial information shall be included in the Technical Proposal.

CLARIFICATIONS Deadline: ***7 business days prior to the RFP Closing Date***

Preparation of the Proposal

The Proposal shall be composed of the following separate parts:

1. **Technical Compliance Matrix**

I. **Technical Proposal**; and
II. **Financial Proposal**;
III. **Financial Proposal without prices**

Technical Proposal

No pricing/financial information shall be included in the Technical Proposal. The Proposal should address and describe all requirements spelled out under Section 2 “Scope of Work” of the Terms of Reference (ToR), and as further described in the ToR in general.

Bidders are required to complete and follow:
Attachment 1: Technical Compliance Matrix provided as part of Instructions for Preparation and Submission of Proposals.

BIDDER'S STATEMENT

STATEMENT OF CONFIRMATION

VENDOR PROFILE

Validity of the Bid – 90 days after the deadline for its submission

Financial Proposal

Attachment 3 “Financial Proposal Form”:

- ✓ Proposed prices for all Work Tasks requested in the Terms of Reference
- ✓ Additional information as attachment with clear indication “Financial proposal”

PRICING - The quoted fees/rates shall be fixed for the duration of the Contract
- Net of taxes

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

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.

OTHER TIPS

- If you are not interested or unable to participate in a tender, inform us! This ways we will be able to keep your organization on the active list.

- Study tender documents carefully and follow all related instructions, ask for clarification if there is any uncertainty.

- Familiarize yourself with the **UN Supplier Code of Conduct and with our General Terms and Conditions** - any deviations may be considered in the decision of a procurement contract award

OTHER TIPS

- Ensure that your offer meets ALL requirements of the tender - provide all requested information and documentation with you offer; failure to do so can result in the disqualification of your offer .

- Be sure to check if a sealed bid is required - electronic submissions for sealed bids are different, and instructions provided in the tender must be followed carefully.

- Always provide your most competitive offer at the outset; pricing negotiations are only undertaken (if at all) with the successful bidder(s).

- Meet the submission deadline; late proposals will not be considered.

Questions & Answers

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1400 Vienna, Austria
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COMPREHENSIVE
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TREATY ORGANIZATION

General Technical Information for Establishment of radionuclide station RN12, Recife, Brazil

Provisional Technical Secretariat of the CTBTO

May 2025

RN12 Station Establishment General

IMS Radionuclide station RN12, Recife, Brazil, will be an automatic radionuclide station of type "RASA":

RN12 Station establishment project will require two major contracts:

1. Contract for RN12 Infrastructure Establishment

   The infrastructure shall be built by the Contractor in accordance with the requirements of the Terms of Reference. The bidders shall note that the RASA system will be delivered, installed, and tested **by another contractor**.

Stakeholders of the project:

- PTS (Procurement Section , IMS/ED Radionuclide Unit)
- RN12 Station Operator: Centro Regional de Ciências Nucleares do Nordeste (CRCN-NE)
- The Commission's Equipment Supplier ("RASA supplier")
- Infrastructure Contractor selected as the outcome of this bidding ("Infrastructure Contractor").
- Any other sub-contractors

RN12 Station
Project Outline – Coordination Meeting

- **Technical Requirements specified in the ToR**

- **Project Outline: Coordination Meeting**

The Coordination Meeting between the involved stakeholders takes place after contract signature. Participants of the coordination meeting:

- Infrastructure Contractor
- Station Operator (CRCN-NE)
- Commission's Equipment Supplier ("RASA supplier")
- PTS technical team
- any local sub-contractors as appropriate (local coordinator, electricians etc…)

RN12 Station
Project Outline – Coordination Meeting

➢ Project Outline: Coordination Meeting

During the coordination meeting all technical and logistical aspects shall be discussed with the involved parties. Time-lines are to be coordinated between the infrastructure contractor, the station operator, the RASA –contractor, and the PTS.

Any logistical challenges need to be identified and addressed.

Any optional services in accordance with the TOR, if requested by the Commission, shall be discussed and agreed.

