REQUEST FOR PROPOSAL

To: ALL BIDDERS CTBTO Ref. No.: 2023-0107/STOMOV

(PLEASE QUOTE ON ALL COMMUNICATIONS)

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

E-mail: procurement@ctbto.org

Attn:

Phone: Date: 15 Aug 23

Fax: Email:

Subject: Upgrading of Infrastructure and Support to the Installation of the

Radionuclide Particulate Station at Buenos Aires, Argentina

Deadline for Submission: 4 Sep 23 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,

Sally ALVAREZ DE SCHREINER

Chief, Procurement Section

ACKNOWLEDGEMENT FORM

Solicitation No:2023-0107Closing Date:4 Sep 23Title:Upgrading of Infrastructure and Support to the Installation of the Radionuclide Particulate Station at Buenos Aires, ArgentinaVienna Local Time:17:00

Procurement Staff: Alexandre Stomov CTBTO Req. No.: 0010022452

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		
	Company Name:	
By:(date)	Contact Name:	
(date)	Email/Tel:	
B: We may submit and will advise		
	Company Name:	
Ву:	Contact Name:	
(date)	Email/Tel:	
C: We will not submit a proposal for the fo	ollowing reason(s)	
our current workload does not perrwe do not have the required expert	nit us to take on additional work at this time; tise for this specific project;	
<pre>insufficient time to prepare a prope other (please specify)</pre>		
	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 Terms of Reference.

The Proposal shall meet all requirements stated in the Terms of Reference. For this project, the Commission is seeking capabilities, which will ensure that the equipment is supplied and 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, Bidder's Statement Form and with the following Attachments:
 - o Attachment 1: Evaluation Criteria and Method
 - o Attachment 2: Format of Financial Proposal
- (c) List of CTBT State Signatories
- (d) Statement of Confirmation
- (e) Vendor Profile Form
- (a) The Commission's Model Contract and its Annexes A B;
 - o The Commission's General Conditions of Contract (Annex A)
 - 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 Bid shall be typed, dated and signed by an official legally authorized to enter into contracts on behalf of your organization. The Bid 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 Bid.

(a) The Bid shall be submitted electronically in three separate pdf files, one containing a Financial Bid *with* prices, one containing a Financial Bid *without* prices, and one containing a Technical Bid, to **procurement@ctbto.org**.

The subject of the email shall contain the following:

NAME OF THE PROJECT: Upgrading of Infrastructure and Support to the Installation of the Radionuclide Particulate Station at Buenos Aires, Argentina CTBTO REFERENCE No.: 2023-0107/STOMOV

No pricing/financial information shall be included in the Technical Section of the Bid. Note however that a complete list of the items being offered (without the prices) shall be included in the Technical Section of the Bid.

Submission in hardcopy to the below mailing address, is also acceptable, a memory stick containing the proposal, as described above, shall also be included.

6. Mailing Address and Closing Date

(a) The Bid shall be sent to the following addressee:

Chief, Procurement Section Office E0918 CTBTO, Vienna International Centre Wagramer Strasse 5 A-1400 Vienna AUSTRIA

(b) The Bid shall be received by the above-mentioned addressee not later than the closing date indicated in the Letter of Invitation.

7. 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 and should be sent to:

E-mail: **procurement@ctbto.org**

Subject: Request for Clarifications re RFP No. 2023-0107/STOMOV

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.

8. Eligible Goods and Services

The services and goods (if any) to be rendered under the Contract shall have their origin in the States Signatories of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), the list of which is attached to this RFP. For purposes of this paragraph, "the origin" means the place from where the materials, goods and/or from which the services are supplied.

9. Type of Contract and Payment

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

Applicable Taxes payable by the Supplier and/or its subcontractor(s) 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 shall be submitted to the Commission, in addition to any other supporting documentation.

"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.

10. 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.

NOTE: No pricing information shall be included in the Technical Proposal.

Personnel

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

Bidder's Statement, Statement of Confirmation and Vendor Profile Form

The attached Bidder's Statement, Statement of Confirmation and Vendor Profile Form shall be duly filled-in, signed and submitted as part of the Technical 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.

The total amount of person-days/work-hours proposed for the project as part of the "turn-key solution" (on-site as well as off-site) and their respective estimated allocation to different work-phases shall be specified clearly in the proposal. In any case it shall be the sole responsibility of the Contractor to fulfil and complete the scope of work as specified in these Terms of Reference regardless of the actual number of person-days dedicated to a specific task.

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.

Time Schedule

A bar chart indicating the estimation of the duration of the services, including the duration of each task required by the Terms of Reference and key staff to be involved in each task.

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 staff proposed for this contract, including technical experience to perform the Work.

Sub-Contractors

Names, legal status, address and qualifications of subcontractor(s), if any, and the scope of the subcontracted services. The Proposal shall provide a statement that your organization shall be fully responsible for the performance of sub-contractors. All sub-contractors shall be legally established in one of the CTBTO Member States.

Model Contract

A statement that the bidder has carefully reviewed the Model Contract and its Annexes and is in agreement with all its terms and conditions.

Delivery Schedule

Delivery time shall be indicated in weeks after receipt of an order and shall be firm during the validity of the Proposal.

PART II: FINANCIAL PROPOSAL

Bidders are required to prepare the Price Schedule using *Attachment 2 (Format of Financial Proposal)* attached to these Instructions for Preparation and Submission of Proposals. In presenting the cost for each item, adequate justification and calculation must be included in the Financial Proposal.

Clear and detailed explanations would enable the Commission to evaluate the Proposal promptly and proceed with fewer requests for clarifications/justifications in a later stage. This is also a factor influencing the decision for Contract award.

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 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 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 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.

11. Completeness and Correctness of the Proposal

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

12. Validity of 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.

13. 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.

14. Evaluation of Proposal

- (a) The Commission will conduct the evaluation based on the criteria and method specified in Attachment 1 "Evaluation Criteria and Method".
- (b) The Commission, based on the evaluation criteria and method given in Attachment 1 and will determine the Proposal that "most effectively satisfies the technical and operational requirements set out in the solicitation documents", subject to contractual and financial compliance.
- (c) The Commission will award the Contract to the bidder receiving the highest combined score in the technical and financial evaluation, in line with the Best Value for Money-principle. The weight of the technical and financial score is 60%/40% respectively. The Commission may split the award of the Contract and award more than one Contract.

15. Negotiations of the Proposal

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.

16. Modification and Withdrawal of 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

17. 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 therefore, without thereby incurring any liability to the bidders.

18. 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.

19. 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.

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

A Bidder must <u>not</u>, 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.

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.		
Confirmation that the bidder has reviewed the Commission's Model License Agreement (if attached), the Commission's General Conditions for Goods (if attached), the Commission's General Conditions of Contract (if attached), Draft Contract (if attached), and the Special Conditions (if attached), 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:		

EVALUATION CRITERIA AND METHOD

A. TECHNICAL EVALUATION

1. Overview

This document describes the evaluation criteria of the bidder's technical proposal (hereafter referred to as the "Bidders Technical Proposal"). The technical evaluation of the Bidder's Technical proposals will be based on an assessment of compliance with all requirements of the Terms of Reference (ToR), and with the requirements for the content of the Technical Proposal set forth in the Instructions for Preparation and Submission of Proposals.

2. Evaluation of Compliance with the requirements

- The maximum score is 100 points for the technical part of the proposal.
- Points will be awarded to each bidder for each of the requirements in Table 2 in accordance to Table 1 below.
- If a bidder is assigned less than 3 points for any criteria, it is considered that that bidder does not satisfy the minimum technical requirements for this project.

Table 1: Basis of scoring

Points	Criteria	
1	Does not meet the minimum technical, functional, or performance related criterion. Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion	
2	Partially meets the requirement. Meets the requirement in most areas but is lacking details an responsiveness in some areas of the criterion.	
3	Meets the requirements.	
4	Meets the requirement to the minimum acceptable level in all areas and exceeds it in some areas.	
5	Response exceeds the requirement in all areas and adds additional technical, functional and performance related value to the proposed services.	

 Table 2: Bidder Technical Proposal Evaluation Matrix

Eval ID	Description	Max Score	Weight	Score
1	Quality of the proposal's solution in response to TOR Section 3.1 Planning and Coordination - Coordination 'Meeting - Station Plan	5	2	10
2	Technical compliance and quality of the proposal's solution in response to TOR Section 3.2.1. Upgrading of Infrastructure – Power Management - Main Power Supply - Auxiliary power system - Grounding - UPS	5	3	15
3	Technical compliance and quality of the proposal's solution in response to TOR Section 3.2.2. "Upgrading of Infrastructure – Station Room"	5	2	10
4	Technical compliance and quality of the proposal's solution in response to TOR Section 3.2.3. "Upgrading of Infrastructure – Air Sampling Site"		3	15
5	Technical compliance and quality of the proposal's solution in response to TOR Section 3.2.4. "Upgrading of Infrastructure – Additional Work Task"	5	2	10
6	Technical compliance and quality of the proposal's solution in response to TOR Section 3.3.1. "Support to the Commission – Installation of equipment"	5	3	15
7	Technical compliance of the proposal's solution in response to TOR Section 3.3.2 "Support to the Commission – System Integration"	5	1	5
8	Technical compliance of the proposal's solution in response to TOR Section 3.4 "Provision of Documentation"	5	1	5
9	Technical compliance of the proposal's solution in response to TOR Section 3.3.2 Inspection	5	1	5
10	Technical compliance with the TOR Section 2 "General Obligations and Liaison." Experience of work in Argentina, especially experience in working with local authorities and contractors, as well as knowledge of Spanish language are considered as an asset.	5	2	10
	Total Score			100

B. COMMERCIAL EVALUATION

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

X= Max Available Score * Y/Z

Legend:

X= score to be assigned to the offer being evaluated

Y= price of the lowest priced, technically compliant offer

Z= score of the offer being evaluated

C. AWARD

The Commission, based on the evaluation method given, will determine the Proposal that 'most effectively satisfies the technical and operational requirements set out in the solicitation documents'. The relative weighting of each component of the Proposal is 60% for the Technical Proposal and 40% for the financial score. The Commission will award the Contract(s) to the successful bidders with the highest combined score and contractual compliance*.

* Bidders are expected to accept and comply with the Commission's General Conditions on Contracts and Model Contract. Any deviations from the provisions included in such documents may be a factor in the Commission's contract award decision.

ATTACHMENT 2

FORMAT OF FINANCIAL PROPOSALS

Bidders are required to prepare and submit the Financial Proposal using the below format.

The Financial Proposal must provide a detailed price breakdown, including unit prices, quantities and to total prices. A proper cost breakdown, cost details, justifications and explanations of each of the cost items would enable the Commission to evaluate the Proposal promptly and proceed with less requests for clarifications/justifications in a later stage. This is also a factor influencing the decision for contract award.

