

Date:

preparatory commission for the comprehensive nuclear-test-ban treaty organization

REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2022-0034/HASAN Val Hi

(PLEASE QUOTE ON ALL COMMUNICATIONS)

Tel. No.:	+43 (1) 26030-6350
E-mail:	procurement@ctbto.org

Attn:

Phone: Fax: Email: 29 Aug 22

Subject: PROVISION OF SOURCES FOR A PROFICIENCY TEST EXERCISES (PTE) AND OTHER RELATED SERVICES INVOLVING CTBTO AND OTHER RADIONUCLIDE LABORATORIES ON A CALL-OFF BASIS.

Deadline for Submission: 7 Oct 22

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: 2022-0034	Closing Date:	30 Sep 22
<i>Title:</i> PROVISION OF SOURCES FOR A PROFICIENCY TEST EXERCISES (PTE) AND OTHER RELATED SERVICES INVOLVING CTBTO AND OTHER RADIONUCLIDE LABORATORIES ON A CALL-OFFBASIS.	Vienna Local Time:	17:00

Procurement Staff: Manzurul Hasan

CTBTO Req. No.: 0010019248

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 fol	lowing reason(s)		
 our current workload does not perm we do not have the required experti 	it us to take on additional work at this time; se for this specific project;		
<pre>insufficient time to prepare a proper submission; 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 as described in the Terms of Reference.

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

2. Documents included in this RFP

This RFP consists of the following documents:

- (a) Letter of Invitation
- (b) These Instructions for Preparation and Submission of Proposals with its Attachments:
 - Attachment 1: Evaluation Criteria and Method
 - Attachment 2: Procedure for submission of electronic bids
- (c) List of CTBTO Member States
- (d) Statement of Confirmation
- (e) Vendor Profile Form
- (f) The Commission's Model Contract and its Annexes A B;
 - The Commission's General Conditions of Contract (Annex A)
 - Terms of Reference (Annex B)

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

3. Amendment of RFP Documents

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

4. Language of the Proposal

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

5. Format and Submission of the Proposal

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

<u>The Proposal shall be submitted electronically according to the attached</u> <u>"PROCEDURE FOR SUBMISSION OF ELECTRONIC BIDS".</u>

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

6. Request for Clarifications and Contacting the Commission

The Commission will issue clarifications, if required. Bidders are requested to e-mail any questions pertaining to this RFP as soon as possible after receipt of the solicitation documents, but in any case, no later than **10 business days prior to the Closing Date**. <u>No requests for clarifications will be entertained after this time</u>. Questions will <u>only</u> be accepted via e-mail sent to:

E-mail:	procurement@ctbto.org
Subject:	Request for Clarifications re RFP No. 2022-0034/HASAN

The Commission will make all reasonable efforts to issue the clarifications not later than 7 business days prior to the Closing Date.

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

7. Eligible Goods and Services

The 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.

8. Type of Contract and Payment

The Commission intends to conclude firm fixed unit prices Call-off Contract based on the attached Model Contract. The terms and conditions of payment for services are described in Clause 13 of the attached Model Contract.

Applicable Taxes payable by the Contractor 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.

9. Preparation of the Proposal

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

The Proposal shall be composed of the following separate parts:

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

providing, but not limited to, the following information:

PART I: TECHNICAL PROPOSAL

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

Point of Contact

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.

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.

Commission's Inputs

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

Qualifications

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

Personnel

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

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

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

A bidder must <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 Quotation 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.

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.

Insurance

Insurance to be included in the Proposal must be for All Risk, covering 110% of the cost of the equipment proposed, and from the date/place of the shipment to the date/place the delivery is completed. The insurance shall be in the name of the supplier and the Commission. You are requested to confirm that you will provide this insurance coverage

PART II: FINANCIAL PROPOSAL

The Financial Proposal shall be prepared in **United States Dollars or Euro** and shall breakdown, separately, the costs for each task required by the Terms of Reference.