A **coordination meeting report** shall be submitted to the Commission with all findings and agreements of the coordination meeting.

RN12 Station Establishment Project Outline – Optional work tasks

- **Project Outline - Optional work tasks I (TOR 4.3.d. Visit to the Commission's Equipment Supplier)**

As set out in TOR 4.3.d the infrastructure contractor may, optionally, visit the Commission's Equipment Supplier's factory to better understand the requirements for having a RASA station installed inside the station housing to be built.

RN12 Station Establishment Project Outline – Optional work tasks

➢ Project Outline - Optional work tasks II (TOR Section 5):

(i) provide storage for the Commission's Equipment.

(ii) Provide support during transport of the Commission's Equipment at the Site

(iii) Provide support to the Commission's Equipment Supplier(s) for the duration of installation and setup of the Commission's Equipment

(iv) Provide consumables and tools expected to be necessary to ensure reliable and continuous operation, until end of initial testing (i.e. 1 month after installation).

The necessity of these options will be addressed during the Coordination meeting and exercised by the Contractor, if requested by the Commission

RN12 Station Establishment Project Outline – Civil Works Plan

➢ Project Outline - Civil Works Plan

- As set out in TOR 4.1. the contractor shall create a Civil Works Plan with detailed information on construction measures, location, dimensions of major system components, and protection measures.

- The completed plan must be submitted to the Commission and CRCN for review. The commission will inform the contractor about acceptance or any required changes of the plan.

- Works shall start only upon the Commission's (and CRCN-NE) approval.

RN12 Station Establishment Project Outline – Work Tasks Reporting

➢ Project Outline – Reports and Acceptance

- Progress Report 1: comprises of Work Task 2 (building of new infrastructure). Acceptance of Progress Report 2 enables the installation of the RASA by the Commission's Equipment Supplier

- Final Report: comprises of any additional work tasks (optional tasks during installation, provision of documentation etc.)

RN12 Station Establishment Project Outline - Inspection

➢ Project Outline – Inspection Visit

(a) An inspection visit by representatives of the Commission is carried out within app. 3 months after the installation completion.

(b) The Inspection visit (together with 1 month Initial testing, and 3 months of operational "Testing and Evaluation" period) is the basis for the PTS station certification.

(c) The Inspection visit together with the Contractor serves to confirm that the Work Tasks of this contract have been carried out in accordance with the Contract.

(d) The contractor shall be present during the Inspection visit (scheduled for 5 days on-site)