	Financial Proposal					
No.	Items	Total Price (USD or EUR)*	Notes/breakdowns			
1.	Work - Section 3.1 of TOR (please provide separate cost breakdown for each item)					
2.	Work - Section 3.2.1 of TOR (please provide separate cost breakdown for each item)					
3.	Work - Section 3.2.2 of TOR (please provide separate cost breakdown for each item)					
4.	Work - Section 3.2.3 of TOR (please provide separate cost breakdown for each item)					
5.	Work - Sections 3.2.4 of TOR (please provide separate cost breakdown for each item)					
6.	Work - Section 3.3 of TOR (please provide separate cost breakdown for each item)					
7.	Reporting – Section 4 of TOR					
8.	Inspection – Section 5 of TOR					
9.	Other costs, if applicable					
	NET TOTAL					
	Taxes** (not applicable)					
	GROSS TOTAL					

^{*} Specify either USD or EUR

^{**} Please see the Instructions for Preparation and Submission of Proposal about any applicable taxes

CTBTO Member States

Afghanistan Ethiopia Tuvalu Mozambique Albania Fiii Myanmar Uganda Algeria Finland Ukraine Namibia

Andorra United Arab Emirates France Nauru Angola Gabon United Kingdom Nepal

Antigua and Barbuda Gambia United Republic of Tanzania Netherlands (Kingdom of the) Argentina Georgia United States of America New Zealand

Armenia Germany Uruguay Nicaragua Australia Ghana Uzbekistan Niger Greece Vanuatu Austria Nigeria Azerbaijan Grenada Niue Venezuela Bahamas Guatemala Vietnam North Macedonia Bahrain Guinea Yemen Norway Bangladesh Guinea-Bissau Zambia Oman Zimbabwe Barbados Guyana Palau

Belarus Haiti Panama

Belgium Holy See Papua New Guinea

Belize Honduras Paraguay Hungary Benin Peru Bolivia (Plurinational State of) Iceland **Philippines** Bosnia and Herzegovina Indonesia Poland Iran (Islamic Republic of) Botswana Portugal **Brazil** Iraa Qatar

Brunei Darussalam Ireland Republic of Korea Bulgaria Israel Republic of Moldova

Burkina Faso Italy Romania

Burundi Jamaica Russian Federation

Cambodia Japan Rwanda

Jordan Cameroon Saint Kitts and Nevis

Canada Kazakhstan Saint Lucia

Kenya Cabo Verde Saint Vincent and the

Kiribati Central African Grenadines Republic Kuwait Samoa Chad Kyrgyzstan San Marino

Chile Lao People's Democratic Sao Tome and Principe

Republic China Senegal Colombia Latvia Serbia Comoros Lebanon Seychelles Congo Lesotho Sierra Leone Cook Islands Liberia Singapore Costa Rica Libya Slovakia Cote d'Ivoire Liechtenstein Slovenia Croatia Lithuania Solomon Islands Cuba Luxembourg South Africa Madagascar Cyprus Spain Czech Republic Malawi Sri Lanka Democratic Republic of the Malaysia Sudan Congo Maldives Suriname Denmark Mali Sweden Djibouti Malta Switzerland Dominican Republic Marshall Islands

Egypt Timor-Leste Micronesia, Federated States of Trinidad and Tobago El Salvador

Taiikistan

Thailand

Equatorial Guinea Monaco Togo Eritrea Mongolia Tunisia Estonia Montenegro Türkiye Morocco Eswatini Turkmenistan

Mauritania

Mexico

Ecuador

STATEMENT OF CONFIRMATION

On behalf of (name of firm or organization):	, I her	reby
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.

¹The 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.
- 1) 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, Gov PLEASE INCLUDE A COPY OF THE CERTIFICATE OF IT		
8. Year Established: 9. Nu	imber of Employees:	
10. Gross Corporate Annual Turnover (US\$m)*: 11. An	nnual Export Turnover (US\$m)*:	
12. Type of Business/Products: Manufacturer Sole Agent Supplier Other (please explain)		
13. Type of Business/Services/Work: Engineering Civil Work Governmental Institution Other (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)**	
Organization: Value in US\$ Equiva	llent: Year:	
Organization: Value in US\$ Equiva		
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	on		
	CC 11 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 10 0		
18. This section shall be signed and stamped by an your organization:	official legally authorized to enter i	into contracts on behalf of		
Name: Title:	Signature:	Date:		
Bank Details	Beneficiary Details			
Bank Name:	Beneficiary Name: (exactly as stated on bank statements)			
Bank Address:	IBAN:			
Exact Account Holder Name:	(if applicable)			
Exact recount fronter (vanie)	Account number:			
	SWIFT/BIC:			
	ABA/Sort Code:			
Additional Details (if applicable)				
Correspondent bank:				
Correspondent account number:				
Correspondent SWIFT/BIC:				
Tax Identification Number:				
FOR CO				
	ΓΒΤΟ USE ONLY nitials	Date:		
-				
Updated By:	itials	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.

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

UPGRADING OF INFRASTRUCTURE AND SUPPORT TO THE INSTALLATION OF

THE RADIONUCLIDE PARTICULATE STATION RN01, BUENOS AIRES, ARGENTINA

This Contract comprises this cover page, a table of contents, 8 (eight) pages of text, a signatories page, a List of Annexes and 3 (three) Annexes (A to C)

[Month, year]

TABLE OF CONTENTS

1.	DEFINITIONS	3
2.	AIM OF THE CONTRACT	4
3.	ENTRY INTO FORCE AND DURATION OF THE CONTRACT	4
4.	COMMENCEMENT AND COMPLETION OF THE SERVICES	4
5.	STANDARD OF WORK	4
6.	RESPONSIBILITIES OF THE CONTRACTOR	4
7.	WARRANTY	4
8.	PERMITS, NOTICES, LAWS AND ORDINANCES	5
9.	PROTECTION OF PERSONS AND PROPERTY	5
10.	RESPONSIBILITIES OF THE COMMISSION	6
11.	CONTRACT PRICE	6
12.	PAYMENT	7
14.	TEMPORARY SUSPENSION OF WORK	7
15.	DELAYS AND EXTENSION OF TIME	8
16.	CONTRACTOR'S CLAIMS AND REMEDIES	8
17.	ENTIRE AGREEMENT	8
18.	DISCREPANCIES	8
19.	SEVERABILITY	9
20.	NO WAIVER	9
21.	CONTRACT AMENDMENT	9
22.	TRANSMISSION OF NOTICES AND OTHER DOCUMENTS	9
23	EFFECTIVENESS	10

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 provide Goods and Services, namely, Upgrading of Infrastructure and Support to the Installation of the Radionuclide Particulate Station RN01, Buenos Aires, Argentina (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. Infrastructure upgrading shall be completed not later than 26 weeks after the signing of the Contract by both Parties. Installation Support services and the submission of the Final Report shall be completed within 35 weeks from the signing of the Contract by both Parties.

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 as follows:
 - (i) 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 and D.
 - (ii) Subject to Clause 5 above, the firm and fixed prices in Annex D upon provision of Optional Items in accordance with Annexes C and D, subject to the Commission's review and acceptance.
- (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 email 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.
- (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.

14. 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.

15. 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 21 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.

16. 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.

17. 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.

18. 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).

19. 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.

20. 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.

21. 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.

22. 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 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: <u>Payable_Invoices@ctbto.org</u>

For related enquiries:

Payments@ctbto.org

(b) The Contractor:

23. 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 PREPARAT NUCLEAR-TEST-BAN TREATY ORG		THE COMPREHENSIVE
[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



General Conditions of Contract

1. DEFINITIONS

- (a) In these general conditions of contract the terms beginning with a capital letter shall have the meaning as defined in the Contract.
- (b) "Services" means all services to be rendered under the Contract.
- (c) "Goods" shall mean all goods, equipment, materials and/or other supplies to be provided under the Contract.
- (d) "Taxes" shall mean 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.

2. LEGAL STATUS

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis the Commission. Neither the Contractor and any subcontractor, nor their personnel shall be considered to be an employee or an agent of the Commission.

3. ASSIGNMENT

The Contractor shall not assign, transfer, pledge or make other disposition of the Contract or any part thereof, or any of the Contractor's rights, claims or obligations under the Contract except with the prior written consent of the Commission.

4. SUBCONTRACTING

In the event the Contractor requires the services of one or more subcontractors, the Contractor shall obtain the prior written approval and clearance of the Commission for such subcontractor(s). The Commission's approval of a subcontractor shall not relieve the Contractor of any of his obligations under the Contract, and the terms of any subcontract shall be subject to and in conformity with the provisions of the Contract.

5. SOURCE OF INSTRUCTIONS

- (a) The Contractor shall neither seek nor accept instructions from any authority external to the Commission in connection with the performance of its obligations under the Contract. The Contractor shall refrain from any action which may adversely affect the Commission and shall fulfil its commitments with the fullest regard to the interests of the Commission.
- (b) While present at the Commission's premises, personnel of the Contractor shall, at all times, obey and conform to all requests and instructions of the Commission's officials and the United Nations Security Staff.

6. CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for the performance under the Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect the local laws and customs and conform to a high standard of moral and ethical conduct.

7. ASSIGNMENT OF PERSONNEL

- (a) The Contractor shall not replace or withdraw any personnel referred to in the Contract for the performance of the Services without the prior written approval of the Commission or unless requested by the Commission.
- (b) Prior to assignment, replacement or withdrawal of personnel for the performance of the Services, the Contractor shall submit to the Commission for its consideration, the curriculum vitae or detailed justification to permit evaluation by the Commission of the impact which such assignment, replacement or withdrawal would have on the Services.
- (c) In the event of withdrawal of personnel, all costs and additional expenses resulting from the replacement, for whatever reasons, of any of the Contractor's personnel shall be for the account of the Contractor. Such withdrawal shall not be considered as termination in part or in whole of the Contract.

8. CONFLICT OF INTEREST

No employee, officer, adviser, agent and/or subcontractor of the Contractor assigned to perform Services under the Contract shall engage, directly or indirectly, in any business, profession or occupation connected or related to the Services or Goods to be provided under the Contract if this constitutes a conflict of interest.

9. INSURANCES

- (a) The Contractor shall provide and thereafter maintain appropriate insurance, or its equivalent, with respect to its employees to cover claims for personal injury or death in connection with the Contract.
- (b) The Contractor shall provide and thereafter maintain insurance against all risk in respect of its property and any equipment used for the execution of the Contract.
- (c) The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death, bodily injury, loss of and damage to property arising from any operations carried out by the Contractor in performing its obligations in connection with the Contract or from operation of any vehicles, boats, airplanes and other equipment owned or leased by the Contractor or its agents, servants, employees or subcontractors.
- (d) Except for insurance mentioned in paragraph (a), the insurance policies under this clause shall:
 - (i) Name the Commission as additional beneficiary;
 - (ii) Include a waiver of subrogation of the Contractor's rights to the insurance carrier against the Commission.
- (e) The Contractor shall, upon request, provide the Commission with satisfactory evidence of the insurance required under the Contract.
- (f) Any amounts not insured, not recovered from or not claimed by the insurer shall be borne by the Contractor.
- (g) Information concerning reduction of coverage shall be furnished by the Contractor to the Commission with at least thirty (30) days prior written notice.
- (h) The Contractor undertakes that provisions to the same effect as the provisions in sub-clauses (a) through (c) above will be inserted in all subcontracts made in performance of the Contract, except sub-contracts exclusively for furnishing Goods.

10. ENCUMBRANCES/LIENS

The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file in any public office or on file with the Commission against any monies due or to become due for any Services or Goods provided under the Contract, or by reason of any other claim or demand against the Contractor.

11. OBSERVANCE OF THE LAW

(a) The Contractor shall comply with all laws, ordinances, rules and regulations, including but not limited to health, environmental and labour laws bearing upon the

- performance of its obligations under the terms of the Contract.
- (b) In particular, the Contractor shall comply with the labour laws of the country in which the Services or Goods are to be furnished providing for benefits covering injury or death in the course of employment.