The Financial Proposal shall contain, at the minimum, the following:

- (i) Firm fixed unit prices for the Training Services required by Terms of Reference for the total contract duration (three (3) years with a possibility of extension for an additional two (2) years if agreed to by both parties);
- (ii) Firm fixed labor rates, with information on the category and number of staff proposed. This section must further include proposed man-hours/man-day including estimated man-power effort for each of the tasks required under the Terms of Reference. Please do note, that the firm fixed labor rates shall include costs and expenses 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 contribution, if applicable) for the provision of the services in accordance with the Terms of Reference;
- (iii) Estimated shipping costs for the required tasks of the Terms of Reference; Estimated prices for the door-to-door shipment to each site, based on DAP (delivered at place) or DDP (delivery duty paid), INCOTERMS 2020, which shall include cost for the packing, handling, insurance, shipping, customs clearance, local delivery, wherever applicable. The Commission will reimburse the actual expenditure for the shipment, subject to provision by the Contractor of the proof of the actual expenditure for the shipment together with the invoice.
- (iv) Description of the content, terms, conditions and cost (if any) of all warranties and guaranties.

Indirect Taxes

In principle the Commission is exempt from taxes. Since the arrangement under which such exemption is respected varies from country-to-country, the selected bidder will be informed by the Commission whether tax exemption will occur at source or whether taxes paid by the selected bidder will be reimbursed by the Commission upon submission of the original supporting documentation. **"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.

For Austrian companies

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

For European Union (EU) Companies

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

Commission, no VAT will be charged to the Commission by the EEC Suppliers under the Contract (Ref. EU VAT Council Directive 2006/112/EC, Article 151).

For Non-EU Companies

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

Note that clear and detailed explanations would enable us 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.

10. 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.

11. Validity of the Proposal

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

12. Correction of Errors

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

13. Evaluation of the Proposal

- (a) The Commission will first conduct a technical evaluation based on the evaluation method and criteria speficied in Attachment I.
- (b) If the Proposal fails to meet the minimum technical requirements for any one criterion, the entire Proposal will not be considered further. If the Proposal meets the minimum technical requirementsOnly the Financial Proposals of those bidders that meet or exceed the minimum technical requirements of all items will be opened and evaluated for its commercial acceptability and to determine the financial score for each responsive bidder. The Commission will evaluate the following:
 - (i) Contractual compliance.
 - (ii) Financial acceptability
- (c) The Commission, based on the evaluation criteria and method given in Attachment I, will determine the Proposal that 'most effectively satisfies the technical and operational

requirements set out in the solicitation documents' in accordance with the criteria specifified in Attachment 1.

(d) The Commission may split the award of the Contract and award more than one Contract to those Contractors who receive the highest combined score in each individual component of the Work, as applicable, and as specified in this RFP documents.

14. Negotiations of the Proposal and Award

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

The Commission also reserves the right to split the award for this project if so deemed desirable.

15. 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.

16. The Commission's Right to Reject the Proposal

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

17. Costs of preparation and submission of the Proposal

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

18. Proprietary Information

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

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 in Sections 3 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.

The maximum score is 55 points for the technical part of the proposal.

2. Evaluation of Compliance with the requirements

- Bidders shall comply with all requirements of the ToR, and with the requirements for the technical proposal.
- The maximum score is 60 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 and 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.