CTBTO PREPARATORY COMMISSION

COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION

Example: RASA Station at RN40, Kuwait City, Kuwait

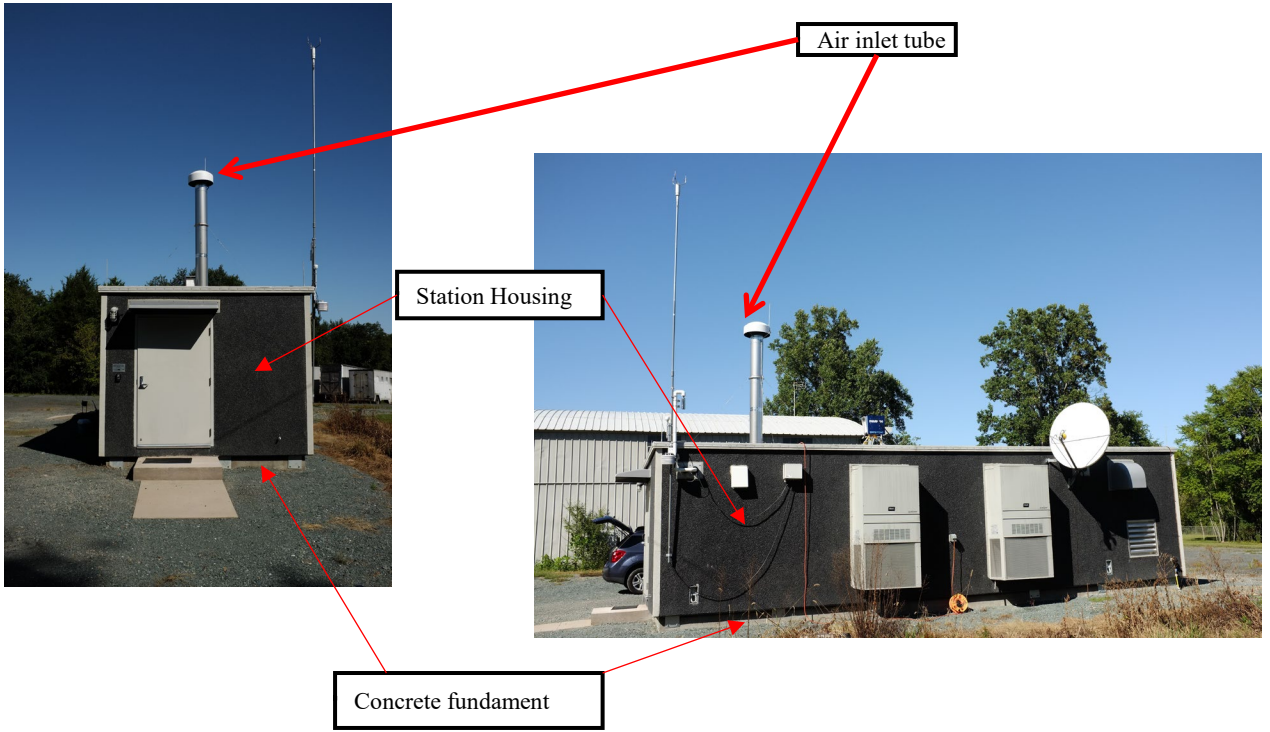
Air inlet tube

RASA inside station room

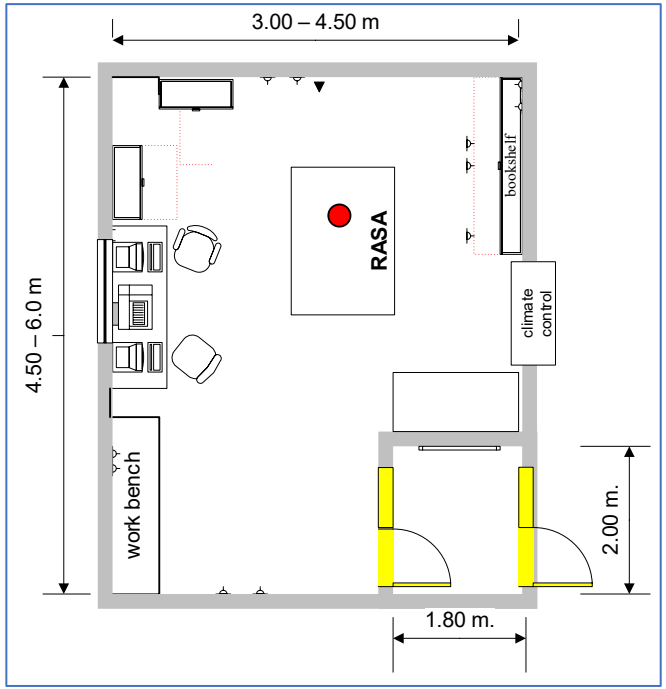
CTBTO PREPARATORY COMMISSION

COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION

Example: RASA Station at RN75, Charlottesville, USA



Example of outline of a radionuclide station room with RASA



- RASA inside the air-conditioned station housing
- Air inlet leading from the roof top into the RASA
- Air Outlet leading through the side wall of the station housing

Roof Opening for Air inlet must be prepared

RASA exhaust through the side wall of the station housing. Opening to be prepared