12. CONFIDENTIALITY

- (a) All technical, financial or other documentation and data the Contractor compiled for or received from the Commission under the Contract shall be treated as confidential and shall be delivered only to the Commission's authorized officials on completion of the Services or as requested by the Commission.
- (b) Either Party acknowledges that all knowledge and information concerning the other Party that may be acquired in connection with the performance of its obligations under the Contract, including but not limited to, any information relating to its operations and procedures, are confidential and proprietary information of the other Party and it shall receive such confidential and proprietary information of the other Party in confidence and shall not disclose or permit disclosure of any such knowledge or information to any person and/or entity without the prior written consent of the other Party.
- (c) The Contractor shall not, at any time, use such confidential information to its own advantage.
- (d) The restrictions on confidentiality shall not apply to the information which:
 - (i) presently is in the public domain;
 - (ii) hereafter becomes part of the public domain without the other Party's fault;
 - (iii) was in the possession of the other Party at the time of the disclosure, as shown by written evidence;
 - (iv) is disclosed to the other Party at any time hereafter by a third Party.
 - (v) is required to be disclosed to governing bodies, or to governmental authorities to the extent required by law or to obtain needed authorization to perform the Contract or pursuant to reporting requirements imposed by those governing bodies or the government of the State of the Contractor.
- (e) These obligations do not lapse upon satisfactory completion of the Services, delivery of the Goods or termination of the Contract by the Commission.

13. LANGUAGES, WEIGHTS AND MEASURES

Unless otherwise specified in the Contract, the English language shall be used by the Contractor in all written communications to the Commission with respect to the Services or Goods to be provided and all documents procured or prepared by the Contractor. The Contractor shall use metric units, except when otherwise specified in the Contract.

14.PUBLICITY

(a) The Contractor shall not advertise or otherwise make public the fact that it is providing or has provided Services and Goods for the Commission. Also, the Contractor shall not, in any manner whatsoever, use the name, emblem or official seal of the Commission or any abbreviation of the name of the Comprehensive Nuclear-Test-Ban Treaty Organization in connection with its business or otherwise.

(b) These obligations do not lapse upon satisfactory completion of the Services, delivery of the Goods or termination of the Contract.

15. OFFICIALS NOT TO BENEFIT/CONTINGENT FEES

- (a) The Contractor warrants that:
 - (i) No person or selling agency has been employed or retained by it to solicit or secure the Contract upon an agreement or understanding for a commission, percentage, brokerage, contingent fee or retainer, except regular employees or bona fide and officially established commercial or selling agencies maintained by the Contractor for the purpose of securing business;
 - (ii) No official or servant or retired employee of the Commission who is not a regular employee of the Contractor, has been or shall be admitted by the Contractor to any direct or indirect benefit arising from the Contract or the award thereof.
- (b) In case of breach by the Contractor of the warranties referred to in previous clauses, the Commission shall have the right to deduct from the Contract Price, or otherwise recover from the Contractor, the full amount of any such commission, percentage, brokerage, contingent fee or retainer so paid.

16. INTELLECTUAL PROPERTY AND OTHER PROPRIETARY RIGHTS

- (a) Except to the extent the Contractor has granted a license to the Commission, the Commission, shall be entitled to all intellectual property, including but not limited to copyrights, patents and trademarks, with regard to products, documents or other materials which bear a direct relation to or are produced or collected under the Contract. The Contractor shall take all necessary steps, prepare and process all necessary documents and assist in securing such property rights and transferring them to the Commission and/or to the government where the Services or Goods are to be provided, in compliance with the requirements of the applicable law.
- (b) The Contractor declares that it does not know of any intellectual property rights of third parties, which might be infringed in the execution of the Contract. Should, contrary to the Contractor's expectation, claims be raised against the Commission charging it with infringement of intellectual property rights, the Contractor shall hold harmless the Commission and shall indemnify it to the full extent of any damages or awards arising from such claims. This obligation of the Contractor shall continue to be in full force and effect up to the expiration of such intellectual property rights.
- (c) The Commission shall give the Contractor due notice in writing of any charges of infringement brought against the Commission and of the filing of any suit for

infringement of intellectual property rights of third parties due to the execution of the Contract, and, without prejudice to the immunity enjoyed by the Commission as an international organization from every form of legal process, including enforcement and execution, the Commission shall give the Contractor the opportunity to defend the Commission against the said suit at its discretion and shall not, without the Contractor's consent in writing, make any admission or consent to any claim of any third party, which might be prejudicial to the Contractor's position.

17. DEFAULT BY THE CONTRACTOR

- (a) In case the Contractor fails to fulfil its obligations and responsibilities under the Contract and provided the Contractor has not remedied such failure(s) within thirty (30) days of having been given written notification by the Commission of the nature of the failure(s), the Commission may, at its entire discretion and without prejudice to its right to withhold payment(s), hold the Contractor in default under the Contract.
- (b) When the Contractor is thus in default, the Commission may, by giving written notice to the Contractor, terminate the Contract as a whole or such part or parts thereof in respect of which the Contractor is in default. Upon such notice, the Commission shall have the right to seek completion, at the Contractor's expense, of that part or those parts of the Contract with respect to which the Contractor is in default.
- (c) The Contractor shall, in this case, be solely responsible for any reasonable costs of completion of the Services and/or delivery of Goods, including such costs, which are incurred by the Commission over and above the originally agreed Contract Price.

18. WITHHOLDING OF PAYMENT

- (a) The Commission may withhold any payment to the Contractor or, on account of subsequently discovered evidence, nullify the whole or part of any payment approval theretofore given, to such an extent as may be necessary to protect the Commission from loss under the Contract on account of:
 - (i) The Contractor's failure to carry out its obligations or to make adequate progress with the obligations, except for failure arising out of force majeure;
 - (ii) The Contractor's failure to remedy unsatisfactory performance, when such failure has been drawn to his attention by the Commission;
 - (iii) The Contractor's failure to submit on time the reports required.
- (b) The withholding by the Commission of any interim payment shall not affect the Contractor's obligation to continue performance of his obligations under the Contract
- (c) No interest shall accrue on payments eventually withheld by the Commission in application of the stipulations of this paragraph.

19. LIQUIDATED DAMAGES

Subject to Clause 20 below (force majeure), if the Contractor fails to deliver any or all of the Services and/or Goods within the latest time period(s) specified in the Contract, the Commission may, without prejudice to its other remedies under the Contract, deduct from the Contract Price as liquidated damages, a sum equivalent to 0.2 per cent of the portion of the Contract Price for the delayed Services and/or Goods for each working day of delay until actual performance, up to a maximum of sixty (60) working days. The recovery by the Commission of proven damages shall not be excluded.

20. FORCE MAJEURE

- (a) Force majeure as used herein shall mean acts of God, industrial disturbances, acts of the public enemy, civil disturbances, explosions and any other similar cause of equivalent force not caused by nor within the control of either party and which neither party is able to overcome.
- (b) As soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the Commission of such force majeure if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract.
- (c) In this event, the following provisions shall apply:
 - (i) The obligations and responsibilities of the Contractor under the Contract shall be suspended to the extent of its inability to perform them and for as long as such inability continues;
 - (ii) The term of the Contract shall be extended for a period equal to the period of suspension taking, however, into account any special conditions which may cause the time for completion of the obligations to be different from the period of suspension;
 - (iii) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure to perform its obligations and meet its responsibilities under the Contract, the Commission shall have the right to terminate the Contract on the same terms and conditions as are provided for in the Termination Clause of the Contract, except that the period of notice may be seven (7) days instead of thirty (30) days;
 - iv) For the purpose of the preceding sub-clause, the Commission may consider the Contractor permanently unable to perform in case of any period of suspension in excess of ninety (90) days. Any such period of ninety (90) days or less shall be deemed temporary inability to perform.

21.INSOLVENCY AND BANKRUPTCY

Should the Contractor be insolvent, adjudged bankrupt, or should the Contractor make a general assignment for the benefit of its creditors, or should a receiver be appointed on account of the Contractor's insolvency, the Commission may, without prejudice to any other right or remedy it may have under the terms of the Contract, terminate the Contract

forthwith by giving the Contractor written notice of such termination.

22.INDEMNIFICATION

The Contractor shall indemnify, hold and save harmless and defend at its own expense the Commission, its officers, agents, servants and employees from and against all suits, claims, demands and liability of any nature or kind, including cost and expenses arising out of acts or omissions of the Contractor or its employees or subcontractors in the performance of the Contract. This requirement shall extend, inter alia, to claims or liabilities in the nature of workers' compensation and to claims or liabilities pertaining to intellectual property rights. The obligations under this clause do not lapse upon termination of the Contract.

23. AMICABLE SETTLEMENT

The parties shall use their best efforts to settle amicably through negotiation any dispute, controversy or claim arising out of, or relating to, the Contract or the breach, termination or invalidity thereof. If the parties cannot reach such amicable settlement through negotiations, the matter shall first be referred to conciliation, by a request by either party for conciliation procedures. The conciliation shall take place in accordance with the United Nations Commission on International Trade Law (UNCITRAL) Conciliation Rules then prevailing, or according to such other procedure as may be agreed between the parties, within a time period of ninety (90) days. There shall be one conciliator. The conciliation shall be in Vienna, Austria, and it shall be conducted in the English language.

24. ARBITRATION

- (a) In the event of a failure to reach an amicable settlement in accordance with Clause 23 above (Amicable Settlement), any dispute arising out of the interpretation or application of the terms of the Contract or any breach thereof shall be settled in accordance with the arbitration rules established by UNCITRAL as at present in force. The number of arbitrators shall be one. The arbitration shall be in Vienna, Austria, and it shall be conducted in the English language.
- (b) The arbitrator shall take into account the internationally recognized general principles of commercial transactions. The arbitrator shall have no authority to award punitive damages, nor to award interest in excess of five (5) per cent, and any such interest shall be simple interest only. The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute.

25.PRIVILEGES AND IMMUNITIES

Nothing in or relating to the Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the Commission and its employees.

25(a). TAX EXEMPTION

In principle, the Commission is exempt from all Taxes. Since the arrangement under which such exemption is respected varies from country-to-country, the Contractor shall collaborate with the Commission to achieve Tax exemption at source or to pursue reimbursement of Taxes paid by the Commission, as the case may be.

26. TERMINATION

The Commission may terminate the Contract in whole or in part, and at any time, upon thirty (30) days' notice of termination to the Contractor. In the event such termination is not caused by the Contractor's negligence or fault, the Commission shall be liable to the Contractor for payment in respect of Services already satisfactory accomplished or Goods delivered and accepted and in conformity with the terms of the Contract, for necessary terminal expenses of the Contractor, and for the cost of such urgent work as is essential and as the Contractor is asked by the Commission to complete. The Contractor shall keep expenses at a minimum and shall not undertake any forward commitment from the date of receipt of the Commission's notice of termination.

27. GOODS

In the event that the Contract requires the Contractor to supply Goods, Clauses 28-35 shall apply in addition to the above.

28. WARRANTY

- (a) The Contractor warrants that the Goods, including packaging, conform to the specifications for the Goods ordered under the Contract and are fit for the purpose for which such Goods are ordinarily used and for purposes expressly made known to the Contractor by the Commission, and are new and free from defects in design, workmanship and materials.
- (b) This warranty shall remain valid for twenty-four (24) months after the Goods or any part thereof have been delivered and accepted, whichever is later, unless the Contractor has granted a longer period. Should the Commission transfer the title of the Goods to a third party during the warranty period, the right to enjoy the warranty shall be transferable to the new title-holder.
- (c) If, during the warranty period mentioned in sub-clause (b) above, the Goods or any part thereof are found to be defective or not in conformity with the specifications under the Contract, the Contractor shall, upon notification, promptly and at its own expense correct all such defects and non-conformities. If these defects and non-conformities cannot be corrected, the Commission shall have the right, at the Contractor's expense, to either demand replacement of the defective item, or receive appropriate reimbursement, or have the defective item repaired or otherwise procured from a third party.