Eval	TOR	TOR Description		
ID	Ref	Description		
		SCOPE OF WORK		
1	3.1, 4 & 5	The contractor understands and will comply with the planning requirements and will liaise with the Commission on developing a plan that is relevant for the exercise and continued communications until the exercise is concluded in accordance with the time schedule and communication requirements.	5	
	3.2	Preparation of the reference samples		
2	3.2.1	The contractor has a method for compressing Manual3M and RASA filters and a CTBT relevant method of splitting MANUAL 3M samples, with the method of providing certified activities.		
3	3.2	The contactor has technical suitable method of estimating overall homogeneity uncertainties for the six IMS geometries.		
4	3.2.2	The contractor has the method of spiking the nuclide mixture mother solution on Cinderella filters with avoiding expansion.		
5	3.2.3	The contractor understands well the CTBT-relevant spiking method for half-RASA filters.		
6	3.2.4	The proposed radionuclide mixture for calibration sources meets the technical requirements.		
7	3.2.5	The proposed method of production of the nuclide mix for the reference samples includes (i) mixture of single or mixed solutions of the nuclides of interest; (ii) neutron irradiation of 235U and/or 238U target, (iii) high-energy particle-induced fission of 235U and/or 238U target, (iv.) other method to be proposed by the Contractor. The proposed methods are likely to cover all radionuclides listed in table 1.		
8	3.2.6	The contractor is able to issue certificates for calibration and reference samples as per requirements and compliant with international standard ISO17025		
	3.3	Distribution of samples		
9	3.3	The contractor can deliver the samples to all 17 listed locations as per requirement.	5	
	6	QUALIFICATIONS OF THE CONTRACTOR		
10	6	The contractor shall have appropriate national accreditation such as ISO9001, ISO17043 or ISO 17025	5	

Table 2: Bidder Technical Proposal Evaluation Matrix

Eval ID	TOR Ref	Description	Max Score
11	6	The contractor shall have at least 5 years relevant experience in the preparation and delivery of reference samples for the purpose of testing analysis capabilities by high-resolution gamma spectrometry. The contractor shall be familiar with methods and performance statistics applied in the evaluation of PTE results.	5
12	3.4	The contractor shall have experience in generating exercise reports and shall be able to provide reports in accordance with the reporting requirements. t	5
		Total Score	60

B. COMMERCIAL EVALUATION

Once the technical evaluation is finalized, the Technical Evaluation Panel and the Procurement Section will evaluate the financial offers of the technically compliant bidders. 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 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.

PROCEDURE FOR SUBMISSION OF ELECTRONIC BIDS IN 2 SEALED FILES

Given the current logistics restrictions at the Vienna International Centre as a result of the COVID-19 situation, the Commission invites you to submit your sealed bids in response to **Request for Proposal No. 2020-0060/HASAN:Diving and Subsea Cable Maintanance Serices for Hydroacoustic Station HA01, Cape Leeuwin (Augusta), Western Australia on a Call-Off Basis.**

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

CRITICAL INFORMATION:

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

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

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

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

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

INSTRUCTIONS:

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

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

(You can download the 7-zip code for Windows at: 7-zip.org)

Creating the archives for submission

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

As an example of how to submit your bid in the required format: assuming you are supplier "SOFTCOMP" and have the following files related to the bid for "RFP 2020-0010/EDWALD". (You will need to replace these elements with the real information for your actual bid.) Assuming further that you have installed the 7-zip software on the Windows system you are using. We will only go through the creation of the Technical bid component; the Financial bid component is similar.

^	Name ^	Date modified	Туре	Size
	🔒 main proposal.pdf	17-Mar-20 15:02	Adobe Acrobat D	4,990 KE
*	🔊 Appendix A.pdf	13-Mar-20 14:43	Adobe Acrobat D	831 KE
1	Supporting blurb 1.pdf	13-Mar-20 13:13	Adobe Acrobat D	3,174 KE
*	Supporting blurb 2.pdf	19-Mar-20 14:17	Adobe Acrobat D	582 KE

Figure 1 An example set of files to be submitted

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

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

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

Leave all the other settings as is, except: **add a password to the encryption** (see figure 2 below). This is done by typing the same password (of your choosing) twice in the two text fields in the lower right hand corner. *Make a note of this password. You must choose different passwords for the two zip archives, that is, the Technical and the Financial bids.*