Operator desk with station computer for reporting

Work bench for sample preparation

THANK YOU

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1400 Vienna, Austria
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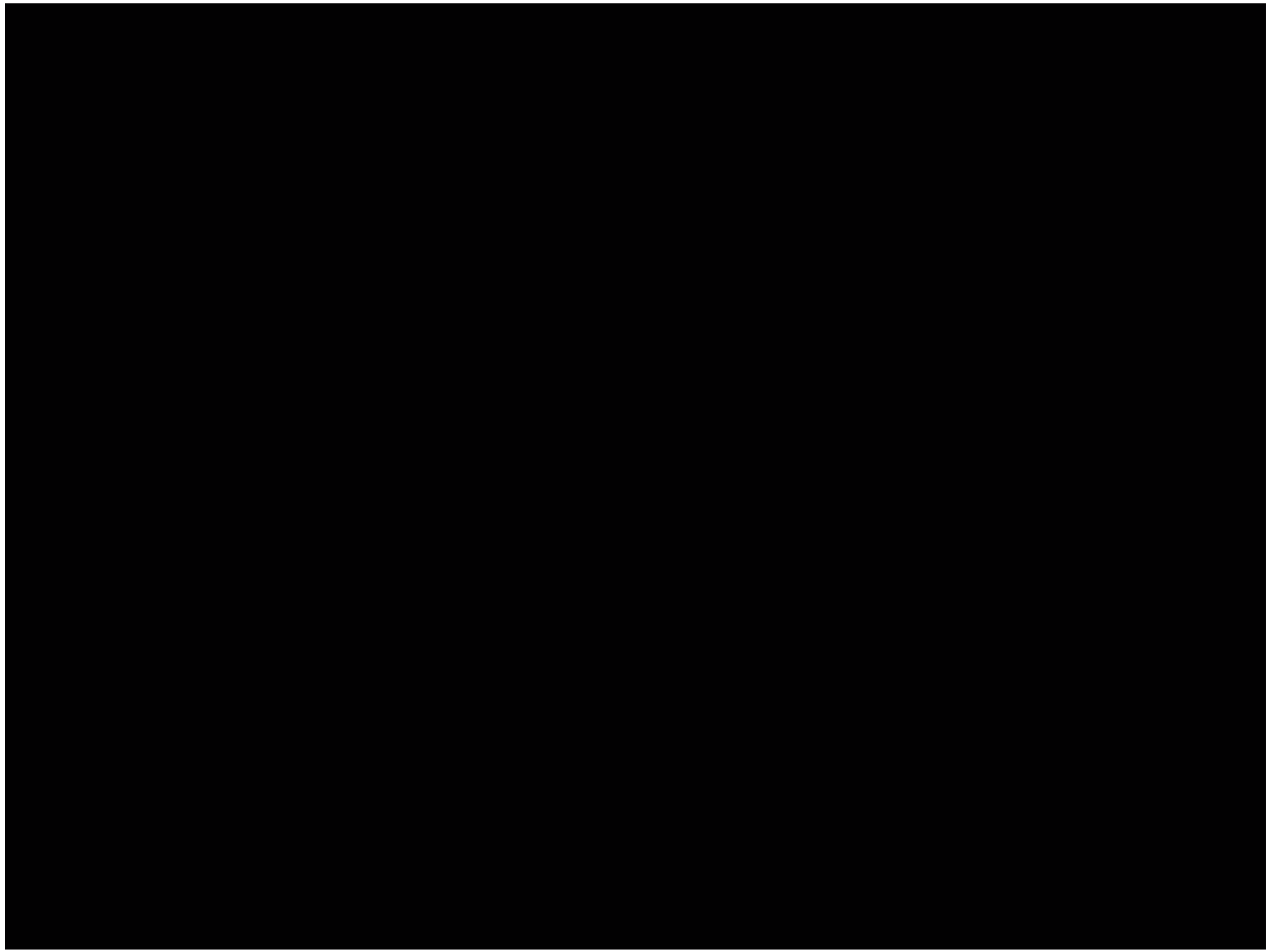
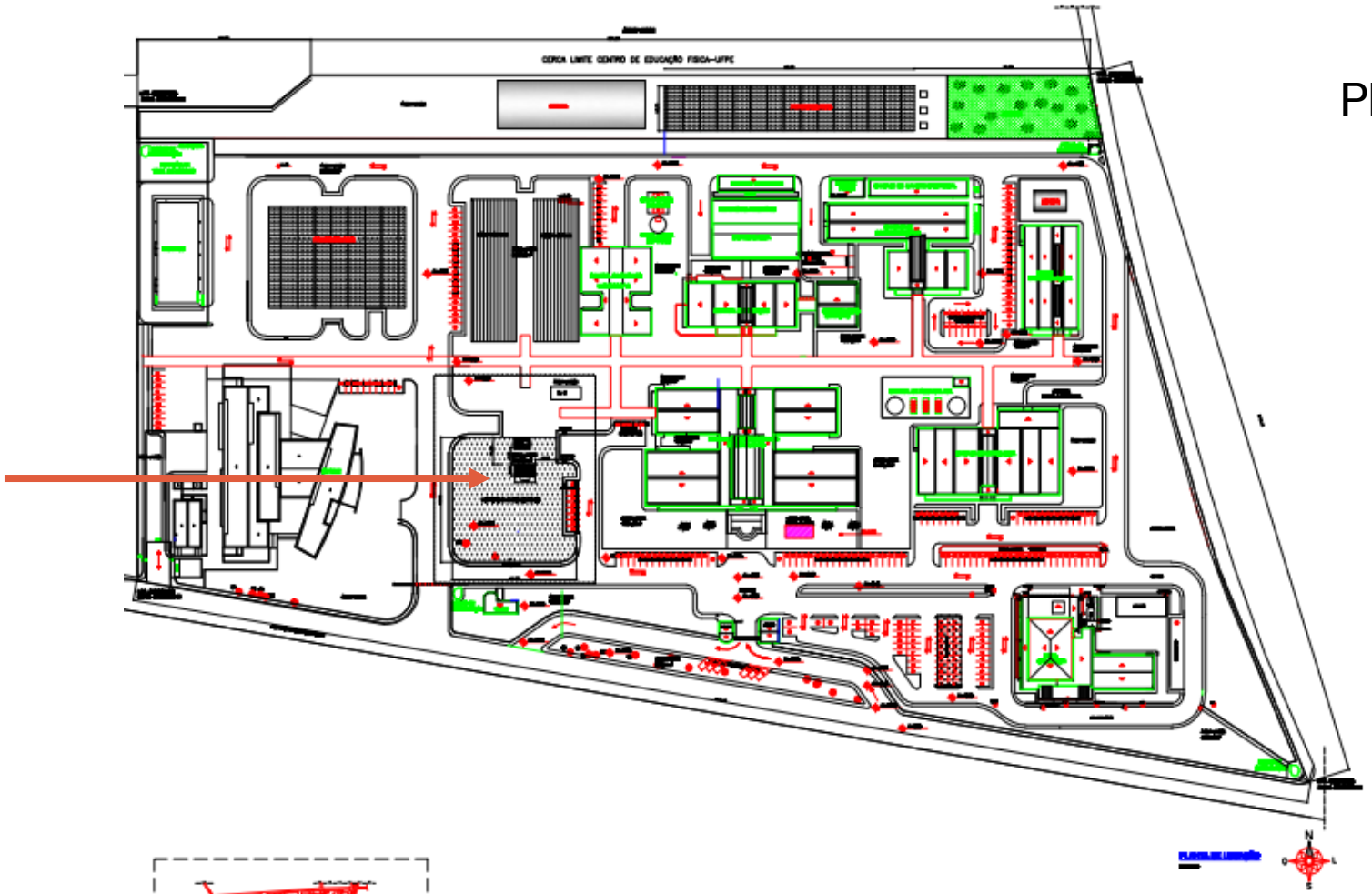
NUCLEARES DO NORDESTE
CNEN
Comissão Nacional
de Energia Nuclear
Centro Regional de Ciências
Nucleares do Nordeste