29. INSPECTIONS AND TESTS

- (a) The Commission shall have the right to inspect and/or to test the Goods to confirm their conformity to the technical specifications. The technical specifications shall specify what inspections and tests the Commission requires.
- (b) The inspections and tests may be conducted on the premises of the Contractor or its subcontractor(s), at a point of delivery designated by the Commission and/or at the Goods' final destination. The Contractor shall give all reasonable facilities and assistance-including drawings and production data-to the Commission at no charge to the Commission.
- (c) Should any inspected or tested Goods fail to conform to the technical specifications, the Commission reserves the right to reject them and the Contractor shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of cost to the Commission.
- (d) The Commission's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at the point of delivery designated by the Commission or at the Commission's offices, shall in no way be limited or waived by reason of the Goods' having previously been inspected, tested and passed by the Commission.
- (e) Nothing in this Section on Inspections and Tests shall in any way release the Contractor from any warranty or other obligations under the Contract.
- (f) All equipment/material supplied under the Contract may be subject to pre-shipment inspection by a third party to be specified by the Commission. The Contractor is not liable for cost of this inspection.

30.PACKING

The Contractor shall comply or ensure compliance with the following provisions concerning packing:

- (a) The Goods shall be packed as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit.
- (b) In the case of a cross-border shipment, the Goods shall have appropriate export packing. If necessary, all cases/crates must be wrapped inside with heavy-duty plastic lined paper, should be steel-strapped and must be able to withstand tough handling. Skids for truck handling are imperative if the gross weight is more than 30 kilograms.
- (c) The consignment shall be marked and shipped as per address shown on the Purchase Order Form.
- (d) Neither partial delivery nor transhipment shall be made unless specifically agreed by the Commission in writing.
- (e) Each case/crate/package shall carry a consecutive number, dimensions, volume, and weight (i.e. Case No. X of Y cases, A x B x C cm, E m3, D Kg.) and shall be marked as follows:

EQUIPMENT FOR
THE PREPARATORY COMMISSION FOR THE
COMPREHENSIVE NUCLEAR-TEST-BAN
TREATY ORGANIZATION.
[point of delivery]

PURCHASE NO	·
GROSS WEIGH	T
NET WEIGHT _	

- (f) Markings shall be done with weatherproof materials. All non-containerized Goods shall be shipped below deck.
- (g) Each case/crate/carton shall carry (outside) a copy of the packing list describing the contents of the case/crate/carton. Outside Case No. 1 should be attached with invoice covering the actual delivery. The accompanying papers must be made out in the English language.
- (h) Prior to delivery, a fax (or a letter by courier service) shall be sent to the consignee, if any, advising of the following:
 - purchase order/Contract number;
 - waybill number or equivalent reference number of the shipment (if any);
 - number of boxes/cartons/crates/etc.;
 - estimated time of departure (ETD);
 - point of departure and name of freight carrier;
 - estimated time of arrival (ETA) to final destination.
- (i) The following documents shall be enclosed with the shipment in case of shipping by air:
 - ♦ airway bill;
 - proforma or commercial invoice;
 - packing list.
- (j) The above documents are indispensable and must reach the consignee, if any, on time to permit customs clearance and in order to avoid demurrage charges.

31. DELIVERY AND TRANSPORTATION

- (a) Delivery of the Goods shall be made by the Contractor in accordance with the terms specified in the Contract, and the Goods shall remain at the risk of the Contractor until delivery has been completed.
- (b) Transport of the Goods to the port of discharge or such other point in the country of destination and/or forwarding to the consignee, if any, (door-to-door) specified in the Contract shall be arranged and paid for by the Contractor and the cost thereof shall be included in the Contract Price.

32. TAKE-OVER/HAND-OVER

Upon successful completion of delivery or of installation and a testing and evaluation period, as specified in the Contract, responsibility for the Goods will be handed over to the consignee or other designated entity.

¹ UN Guiding Principles on Business and Human Rights, available at https://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR EN.pdf.

33.EXPORT LICENCES

If an export licence or any other governmental authorization is required for the Goods, it shall be the obligation of the Contractor to obtain such licence or governmental authorization. In the event of failure to obtain such licence or authorization within reasonable time, the Commission may declare the Contract null and void.

34. SPARE PARTS

In accordance with the Contract, the Contractor may be required to provide any or all of the following materials and notifications pertaining to spare parts manufactured and/or distributed by the Contractor:

- (a) Such spare parts as the Commission may choose to purchase from the Contractor, provided that the Contractor is not relieved of any warranty obligations under the Contract;
- (b) In the event of termination of production of the spare after delivery of the Goods:
 - advance notification to the Commission of the pending termination, in sufficient time to permit the Commission to place a final order;
 - (ii) following such termination, furnishing at no cost to the Commission, the blueprints, drawings and specifications of the spare parts, if and when requested.

35. UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS

Questions concerning matters arising under the Contract, but not settled in it, shall be settled in conformity with the United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980), which shall be applicable to the Contract. The applicable language version of the Convention shall be the version in which the Contract is written.

36. SUSTAINABLE BUSINESS PRACTICES

The Commission requires the Contractor and its personnel to:

- (a) support and respect the protection of internationally proclaimed human rights¹ and to observe the highest standards of ethics and integrity throughout its supply chains.
- (b) abide by the United Nations Supplier Code of Conduct².
- (c) to take appropriate steps, whenever possible to perform its obligations in a manner that takes into account economic, environmental and social considerations.
- (d) certify that they have not and will not engage in harassment or sexual harassment, proscribed practices or any further practice described in Clauses 37, 38, 39, 40

² Available at https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct.

and 41, during the procurement process and the performance of the Contract.

37. PREVENTION OF HARRASSMENT AND SEXUAL HARRASSMENT

- (a) The Commission is committed to providing a professional work environment that upholds the highest standards of equality, respect and dignity for all. In this regard, and without limitation to any other provision contained herein:
 - (i) The Contractor shall adhere to zero tolerance for harassment and therefore accepts and agrees to refrain from any conduct which could, in the view of the Commission, meet the definition of harassment and/or sexual harassment. For the avoidance of doubt, "harassment" shall be understood as any improper or unwelcome conduct that might reasonably be expected or be perceived to cause offence or humiliation to another person when such conduct interferes with work, is made a condition of employment, or creates an intimidating, hostile or offensive work environment. "Sexual harassment" shall be understood as harassment of a sexual nature, and the above definition of harassment applies equally to sexual harassment. Sexual harassment may occur between persons of opposite sex or of the same sex.
 - (ii) The Contractor shall take all reasonable and appropriate measures to prevent and deter harassment and sexual harassment or abuse of anyone by its employees, agents, officials or any other persons engaged or controlled by the Contractor to perform the Services.
 - (iii) The Contractor shall promptly report to the Commission any actual, reported or suspected cases of harassment, sexual harassment or abuse of anyone by its employees, agents, officials or any other persons engaged or controlled by the Contractor to perform the Services of which the Contractor becomes aware. Such reports to the Commission may be on a no name basis, if necessary.
 - (iv) In addition to notifying the Commission pursuant to sub-clause (iii) above, on becoming aware of any allegation of harassment, sexual harassment or abuse of anyone, the Contractor shall take all reasonable and appropriate measures to address the matter, including engaging in good faith consultations with the Commission, while ensuring minimum impact and/or disruption of the Services.
- (b) The Contractor acknowledges and agrees that any breach of the provisions of this Clause 37, as determined by the Commission, shall permit the Commission, at its sole discretion, to:
 - (i) Request the Contractor to remove, temporarily or permanently, from the relevant assignment, any Contractor's personnel reported for having committed harassment, sexual harassment or abuse of anyone.
 - (ii) Terminate the Contract, and/or any other agreement, arrangement or partnership concluded by the Commission with the Contractor, immediately upon

- written notice to the Contractor, without any liability for termination charges or any other liability of any kind, on the terms and conditions as are provided for in Clause 26 (Termination) above; and/or
- (iii) Exclude the Contractor from participating in any ongoing or future solicitations, and/or entering into any future contractual or collaborative relationships with the Commission and/or suspend the Contractor from the Commissions supplier roster.
- (c) The Commission shall be entitled to report any breach of the provisions of this Clause 37, as determined by the Commission, to the Commission's governing bodies, other UN agencies and/or donors.

38. PROSCRIBED PRACTICES

The Commission requires that the Contractor and its personnel certify that they have not and will not engage in proscribed practices and proscribed conduct during the procurement process and the performance of the Contract. The Commission defines Proscribed Practices as follows:

Fraudulent practice: is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

Corrupt practice is the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;

Coercive practice is the impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of any party in order to influence the actions of that party;

Collusive practice is the proposing or entering into an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;

Unethical practice is conduct or behaviour that is contrary to the conflict of interest, gifts and hospitality, post-employment provisions or other published requirements of doing business with the Commission;

Obstructive practice is any act which deliberately and in an effort to compromise an investigation, destroys, falsifies, alters or conceals information or documents that may be relevant to a fraud and corruption investigation, or material that could become evidence as a result of such investigation; or the making of false statements to investigators during such an investigation.

39. CHILD LABOUR

The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's 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.

40. MINES

The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiaries or affiliated entities (if any) is engaged in the sale or manufacture of anti-personnel mines or components utilized in the manufacture of anti-personnel mines.

41. TERRORISM

The Contractor shall ensure that none of the funds received from the Commission under the Contract are used, directly or indirectly, to provide support to individuals or entities subject to sanctions or other measures promulgated by the United Nations Security Council and appearing in the Consolidated United Nations Security Council Sanctions List. This provision shall be included in all subcontracts or sub-agreements entered into under the Contract.

42. FULL DISCLOSURE

- (a) The Contractor will immediately notify the Commission upon becoming aware of any Proscribed Practices or other prohibited practices or conduct or suspicion thereof, as per Clauses 37-41, by itself or its personnel during the procurement process or the performance of the Contract. The Contractor will take all appropriate measures to prohibit and prevent its personnel from engaging in Proscribed Practices or any other prohibited conduct, as well as to investigate allegations thereof, or to take corrective action when such a Proscribed Practice or any other prohibited conduct has occurred.
- (b) The Contractor further warrants that it is not the subject of any sanctions, or otherwise identified as ineligible by any government, supranational organization (e.g., European Union), another entity of the United Nations System or multilateral development finance institution. The Contractor will disclose to the Commission if it becomes subject to any sanction or temporary suspension during the term of the Contract. The Contractor recognizes that a breach of this provision constitutes a fraudulent practice.

43. DATA PROTECTION

(a) Use of the Commission's data: Use (including accessing, processing, retention, storage) of the Commission's data is limited to the purposes contained in the Contract and such use will be limited to Contractor's personnel on a "need to know" basis. Use of the Commission's data for internal research, marketing, sales, or promotional purposes is strictly prohibited. Subject to Clause 12 (Confidentiality), the

- Contractor will treat the Commission's data as confidential and may neither disclose it nor make it available to any third-party except with the prior written authorization of the Commission.
- (b) Compliance: The Contractor confirms that it has a data protection policy in place that meets applicable legal requirements and that it will apply such a policy to the Commission's data, without prejudice to the privileges and immunities of the Commission. The Contractor will implement technical and organisational measures to ensure appropriate protection of the Commission's data, in conformity with the abovementioned requirements and internationally recognised standards and best practices. In addition, the Contractor will:
 - (i) at its sole expense and risk, return, delete, or destroy all the Commission's data, including data backups, upon written instruction of the Commission. The Commission will provide a reasonable period of time and take into account the Contractor's legitimate interests, as well as the termination or expiration date of the Contract;
 - (ii) process, retain or store the Commission's data exclusively in countries that are signatories to the Comprehensive Nuclear-Test-Ban Treaty and that ensure adequate legal protection of the Commission's privileges and immunities; and
 - (iii) be liable for any resulting damages or penalties for its failure to comply with its obligations.
- (c) **Data security:** Upon discovery of a data security breach, the Contractor will immediately notify the Commission and undertake at its sole expense to:
 - (i) propose immediate remedial actions (including containment);
 - (ii) implement, as directed by the Commission, all necessary damage mitigation and remedial actions;
 - (iii) where applicable, as directed by the Commission, restore the Commission's and end-users' access; and
 - (iv) keep the Commission informed of its progress.
- (d) The Contractor, at its sole expense, will cooperate fully with any Commission investigation, remediation steps and response to a data security breach.