Archive: C:\Users\edwal	d\Desktop\proposalmaterial\			
SOFTCOMP-20	20-0010-EDWALD-TECHNIC	AL-BID.zip	~	
Archive <u>f</u> ormat:	zip	<u>U</u> pdate mode:	Add and replace files	~
Compression <u>l</u> evel:	Normal	Path mode:	Relative pathnames	~
Compression <u>m</u> ethod:	Deflate	Options		
<u>D</u> ictionary size:	32 KB	Create SFX arc		
<u>W</u> ord size:	32	/ Delete files after	er compression	
<u>S</u> olid Block size:		Encryption		
Number of CPU <u>t</u> hreads:	4 ~ /	4 Enter password:		
Memory usage for Compressi		B Reenter password		_
Memory usage for Decompre	ssing: 2 M	B		
Split to <u>v</u> olumes, bytes:		Show Passwor	d	
Parameters:	```````````````````````````````````````	Encryption method	d: ZipCrypto	~
] [
		ОК	Cancel Help	-

Figure 2 Creating an Archive

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

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

Checksum information	×
Name: SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip Size: 5834922 bytes (5 MB)	
SHA1: 7D2B04A67693036A3F0936E9677E6D7AA42AD726]
The "SHA1 "Hash" OK	

Figure 3 SHA1

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

Sidebar: How to open a CMD window in Windows:

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

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

Finally,

- Create a new email, Subject: example- "SOFTCOMP-2020-0010-EDWALD". Add the two compressed archives, that is, the Technical Bid and the Financial Bid archives as attachments. The text of the email should contain the SHA1 information for both archives.
 SEND THIS TO: sealed_bids@ctbto.org (note that there is an underscore "_" between "sealed" and "bids"). (Should the email become larger than your mail system allows, you can try sending the two archives in separate emails. Take care to include the right SHA1 information with each file.)
- Create a new email, Subject: example- "SOFTCOMP-2020-2010-EDWALD-Technical Bid" the contents of which must contain the Encryption Key for the Technical Bid (the password you used when creating the Technical Bid). (Again, note the underscore between 'bid' and 'keys'.)

SEND THIS TO: bid_keys@ctbto.org

IMPORTANT NOTE: As stated above, only send the Encryption Key for the Technical Bid to the <u>bid keys@ctbto.org</u> mailbox when sending your Technical and Financial Bids to the <u>sealed_bids@ctbto.org</u> mailbox. You shall only send the Encryption Key for the Financial Bid

to the Commission if and when informed by the Commission that your Technical Bid had been evaluated as "technically acceptable".

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

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

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

STATEMENT OF CONFIRMATION

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

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

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

- 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):_____

Title/Position:

Place (City and Country):

Date: _____

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

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

1. Name of Company:			
2. Street Address:			3. Telephone:
2. Street Address.			3. receptone.
P.O. Box :			4. Fax :
City:			
5			
Zip Code :	Country:		5. E-Mail :
<u> </u>			
6. Contact Person:			Title:
7 Legal Status (e. a. Danta an	while Drivets Limited Company	Carr	
7. Legal Status (e.g. Partner	ship, Private Limited Compar	ny, Gov	vernment Institution)
8. Year Established:		9. Nu	Jumber of Employees:
o. i cui Estublished.		2.114	anioer of Employees.
10. Gross Annual Turnover (US\$m)*:	11. Aı	Annual Export Turnover (US\$m)*:
			r · · · · · · · · · · · · · · · · · · ·
12. Type of Business/Produc	ts: Manufacturer	Sole A	Agent Supplier
13. Type of Business/Service	s/Work: Engineering	Civil V	Work Governmental Institution
14. References (your main cu	istomers, country, year and te	chnical	ll field of products, services or work): **
15 Duration Grouple Contract			······································
15. Previous Supply Contrac	cts with United Nations Organ	nzations	as (over the last 3 years)**
Organization:	Value in US\$ Equiva	alent	Year:
organization.	value in OS\$ Equiva	alent.	i cai.
Organization:	Value in US\$ Equiva	alent:	Year:
6	· 1		
16. Summary of any changes	in your company's ownershi	p during	ng 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 (please indicate the Product/Service/Work # as per attached sheet): Product/Service/Work # Product/Service/Work Description				
			^	
Questionnaire completed by:	•			
18.Name:	Title:	Signature:	Date:	
19. Evaluated By:		FOR CTBTO USE ONLY Initials	Date:	
20. Updated By:		Initials	Date:	
21. Remarks:				
22. Vendor Registration Number Allocated:			Not Accepted:	