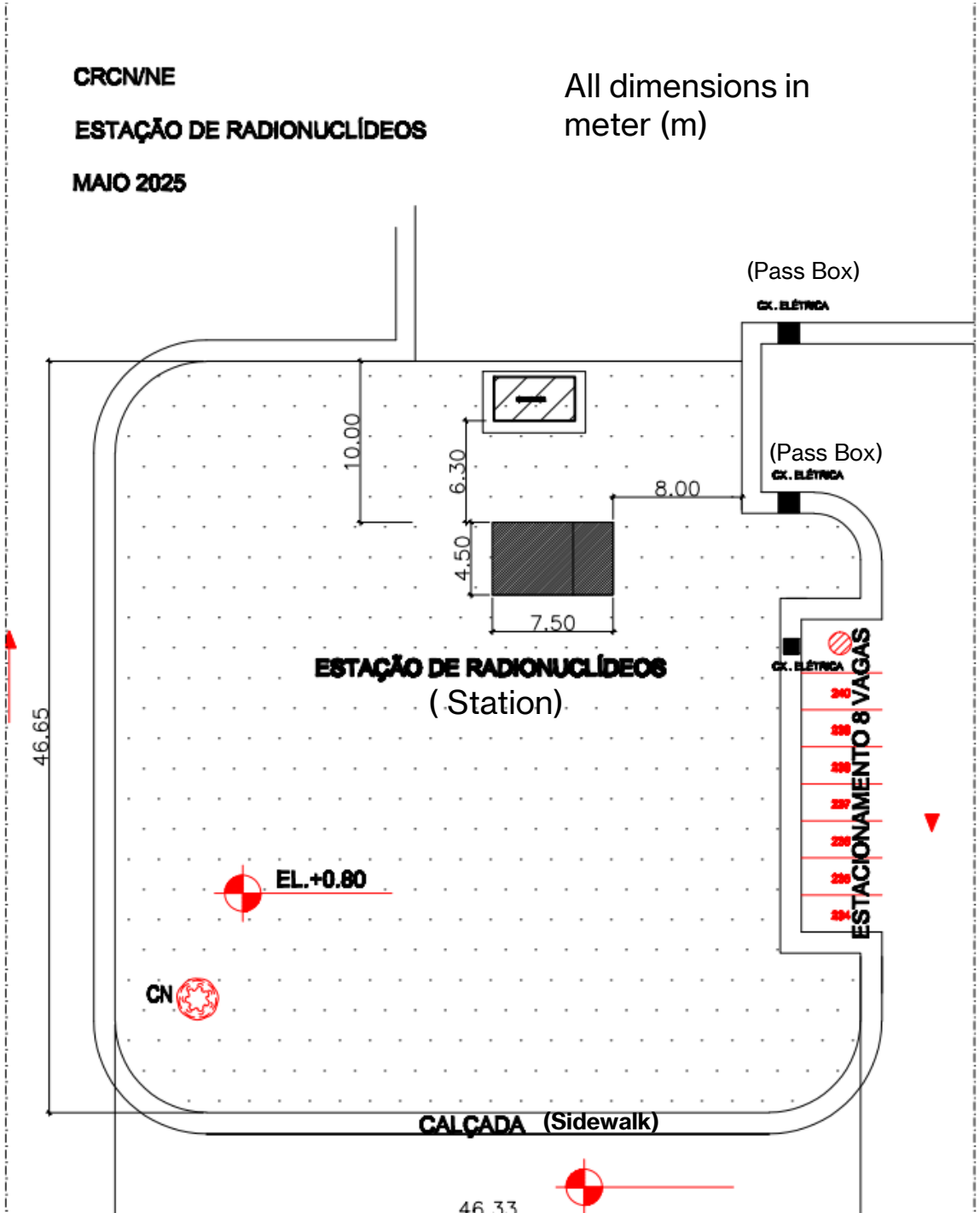


Plant Location



Plant Situation

Plant Location

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Comissão Nacional de Energia Nuclear
Centro Regional de Ciências Nucleares - NE
Centro de Tecnologias Estratégicas do Nordeste
CETENE