44. ESSENTIAL TERMS

The Contractor acknowledges and agrees that each of the provisions in Clauses 36 to 43 above constitutes an essential term of the Contract and that any breach of any of these provisions shall entitle the Commission to terminate the Contract or any other contract the Contractor has with the Commission, immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind. Furthermore, the Commission is entitled to exclude the Contractor from participating in future tenders should the Contractor breach any of the provisions included in Clauses 36 to 43.

ANNEX B

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

TERMS OF REFERENCE

FOR

UPGRADING OF INFRASTRUCTURE AND
SUPPORT TO THE INSTALLATION OF
THE RADIONUCLIDE PARTICULATE STATION
RN01, BUENOS AIRES, ARGENTINA

TABLE OF CONTENTS

1. BACKGROUND INFORMATION	2
2. GENERAL OBLIGATIONS AND LIAISON	2
3. WORK TASKS	3
3.1. PLANNING AND COORDINATION	
3.1.1. Coordination Meeting	
3.2. UPGRADING OF INFRASTRUCTURE	4
3.2.1. Power Management	4
3.2.2. Station Room	5
3.2.3. Air Sampling Site	7
3.2.4. Additional Work Task:	7
3.3. SUPPORT TO THE COMMISSION DURING THE INSTALLATI	ON AND
INTEGRATION OF EQUIPMENT	8
3.3.1. Installation of Equipment	8
3.3.2. System Integration	8
3.4. DOCUMENTATION	9
4. REPORTING	9
4.1. Station Plan	
4.2. PROGRESS REPORT	
4.3. FINAL REPORT/REVISED FINAL REPORT	10
5. INSPECTION	11
6. INDICATIVE TIME FRAME	12
7. LIST OF ATTACHMENTS	12
ATTACHMENT I - Technical Notes related to the Upgrading of RN01, Bue	nos
Aires, Argentina	
ATTACHMENT II - Station Management for Particulate and Noble Gas Stat	
case of power failure	
ATTACHMENT III - Layout of the Station Detector Room	18
ATTACHMENT IV – System Integration Documentation	
ATTACHMENT V – Requirements for Station Specific Documentation (SS)	

1. BACKGROUND INFORMATION

- (a) The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the "Commission") intends to upgrade the IMS Station RN01 at Buenos Aires, Argentina (hereinafter referred to as the "Station"). RN01 is certified and has been in operation since the year 2001. The designated station operator is Autoridad Regulatoria Nuclear (ARN). The Station is located at the headquarters of ARN.
- (b) The upgrading of the Station may involve several sub-contractors and institutions. The Contractor shall liaise between the Commission, the station operator (ARN), and any sub-contractors and local institutions relevant for the project.
- (c) The Commission will provide the Commission's equipment that is necessary for upgrading the radionuclide station. The Commission desires to engage a contractor (hereinafter referred to as the "Contractor") to upgrade the infrastructure for the Station, to support at the installation of the Commission's equipment (hereinafter referred to as the "Equipment"), to test the Station, and to provide documentation in accordance with these Terms of Reference. More information on CTBTO can be found under www.ctbto.org

2. GENERAL OBLIGATIONS AND LIAISON

- (a) The Contractor shall ensure that the Project 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 these Terms of Reference. This requirement shall include contracts with the local power supplier and infrastructure works at the roof of the ARN building. The Contractor shall obtain licenses, permits or authorizations needed to carry out the Work under this Contract.
- (b) The Contractor shall liaise with ARN, with the Commission, and any other contractors and any local institutions as required, during all phases of the Work.
- (c) The Contractor shall keep the Commission informed of any exchange of relevant information between the Contractor and ARN, and any other contractors and local institutions.

3. WORK TASKS

3.1. PLANNING AND COORDINATION

3.1.1. Coordination Meeting

- (a) The Contractor shall coordinate with ARN and with the Commission scheduling of a coordination meeting (hereinafter referred to as the "Coordination Meeting") between the Contractor, ARN, any relevant local sub-contractors. The Commission and the Commission's Equipment Supplier(s) (if required by the Commission) may participate at the coordination meeting, if deemed necessary. The Coordination Meeting shall be held for approximately one day at the site of the Station.
- (b) The coordination meeting shall take place after contract signature to assess any relevant issues related to the work tasks of the contract as specified in Sections 3.2, 3.3, and 3.4 below.
- (c) The Contractor shall produce and submit to the Commission a Coordination Meeting Report within 2 weeks after the Coordination Meeting. The Coordination Meeting Report shall contain the findings of the Coordination Meeting. In case, unforeseen work tasks have been identified during the Coordination Meeting, they shall be described in the report, and a related technical and financial proposal shall be provided as Attachment

3.1.2. Station Plan

The Contractor, after the Coordination Meeting, shall provide a detailed plan of the station room and the air sampling site (hereinafter referred to as "Station", including all measures meant for the location, size of major system components and protection measures, as described in the paragraphs below ("Station Plan"). This plan shall provide details on civil works needed to upgrade the complete station (such as clearing the air sampling site, levelling, running conduit, providing security fence, access stairs, pads for structure and paths, etc.) including all measures meant for the construction, location, size of major system components and protection measures, as described in paragraphs below. The Station plan shall also provide the electrical connections between main power, auxiliary generator, UPS, and the Station equipment. The plan shall be prepared in coordination with ARN, and it shall be submitted to the Commission for its approval prior to its construction.

3.2. UPGRADING OF INFRASTRUCTURE

The Contractor shall check and upgrade station infrastructure and power connection in accordance with the Station plan approved by the Commission.

3.2.1. Power Management

3.2.1.1.The main power supply

The Contractor shall:

- (a) Confirm that the existing main power system provides power, 15 kW minimum, for all Station Equipment, and 15 kW for potential future noble gas equipment. The power connection to the Station shall be according to the national standards.
- (b) Confirm and ensure that the main power system is ready to connect the Equipment.
- (c) Check and, ensure:
 - (i) sufficient cable gauge for power supply of the Station;
 - (ii) lay the cables from the power access point to the site in ducts;
 - (iii) a common grounding point;
 - (iv) a power-meter, preferably in the power distribution box, that provides information on the power consumption of the RN01 station (particulate and noble gas system)

3.2.1.2.The auxiliary system

The Contractor shall:

- (a) Remove and dispose the old auxiliary generators of the RN01 station, which are located at the roof of the ARN building. Any administrative preparations for blocking adjacent roads for the removal, and organisation of heavy equipment necessary for removal shall be organized by the Contractor.
- (b) Supply and install an auxiliary power supply (max capacity 45 kW) providing power for all Equipment (particulate and future noble gas system) for at least three days without refilling. The basis for calculation of an appropriate tank capacity shall be 30kW average power consumption over 72 hours.
- (c) Ensure that the auxiliary system:
 - (i) provides sufficient power for the start-up and running of all Equipment without oversizing the generator;

- (ii) operates automatically (switch on and off);
- (iii) is switched on automatically after a configurable time (typically within 5 minutes) when a power outage of the main power occurs;
- (iv) will run for a configurable time (typically 10 minutes) when it is switched on;
- (v) provides information of its operating status (on/off) via dry contact and signal cable to the station data logger. Cable conduits and cables shall be provided from the auxiliary power location to the Station room

3.2.1.3.The UPS

(a) The Contractor shall install the Uninterruptable Power Supply (UPS) that is provided by the PTS. The UPS provides stabilized voltage and frequency to all components of the Station, except for the climate control and air sampler.

3.2.1.4. Grounding of the station

- (b) Electrical connections are available for particulate and potential noble gas system. The Contratcor shall check the connections and proper grounding of the station's electrical connections.
- (c) Ensure availability of, and, if necessary, supply and establish a common grounding point according to local regulations and guarantee that the maximum resistance at grounding point does not exceed 25 Ohms (Ω).

3.2.2. Station Room

The Contractor shall:

- (a) Move all existing station equipment from the old station room to the new station room as indicated in Attachment 1. Equipment for transport of heavy components (two pieces of lead shield, each of a mass of about 1 ton, two electric filter press of mass of about 250kg) shall be organized in this regard by the Contractor.
- (b) Improve the insulation of the window and the entrance door of the station room so that the room can be properly air conditioned.
- (c) Ensure that the openings of the Station are wide enough to allow the entry of all the Equipment.

- (d) Ensure that the Station is ready for the installation of the Equipment.
- (e) Install Cable ducts for communication cables and power cables between the old and new station room, as necessary. The duct would run outside of the two offices at the wall of the corridor connecting the two offices, or as agreed differently with ARN during the coordination meeting.
- (f) Extend cables (power, communication) from the old to the new station room, or pull the cables from any station component to the station room, as needed.
- (g) Ensure that the following requirements for the Equipment housing are complied with:
 - (i) cable ducts to sensors outside the Station are laid and/or extended from the old to the new station room, and from the air sampling site, the satellite antenna (VSAT) location, and auxiliary generator location (i.e. meteorological sensors, VSAT cable, auxiliary power status, etc.)
 - (ii) some form of protection against inadvertent or malicious intrusion and/or vandalism are installed, windows shall be protected with window grills;
 - (iii) the inside of the Station is protected from any adverse environmental influences like sand, water, sea salt, insects, etc.;
- (h) Ensure that UPS supported power sockets are labelled accordingly.
- (i) upgrade lightning protection, if deemed necessary.
- (j) If not installed yet, supply and install fire protection in the room where the Equipment is installed, ensuring that:
 - (i) at least one CO₂ fire extinguisher with a filling of at least 6 kg is available at all times;
 - (ii) a fire alarm system is installed;
- (k) Supply and install a redundant air conditioning system (commercial grade). The air conditioning system shall be maintainable and sustainable by spare parts by a company that has a local office or representative in Buenos Aires or Argentina. The air conditioning system shall guarantee:
 - (i) maximum temperature variation: $\Delta 3^{\circ}$ C in 24 hours (temperatures below 25° C are recommended)
 - (ii) relative humidity between 30% and 70%,
 - (iii) the dewpoint difference >10°C
 - (iv) switching on automatically upon resumption of main power following a power outage,
 - (v) Heat generation from station equipment to be taken into account
 - Noble gas equipment: app. 4000 kW
 - Particulate station: app. 3000 kW

3.2.3. Air Sampling Site

- (a) Remove and dispose old air samplers that are located at the roof of the ARN building (Note: a crane will be necessary for removal)
- (b) The sampling hut shall be reconditioned (remove cracks and renew painting). The metal doors shall be refurbished and painted with anticorrosion paint.
- (c) The sampling hut shall be prepared for installation of the air sampler model "Snow White".
- (d) Access stairs and a security fence shall be installed at the roof of the sampling hut
- (e) The air sampler "Snow White" shall be placed on the top of the sampling hut (note: a crane will be necessary to lift the air sampler from ground level to roof of the ARN building)
- (f) Establish appropriate cable ducts and lay/extend cables (power, communication: Ethernet) from the switch inside the sampling hut to the "Snow White"
- (g) Install the rod and meteorological station of the air sampler "Snow White"
- (h) Adjust, if necessary and assessed before, the meteorological station of the ARN building

3.2.4. Additional Work Task:

The Contractor shall

- (a) Re-condition the Global Communication Infrastructure's (GCI) antenna support and paint it with anticorrosion paint.
- (b) Ensure that a fire alarm system is set up in a way that prompt and effective actions can be taken, i.e. connected to the fire brigade station, station operators, next-door neighbours, local authorities etc;

3.3.SUPPORT TO THE COMMISSION DURING THE INSTALLATION AND INTEGRATION OF EQUIPMENT

3.3.1. Installation of Equipment

The Contractor shall:

- (a) Install and connect the auxiliary generator to the Station.
- (b) Install the air sampler "Snow White" at the air sampling spot and prepare it for connection to the Station.
- (c) Electrically connect the air sampler to the power network of the Station.
- (d) Move and install the Equipment into the new RN01 room and prepare for all necessary connections.
- (e) Support the Commission during installation and testing of the Equipment (including the equipment housing).
- (f) Ensure that trained technical personnel are present on-site during the installation.

3.3.2. System Integration

- (a) The Contractor shall, in support to the Commission, ensure the integration of the system consisting of the Equipment and the local infrastructure taking into account the physical characteristics of the Station.
- (b) The support shall be provided during the following work tasks:
 - (i) Installation and set up of the detection systems
 - (ii) Set up and integration of air sampler "Snow White
 - (iii) Installation and set up and integration of the station's computer system
 - (iv) Installation and set up and integration of the station's State-of-Health system
 - (v) Set up and integration of the station's communication system
- (c) The work amount estimated for installation and integration support shall be amounted to a maximum of 5 days on-site.

3.4. DOCUMENTATION

The Contractor shall:

- (a) Ensure that all documentation sent to the Commission is in the English language.
- (b) Ensure that all documentation sent to the Commission is also available at the Station. All this documentation shall be kept in a safe and clean place.
- (c) Produce the station specific documentation according to Attachment IX:
 - (i) the Contractor should generate the following drawings:
 - Station Block Diagram
 - Station Electrical Diagram
 - Station Network Diagram
 - Station Data Flow
 - Set of Station documented photos

using VISIO from Microsoft.

- (i) the Contractor should provide three text reports complying with the requirements specified in the Attachment IX
 - General Station Information Report
 - Equipment Information Report
 - Station Security Report

4. REPORTING

The Contractor shall submit to the Commission a Station Plan, a Progress Report, a Coordination Meeting Report, and a Final Report.

4.1. STATION PLAN

The Contractor shall submit a Station Plan as referred to in Section 3.1.2.

4.2.PROGRESS REPORT

(a) The Contractor shall submit a Progress Report with sufficient information for the Commission to determine that the Work Tasks, as referred to in Section 3.2.1,

3.2.2, 3.2.3, and 3.2.4 above, have been carried out and that the site is ready for installation of Equipment.

(b) This Report shall contain:

- (i) full description of the work specified in Sections 3.2.1, 3.2.2, 3.2.3, and 3.2.4;
- (ii) a final detailed plan of the infrastructure and a narrative of the Work described in Section 3.2.1, 3.2.2, 3.2.3, and 3.2.4
- (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 (i.e. foundations).
- (iv) Electrical Drawings with layout drawings showing locations and connections of all electrical Equipment, including generators, transformers, motors, controls, grounding points, and back-up electrical storage facilities. Details shall include main routings for cabling, including burial depths and locations when applicable, and a description of all cabling.
- (v) photographs, with descriptive captions, of the Equipment housing and of the Contractor Equipment
- (vi) The SSD documentation referred to in Section 3.4 (c) (i) (i.e. Station Block Diagram, Station Electrical Diagram, Station Network Diagram, Station Data Flow, Set of Station documented photos)

4.3.FINAL REPORT/REVISED FINAL REPORT

4.3.1. Final Report

- (a) The Contractor shall submit a Final Report with sufficient information for the Commission to determine that the Work referred to in these Terms of Reference has been completed.
- (b) This Report shall contain:
 - (i) a full description of the Work performed in accordance with Section 3.3 above, except for issues covered by the Progress Report;
 - (ii) any prove of remedial or corrective actions in case they were requested by the Commission upon evaluation of the Progress Report;
 - (iii) The SSD documentation referred to in Section 3.4 (c) (ii) (i.e. General Station Information Report, Equipment Information Report, Station Security Report)

- (iv) a list of institutions, suppliers and sub-contractors that took part in the Project and their role throughout each phase of the Project;
- (v) a complete list of all the documentation available at the Station, including that pertaining to the Equipment;
- (vi) any other information relevant to the Project.

4.3.2. Revised Final Report

(a) If the Commission, after the review of the Final Report or at the time of the Inspection, referred to in Section 5, comes to the conclusion that any part of the Work has not been performed in accordance with the Terms of Reference 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 will instruct the Contractor to submit such additional information and/or to carry out a remedial action. Within 6 (six) weeks of the receipt of the Commission's instruction, the Contractor shall undertake any remedial action requested and provide a Revised Final Report that describes the remedial action taken and contains the additional information requested to satisfy the instruction of the Commission.

5. INSPECTION

- (a) An inspection by representatives of the Commission and/or institutions appointed by the Commission to confirm that the Work Tasks have been carried out in compliance with the Contract shall take place within 8 (eight) weeks of the receipt of the Final Report by the Commission, referred to in Section 4.34.4 above (hereinafter referred to as the "Inspection").
- (b) The exact dates and duration of the Inspection shall be agreed between the Commission and the Contractor.
- (c) The Commission reserves the right to invite representatives of other organizations to the Inspection in an advisory role.
- (d) During the Inspection the documentation described in Section 3.4 shall be available at the Station in order to ease the Inspection procedures.
- (e) If the Inspection reveals that the Work is not in compliance with the Contract, the Commission will instruct the Contractor, during the Inspection or within 3 (three) weeks after the inspection, to take the necessary action to remedy the defects within 6 (six) weeks of the instruction by the Commission.
- (f) The Contractor shall make a representative available for the Inspection for 4 working days.

6. INDICATIVE TIME FRAME

a) It is expected to complete Infrastructure upgrading not later than 26 weeks after the signing of the Contract by both Parties. Installation Support services and the submission of the Final Report re expected to be completed within 35 weeks from the signing of the Contract by both Parties.

7. LIST OF ATTACHMENTS

ATTACHMENT I – Technical Notes related to the Upgrading of RN01, Buenos Aires, Argentina

ATTACHMENT II Station Management for Particulate and Noble Gas Stations in case of power failure

ATTACHMENT III -Layout of the Station Detector Room

ATTACHMENT IV – System Integration Documentation

ATTACHMENT V – Requirements for Station Specific Documentation

ATTACHMENT I - Technical Notes related to the Upgrading of RN01, Buenos Aires, Argentina

Technical Notes:

1. RN01 Room:

ARN has a room (office 326) available which is planned as location for the upgraded station. The envisaged room is in the same floor, in a distance of 5 offices/app. 25m from the present radionuclide particulate station.

The envisaged room would also provide space for a potential future noble gas system. The available space is around 30 sqm.

2. Room Specifications:

The room was refurbished with reinforcement to stand at least 2000kg/sqm. Electrical connections are available for particulate (and potential noble gas system). The grounding must be checked within the infrastructure contract.

Insulation of the large window and necessity for new air condition systems may be included upon feedback from ARN, accordingly: 2 new industrial ACs with local representative shall be provided within the contract for infrastructure upgrade to be installed in office 326. The equipment must work alternately unless the thermostat indicates that both are necessary at the same time, this device (sequencer) must also be provided.

New window in the office 326 is DVH (Dualglass).

Improving sealing of the entrance door for the benefit of the ACs shall also be covered in the contract for infrastructure upgrade.

3. Moving of Station Equipment

Moving of present station equipment from old to new station location shall be part of the infrastructure upgrade contract. In particular heavy equipment need to be transported using appropriate equipment like forklift:

- a. Electric press and spare press
- b. Lead shielding (2 pieces, each about 1 ton)

4. *UPS*:

At the moment APC UPS is used at RN01. PTS provides UPS brand Socomec NETys 7000 as standard UPS systems since 2019. However, PTS will assess the UPS that best suits the location at Buenos Aires with respect to local supply, maintenance, technical support and availability of spare batteries (which are provided through the PCA contract). The UPS for the upgraded station will be provided by PTS.

5. <u>Detector System:</u>

2 Ortec detectors with closed nitrogen cooling cycle (model Canberra Cryocycle) are available at the station. Two multichannel analyzers (MCA) model DSPEC50 are available. PTS will provide a third DSPEC as spare parts. The upgraded station shall be set up as two/redundant detector system (with a hot spare detector) in this regard. ARN suggest that the two redundant detector systems should be complete, with a rack, PC, UPS, MCA, etc. to have a full hot spare detector system. The suggestion is acceptable for PTS.

6. Decay Chamber:

The existing decay chamber and tamper sensor (magnetic) will be used. Moving of the decay chamber from old to new station room will be done by the station installer (with support by ARN). Bar Code Reader (BCR) for Decay chamber: The old BCR cannot be used. A new, standardized BCR will be provided and installed.

ARN suggest checking if existing tamper sensor will be compatible with new SoH system. - This will be done within the installation, in case new sensors will be provided by the PTS.

7. *Computer and rack:*

the new station will receive a new computer system and a new rack that will host also communication system necessary and the DSPEC50s.

Two separate racks will be installed, one for each detector system.

8. Filter Management:

Filter handling tool, press and cutter are ok and can be reused

9. *Connection to GCI*:

the GCI equipment is located on the sampling spot on the roof of the ARN building. Communication between station room and the GCI building is done via fibre optic cable. The router that receives the fibre optic cable from the roof and converts into Ethernet signal, shall be re-used (spare parts are also available at ARN). It will be taken out of the present rack and mounted on the wall or as appropriate. The Ethernet cable from the router need to be prolonged to the new room (see next point).

10. Cable ducts between old and new station room

Cable ducts between present station room and new station room shall be mounted to provide for communication cables and power cables as necessary. The duct would run outside of the two offices at the wall of the corridor connecting the two offices.

11. Scales:

Two scales (model ADAM cw+75) are available at the station. PTS will check implementation of the scales in the new radionuclide station software interface ("new RSSI") that will be supplied to RN01.

12. Bar Code Readers:

5 Bar Code Readers will be supplied for Air sampler, Decay chamber, 2 detector systems, 1 spare. Cables with appropriate length and mounting kit will be included.

13. *Lead shield*:

Tamper switches for lead shield can be used with new data logger (model Symetude DAS). Old bar code readers, inside the shield, cannot be used. New BCRs (see point above) will be provided for samples scanned at spectrometer spot.

14. *Computer system:*

New computers will be provided. Operating system will be Windows 10. Station software will be new RSSI.

15. <u>Data Acquisition System:</u>

A DAS (PTS standard SoH data logger) will be provided to collect SoH data like tamper sensors, room temperature, humidity, detector temperature, etc)

16. Data Communication:

A communication rack including Ethernet switch, Moxa signal converter and fibre optic cable converter (if appropriate) will be supplied by PTS. It will be mounted in a new rack, supplied, too.

17. Authentication:

new hardware and software for authentication will be provided and installed by the PTS.

18. SoH sensor:

A new room temperature and humidity sensor (standard model Vaisala HMD89) will be supplied by PTS.

19. Bar Code Printers:

New bar code printer with ethernet connection will be supplied. Consumables (ribbon and labels) will be provided with it.

20. Air sampling spot:

- a. It has been decided to use Snow white (with its own met station) from SENYA as next air sampler.
- b. It was agreed to use the current air sampler spot.