RADIONUCLIDE STATION RN12, RECIFE, BRAZIL

AVAILABLE INFRASTRUCTURE – CRCN/NE

1. ELECTRICAL INSTALLATIONS

Considering that the electrical supply for RASA - the new RN12 Radionuclide Station - will be received by an exclusive circuit starting from the Generator Room (linked to the CRCN Substation), more specifically from the "Essential Loads Panel", we will have an almost entirely existing route, with a network of ducts and junction boxes already in place, requiring only the construction of a section within the area of the land where the new station will be built. Thus, information about the route was gathered. Electrically, we have a total of 14 existing junction boxes and one more to be built. All ground junction boxes are constructed using plastered masonry and reinforced concrete covers.

The pipes between the junction boxes are normally 4 inches thick, which allows the substation power cable to be laid with ease, as far as the cross-section is concerned. However, it was observed that there was a need to clean these junction boxes to remove debris and material carried there, such as sand and coarse dust. This is essential for the correct installation of the station's new circuit.

Below is a list of boxes and route distances from the Substation:

www.crcn.gov.br | Phone: 81 3454.8000 | 3454-8086 | Professor Luiz Freire Street, 200, University City - Zip Code 50.740-540 - Recife|PE

EXCERPT	DIMENSIONS OF THE JUNCTION BOX (meters)	DISTANCE FROM PREVIOUS BOX A GENERATOR SWITCHBOARD ROOM (meters)
0 - Starting from the "Essential Loads Chart"		
0 → 1	1,20 x 1,20	2,00
1 → 2	1,20 x 1,20	2,00
2 → 3	1,20 x 1,20	15,00
3 → 4	1,20 x 1,20	12,0
4 → 5	1,25 x 0,85	20,0
5 → 6	1,12 x 1,12	17,0
6 → 7	1,12 x 1,12	14,0
7 → 8	1,10 x 1,10	12,0
8 → 9	0,92 x 0,92	26,0
9 → 10	0,92 x 0,92	32,0
10 → 11	0,92 x 0,92	32,0
11 → 12	1,26 x 1,26	10,0
12 → 13	1,25 x 1,25	21,0
13 → 14	1,25 x 1,25	11,0
14 → 15	0,94 x 0,94	10,0
15 → 16*	1,00 x 1,00	25,0
TOTAL (meters)		261,0

15* Junction Box to be built.

2. INTERNET FACILITIES

The Route for launching the internet cable (network): Considering the availability of infrastructure for possible deployment of the logical network cable, a survey of the route was carried out from the IT Rack located in the server room. Thus, we have the following table identifying the distance along the route and the number of junction boxes along the route. Identical to the electrical part, all the logic network junction boxes, located on the ground, are built in plastered masonry and have a reinforced concrete lid.

www.crcn.gov.br | Phone: 81 3454.8000 | 3454-8086 | Professor Luiz Freire Street, 200, University City - Zip Code 50.740-540 - Recife|PE

EXCERPT	DIMENSIONS OF THE JUNCTION BOX (meters)	DISTANCE FROM PREVIOUS BOX TO SERVER ROOM (meters)
0 - Starting from the server room		
0 → 1	0,92 x 0,92	21,0
1 → 2	0,92 x 0,92	3,0
2 → 3	0,92 x 0,92	32,0
3 → 4	0,92 x 0,92	34,0
4 → 5	0,72 x 0,62	20,0
5 → 6	0,72 x 0,62	15,0
6 → 7*	1,00 x 1,00	25,0
TOTAL (meters)		150,0

7* Junction Box to be built.

3. GENERAL CONSIDERATIONS

The intervention actions to be adopted will focus on improving the conditions of the existing infrastructure, such as:

• Cleaning the existing junction boxes to remove debris and materials;

• Clearing the tubular paths to allow the passage of conductors;

• Installing the output circuit breaker of the essential loads panel of the GMG room of the CRCN and interconnecting the device to the general busbar; identifying the device within the Essential Loads Panel;

• Laying the power supply circuit cables and crimping the terminals and connections to the output circuit breaker. Leave at least 1 meter of cable slack inside each junction box.