- c. The new sampler spot will be on top of the existing sampler housing. A safety fence and access stairs shall be installed by the contractor. The existing meteorological mast must be assessed for re-arranging the fixing wires. It need to be assessed by the contractor together with ARN if this wire can be removed or modified.
- d. A crane will be necessary for lifting the Snow White to the roof. Street may be blocked for some time accordingly. A infrastructure contractor need to arrange for all necessary administrative preparations to lift equipment by crane. ARN will support/advise in this respect.
- e. Removal of old equipment (air samplers) need to be organized. Removal could be part of infrastructure contract. Old samplers shall be transported to Ezeiza ARN facility.
- f. UPS at sampling spot: the present UPS will stay at the sampling spot as the main power supplies to station room and sampling spot are separated. The UPS shall be checked and new Battery packs or complete new UPS shall be provided.
- g. Ethernet cables from the Snow White to the fibre optic converter shall be supplied.

21. Auxiliary power supply (APS)

The current APS is not in use since generators are broken and very old. A new standard APS (diesel based) shall be installed. New APS shall be located at the same spot as the old ones. The old APS shall be removed (infrastructure contract). This need to be done by crane. Present two APS are installed, one serving the sampling spot and one serving the station room. Only one APS shall be installed serving both consumers.

A communication cable providing auxiliary power status shall be pulled from the aux system to the station room.

Check grounding of in RN326 and also electrical connection up to the electrical panel of the station.

The new APS need to be connected directly to room RN326 and probably new cables will be necessary.

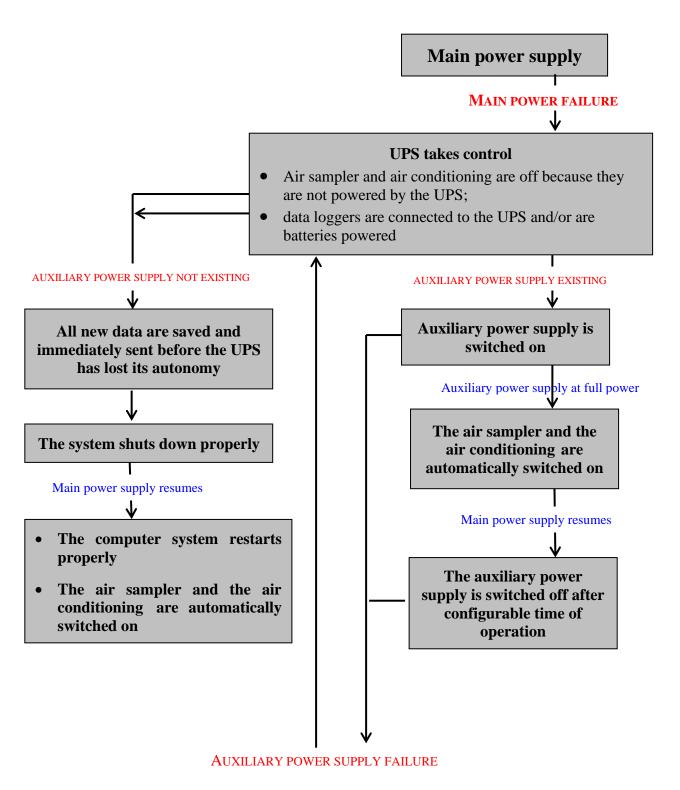
22. General office conditioning for contractor

- a. Office 320 and 322 should be reconditioned (removal of all old station cabling and install new lights and paint)
- b. Sampling room should be reconditioned (cracks and paint) after the civil works. Metal doors should be refurbished and painted with anticorrosion paint.
- c. GCI antenna support must be reconditioned and painted with anticorrosion paint.

d. All old (Aux. Gen., Sampler, ARIX system, etc.) station equipment should be transported to ARN Ezeiza facility for final destination.

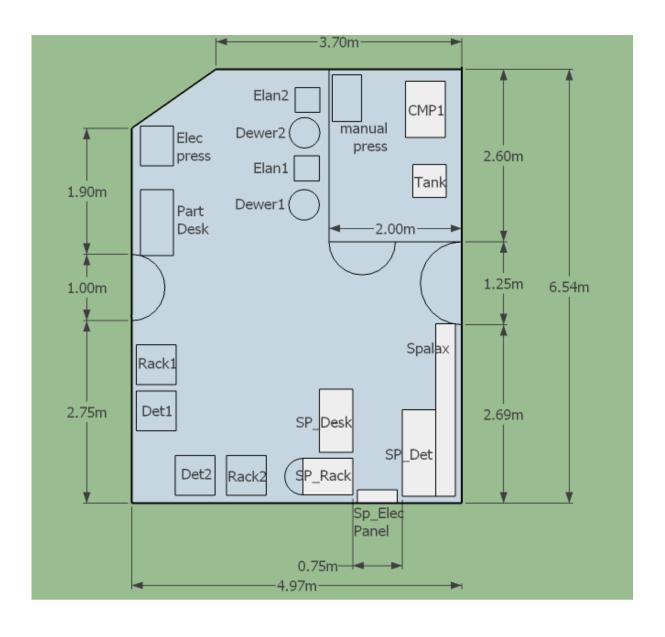
ATTACHMENT II - Station Management for Particulate and Noble Gas Stations in case of power failure

For noble gas stations the same schema applies with the possible exclusion of the air sampler considerations.



Data logger(s) should be preferably battery powered with an autonomy of 2-4 weeks.

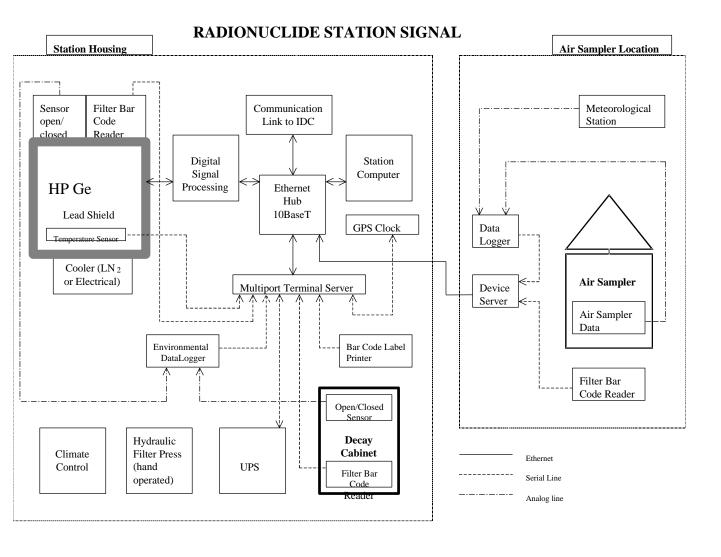
ATTACHMENT III - Layout of the Station Detector Room



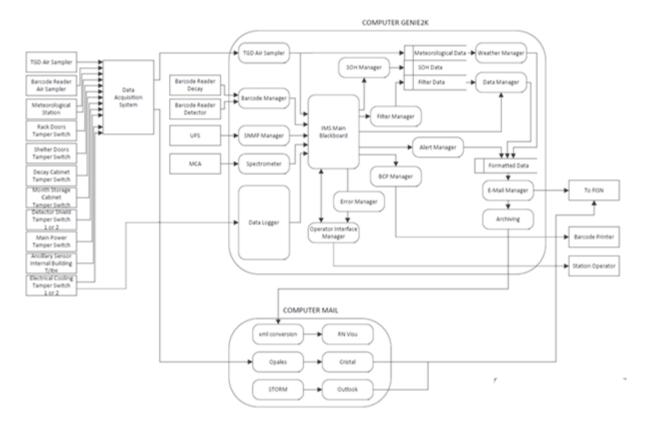
ATTACHMENT IV – System Integration Documentation

A example for system integration documentation is shown.

1. Diagram showing the data connections of the Equipment elements



Example of data flow at an RN station



ATTACHMENT V – Requirements for Station Specific Documentation (SSD)

SSD Information Package Requirements:

RN Station Drawings

Station Location, set of two maps:

Location of station sites in relation to nearby roads, cities and airports Station sites layout over a satellite image, including elevation of the area

Station Block Diagram (SBD): The SBD will present the station by blocks at the equipment category level¹ and the relationships between them. The blocks are connected with lines representing flow of energy or information. Labels and colours are used to identify the different types of flow. Boxes represent equipment and subsystems, as classified under "Creating SSD Station Drawings & Photos Set" (see below). The distribution of subsystems and equipment on the page shall be such to show a left-to-right flow of data. The main data path shall be shown on the same horizontal line. The SBD will 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 will display the following elements; mains power, generators, solar panels, batteries, charge controllers, uninterruptible power supplies, transfer switches, circuit breakers, grounding, surge protectors, power outlets. IEC 60617 graphical symbols are used for the diagram. The most common symbols are available in a Microsoft VISIO shape library saved with the template files available from the PTS. The EPD should include also the following information:

Equipment power rating: phases, voltages and frequency, capacity/load Grounding

Circuit breaker current ratings

Cable types, lengths and diameters

For RN stations also show the main switchboard and air conditioner phase and neutral connections.

Data Flow Diagram (DFD):

Data Flow Diagram 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. The DFD will include data generation system and data acquisition system specifying when necessary

21

¹ Equipment category as recorded in DOTS

software functional block diagram and end-users. The DFD will specify protocols used (data format). The DFD will identify the end users (to IDC, to NDC etc).

The RN Particulate and Noble Gas System DFD identify data generation at the different equipment items and describe the data flow including type of connection: Ethernet, analogue or serial. The acquisition computer is represented as a block enclosing the different software modules.

Network Diagram

The network diagram includes: IP addresses, gateways and netmasks of all IP devices. It represents the station local network. If possible it should be combined with Communication Diagram.

SSD Photo Requirements

For manual stations

Air sampler
Detector
Cooling system
Filter press
Air flow meter
Data logger

Notes:

More than one photo per location may be needed to comply with the requirements Photograph the equipment in the context of its location, not as an isolated piece of equipment When it is not possible to photograph a piece of equipment within the context of its location on the site, provide a simple sketch included to indicate its location.

For documenting the photos follows the guidelines under "Working Instructions – Creating SSD Station Drawings & Photos Set".

Working Instructions – Creating SSD Station Drawings & Photos Set

Purpose

These work instructions describe the specific settings and instructions to generate the IMS station drawing set based requirements defined under the docuemnts SSD Drawings Requirements and SSD Photo Requirements

Applicability

Applied to IMS Stations.

Provides the instructions to generate the IMS Station drawings set.

Reference Documents

SSD Drawings Requirements and Photo Requirements

Work Instructions creating station location maps using QGIS

Skill Level

MS Visio at user level

QGIS at user level

Work Instruction

The set of drawings will be done with MS Visio following the SSD Drawings and Photograph Requirements.

Settings

The format settings for the Visio sheet are preconfigured in the Visio Sheet Template. This includes the page configuration as well as the modified shapes, which are preselected in two Visio stencils: Visio shapes and Electric Diagram Shapes.

Station Location and Satellite View: RN01

Documented photos

There number of photos describing the station is flexible. The number will differ depending on the complexity of the station and the station's characteristics. Following the SSD Photo Requirements and Work Instruction for taking photos.

The quantity of photos included in each page is to be decided by the common sense of the drawings' author.

The title of each photo page will indicate the precise location of its content; CRF, Equipment Facility, Site or Repeater.

The specific location of the object will be indicated with a free text label placed at the bottom of the photo, set with Calibri font, Size 18. The label will also indicate if the photo is representative for the rests of the sites.

To label station equipment use the categorization as represented at Station Block Diagram when needed. To indicate each item a Visio Shape is provided in the Visio Shapes Stencil with the name "Photo Item Description". This shape has also an arrow to indicate which item on the photo is being labelled. After adding the shape to the drawing, it must be ungrouped so the arrow can be used independently from the label. For this click Group>Ungroup on the arrange menu, located in the menu ribbon.

No element or equipment on the photo can be left unlabelled.

Labels should be placed outside the margins of the photo whenever possible, and be aligned to each other. To maintain a visual balance, select a group of labels and click on Position>Space Shapes>Distribute Horizontally/Vertically depending on each case, so the

labels have the same spacing. Note that the first and last label on the line will keep their positions and the ones in between will move.

Instructions on how to take the photos:

Hold the camera firmly to ensure the sharpness of the image. If the photo is blurry or shaken take it again.

Photos must be shot with appropriate lighting. If there isn't enough ambiance light consider shooting with flash.

The subject of the photo must fill the margins of the picture.

Consider if the surrounding context of the object is also worthy of being included in the picture and zoom out/step back accordingly.

If taking a photo of an object from a distance consider using a zoom or taking the picture from up close.

If taking a photo of an object that is not at eye level be sure to shoot from the best possible spot to ensure a proper visibility of the subject.

If taking a photo of a room be sure to step back and/or zoom out in order to capture the distribution and space of the room.

If taking a photo of a room consider using a panoramic shooting mode as long as it satisfies all the other additional requirements.

Photos must be in colour.

Examples:







Yes



No Yes

Station Block Diagram (SBD) for RN

The SBD will represent the RN particulate equipment using blocks of solid lines and the color code as presented in Annex I and II.

The equipment components inside the lead shielding will be grouped with a green dashed line labelled "Lead Shielding". This symbol is available in the Visio Shape Stencil as Lead Shielding.

The equipment components that cannot be grouped in a subsystem can be left independently in the drawing to preserve the drawings' legibility.

The power subsystem shall be placed on the left side of the page. The GCI on the right side.

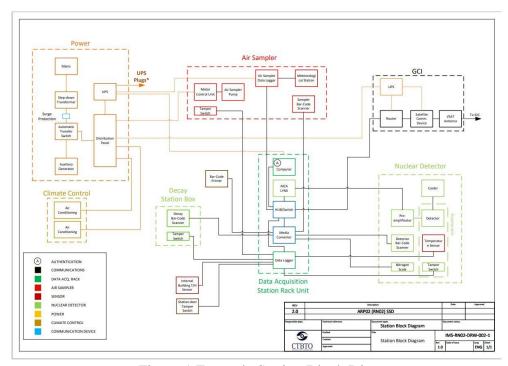


Figure 1 Example Station Block Diagram

Electrical Power Diagram

Represent the equipment, cable and power information according to the IEC 60617 Drawing Standard using a single line to represent cables. The most common symbols are already selected in a dedicated Visio stencil (Electrical Diagram Shapes) saved with the template files.

Cables should be represented as a single line and following the same standard convention as the symbols. When the line has to represent more than one cable this has to be indicated by striking with as many diagonal lines as cables. Voltage, frequency and phase are to be represented as follows:

Number of phases-Type of neutral –AC or DC Symbol –Frequency when applicable- Voltage Example for Standard European Single Phase: $1PEN-50Hz\ 230v$

Example for standard European Three Phase: 3PEN – 50HZ 380v

For array stations, when needed, accommodate the information using one or more pages for the sites and one for the central recording facility.

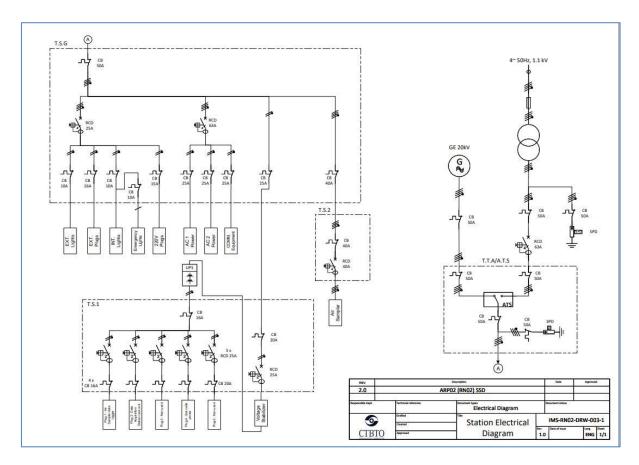


Figure 2 Electrical Diagram Example

Network Diagram.

For RN particulate and Noble Gas systems, the network devices conforming the local network will be inside a black dashed line rectangular block labeled local network. The GCI equipment will be inside a black dashed line rectangular block labeled GCI. All network devices will be associated with the connected equipment.

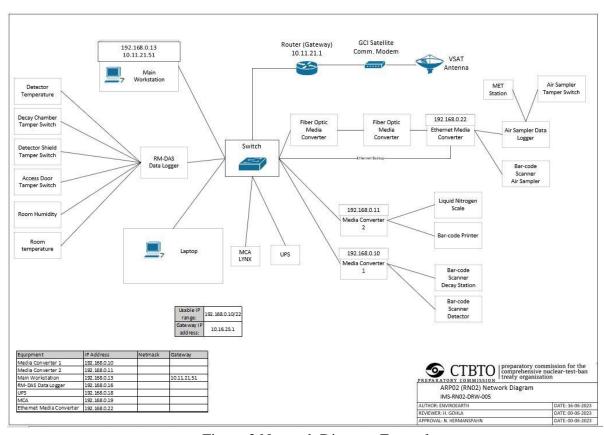


Figure 3 Network Diagram Example

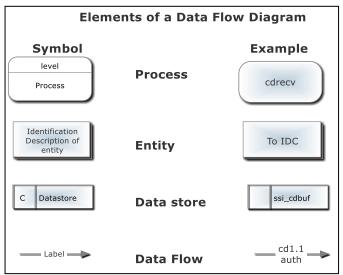
Data Flow Diagrams (DFD)

DFD will be constructed using the four basic symbols from the Gane and Sarson's² notation to represent process, data stores, entities and data flow:

process --- it represents the transformation of data as they flow through the system: data flow into a process, are changed, and then flow out to another process or a data store. The entity --- it represents the initial source and final destination of data in a DFD

² Chris Gane and Trish Sarson. Structured Systems Analysis: Tools and Techniques. McDonnell Douglas Systems Integration Company, 1977
https://en.wikipedia.org/wiki/Data_flow_diagram

data store --- a temporary or permanent holding area for data data flow --- the connection between processes and data stores along which individual entities or collection of entities flow.



When necessary, a vertical dashed line will split the drawing in two areas; the element site and the Central Recording Facility. The two areas will be labelled, as; sites and central recording facility.

The equipment will be named as for the Station Block Diagram.

The symbols are available in the Visio Shapes Stencil

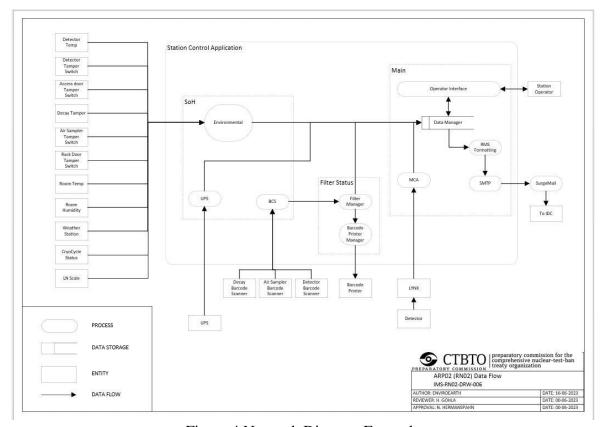


Figure 4 Network Diagram Example

Annex I: COMMON EQUIPMENT DOTS CATEGORIES /SUBSYSTEM TABLE FOR IMS STATIONS

Security	Grounding	Power	Intra-site communicatio ns	CRF /data acquisition and authenticatio n.	Software	Central/ Timing	Climat e Contro 1	GCI/IS N
Tamper Switch	Surge Protection	Mains	Radio Antenna	Computer	Data acquisition software	Central Timing	Climat e Contro	GCI UPS
Alarm Centre	Grounding	Charge Controller	Communicatio n Controller	Hub/Switch	Operating system	GPS Antenna		GCI Router
Firewall		Diesel	Hub/Switch	Central Timing	SO/ SoH software	GPS Repeate r		GCI UPS
Fences		Gas	Router	Authenticatio n Device	Data authenticatio n and PKI			
		Fuel cells	VSAT Antenna	Hub/switch				
		Gas	Telemetry Cable					
		Hybrid Propane	Radio Modem Satellite Communicatio n Device					
		Solar Panel Thermo	Media Converter					
		Electric						

Wind				
Transf	er			
Switch	n			
AC/De	C			
Conve	rter			
AC/A	C			
Conve	rter			
DC/A	C			
Conve	rter			
DC/De	C			
Conve				
DC/De				
Regula	ator			
Distrib	oution			
Box				
Batter				
Charge	er			
Inverte	er			
Power				
Contro				
Voltag				
Regula				
Batter	y			
UPS				

Annex II: EXTRA EQUIPMENT DOTS CATHEGORIES /SUBSYSTEM TABLE FOR RN TECHNOLOGIES

Air Sampler	Nuclear	Filter
•	Detector	Mangement
Air Sampler	Detector	Filter Press
Pump		
Air Flow Meter	Preamplifi	Bar code
	er	Reader
Air Flow	Detector	Robot Arm
Electronics	Shield	
Ethernet Serial	MCA	Pinch Roller
Server		
Media		Proximity
Converter		sensor
		Barcode
		Printer

Station General Description

STATION LOCATION

Describe location of sites. Brief description of world location, country and region, nearest town/city, proximity to other IMS stations, general terrain, road access

STATION DESCRIPTION

General description of the station.

LOCAL CONDITIONS

Describe local weather and climate conditions for the station.

Hazards

Hazards; times when station is inaccessible, e.g. winter months for polar stations. If available, description of wind conditions and other significant sources of noise at site(s)

Access

Describe the access to the station

Access dates

Dates when the access to the Station is possible.

LAND OWNERSHIP

Brief description of land ownership, use issues, leases. Do not provide contact details of land owner

Leases

Status of any lease or land contract

Land use right

Land use right describing if there is a military use for the area or an airport

General RN Equipment Information

AIR SAMPLER

Describe particularities of the equipment, its/their location or any specific condition of its

functionality (flow rate) that it is present at the station.

1.1 METEOROLOGICAL EQUIPMENT

Describe the meteorological equipment configuration (mandatory and non-mandatory components)

and indicate its location.

2 DETECTOR SYSTEM

Describe particularities of the detector system or any specific condition of its functionality that it is present at the station.

STATION COMMUNICATION

2.1 EXTERNAL COMMUNICATION

Provide overview of data transmission to IDC. Describe in terms of Basic Topology, Independent

Sub-Network, Partitioned Sub-Network, as given by Operations Manual para 4.6.2

3 POWER AND GROUNDING

Describe the power at the station and the backup sources & UPS, if possible comment of the overall

consumption of the station.

Describe the grounding system and lightning protection

4 DATA AQUISITION AND AUTHENTICATION

Describe the station acquisition system

4.1 SOFTWARE APPLICATIONS

Indication of the running System, acquisition software applications and modules.

5 STATION OPERATOR DATA MONITORING SYSTEM

Description of the system which provide the SO the capability to monitor the station.

5.1 STATE OF HEALTH MONITORING

Indication of any SOH monitoring system at the station.

Security of a Radionuclide station

1 STATION SECURITY

Describe security at the station; description of the fences, locked point, location and custodian of the

keys, requirements for entrance, passwords, alarm system and fire protection

1.1 INTRUSION SECURITY

Describe the station anti tampering systems

1.2 DATA AUTHENTICATION

Describe the station data authentication system