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RADIONUCLIDE STATION RN12, RECIFE, BRAZIL

AVAILABLE INFRASTRUCTURE – CRCN/NE

1. ELECTRICAL INSTALLATIONS

Considering that the electrical supply for RASA - the new RN12 Radionuclide Station - will be received by an exclusive circuit starting from the Generator Room (linked to the CRCN Substation), more specifically from the "Essential Loads Panel", we will have an almost entirely existing route, with a network of ducts and junction boxes already in place, requiring only the construction of a section within the area of the land where the new station will be built. Thus, information about the route was gathered. Electrically, we have a total of 14 existing junction boxes and one more to be built. All ground junction boxes are constructed using plastered masonry and reinforced concrete covers.

The pipes between the junction boxes are normally 4 inches thick, which allows the substation power cable to be laid with ease, as far as the cross-section is concerned. However, it was observed that there was a need to clean these junction boxes to remove debris and material carried there, such as sand and coarse dust. This is essential for the correct installation of the station's new circuit.

Below is a list of boxes and route distances from the Substation:

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EXCERPT	DIMENSIONS OF THE JUNCTION BOX (meters)	DISTANCE FROM PREVIOUS BOX A GENERATOR SWITCHBOARD ROOM (meters)
0 - Starting from the "Essential Loads Chart"		
0 → 1	1,20 x 1,20	2,00
1 → 2	1,20 x 1,20	2,00
2 → 3	1,20 x 1,20	15,00
3 → 4	1,20 x 1,20	12,0
4 → 5	1,25 x 0,85	20,0
5 → 6	1,12 x 1,12	17,0
6 → 7	1,12 x 1,12	14,0
7 → 8	1,10 x 1,10	12,0
8 → 9	0,92 x 0,92	26,0
9 → 10	0,92 x 0,92	32,0
10 → 11	0,92 x 0,92	32,0
11 → 12	1,26 x 1,26	10,0
12 → 13	1,25 x 1,25	21,0
13 → 14	1,25 x 1,25	11,0
14 → 15	0,94 x 0,94	10,0
15 → 16*	1,00 x 1,00	25,0
TOTAL (meters)		261,0

15* Junction Box to be built.

2. INTERNET FACILITIES

The Route for launching the internet cable (network): Considering the availability of infrastructure for possible deployment of the logical network cable, a survey of the route was carried out from the IT Rack located in the server room. Thus, we have the following table identifying the distance along the route and the number of junction boxes along the route. Identical to the electrical part, all the logic network junction boxes, located on the ground, are built in plastered masonry and have a reinforced concrete lid.

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EXCERPT	DIMENSIONS OF THE JUNCTION BOX (meters)	DISTANCE FROM PREVIOUS BOX TO SERVER ROOM (meters)
0 - Starting from the server room		
0 → 1	0,92 x 0,92	21,0
1 → 2	0,92 x 0,92	3,0
2 → 3	0,92 x 0,92	32,0
3 → 4	0,92 x 0,92	34,0
4 → 5	0,72 x 0,62	20,0
5 → 6	0,72 x 0,62	15,0
6 → 7*	1,00 x 1,00	25,0
TOTAL (meters)		150,0

7* Junction Box to be built.

3. GENERAL CONSIDERATIONS

The intervention actions to be adopted will focus on improving the conditions of the existing infrastructure, such as:

• Cleaning the existing junction boxes to remove debris and materials;

• Clearing the tubular paths to allow the passage of conductors;

• Installing the output circuit breaker of the essential loads panel of the GMG room of the CRCN and interconnecting the device to the general busbar; identifying the device within the Essential Loads Panel;

• Laying the power supply circuit cables and crimping the terminals and connections to the output circuit breaker. Leave at least 1 meter of cable slack inside each junction box.

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