* 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.

* 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.

CTBTO Member States

Afghanistan Albania Algeria Andorra Angola Antigua and Barbuda Argentina Armenia Australia Austria Azerbaijan Bahamas Bahrain Bangladesh Barbados Belarus Belgium Belize Benin Bolivia (Plurinational State of) Hungary Bosnia and Herzegovina Botswana Brazil Brunei Darussalam Bulgaria Burkina Faso Burundi Cambodia Cameroon Canada Cabo Verde Central African Republic Chad Chile China Colombia Comoros Congo Cook Islands Costa Rica Cote d'Ivoire Croatia Cuba Cyprus Czech Republic Democratic Republic of the Congo Denmark Djibouti Dominica Dominican Republic Ecuador Egypt El Salvador Equatorial Guinea Eritrea Estonia

Eswatini Morocco Ethiopia Mozambique Fiji Myanmar Finland Namibia France Nauru Gabon Nepal Gambia Netherlands New Zealand Georgia Germany Nicaragua Ghana Niger Greece Nigeria Grenada Niue Guatemala North Macedonia Guinea Norway Guinea-Bissau Oman Guyana Palau Haiti Panama Holy See Honduras Paraguay Peru Iceland Philippines Poland Indonesia Iran (Islamic Republic of) Portugal Iraq Qatar Ireland Israel Romania Italy Jamaica Japan Rwanda Jordan Kazakhstan Saint Lucia Kenva Kiribati Grenadines Samoa Kuwait Kyrgyzstan San Marino Lao People's Democratic Republic Senegal Latvia Serbia Lebanon Seychelles Lesotho Sierra Leone Liberia Singapore Slovakia Libva Liechtenstein Slovenia Lithuania Solomon Islands Luxembourg South Africa Madagascar Spain Malawi Sri Lanka Malaysia Sudan Maldives Suriname Mali Sweden Malta Switzerland Marshall Islands Tajikistan Mauritania Thailand Timor-Leste Mexico Micronesia, Federated States of Trinidad and Tobago Monaco Togo Mongolia Tunisia Montenegro Türkiye

Papua New Guinea Republic of Korea Republic of Moldova **Russian Federation** Saint Kitts and Nevis Saint Vincent and the Sao Tome and Principe Turkmenistan Tuvalu Uganda Ukraine United Arab Emirates United Kingdom United Republic of Tanzania United States of America Uruguay Uzbekistan Vanuatu Venezuela Vietnam Yemen Zambia Zimbabwe

EPARATORY COMMISSION

CONTRACT NO. 20XX-XXXX

between

THE PREPARATORY COMMISSION

FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY

ORGANIZATION

and

NAME OF CONTRACTOR

for

PROVISION OF SOURCES FOR A PROFICIENCY TEST EXERCISES (PTE) AND OTHER RELATED SERVICES INVOLVING CTBTO AND OTHER RADIONUCLIDE LABORATORIES ON A CALL-OFF BASIS

This Contract comprises this cover page, a table of contents, 13 (thirteen) pages of text, a signatories page, a List of Annexes and 3 (three) Annexes (A to C)

[Month] [2022]



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CALL- OFF CONTRACT NO. XXXX

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 [Name of Contractor] (hereinafter referred to as the "Contractor"), having its principal 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, FRD and any further modifications or such further documents as may be expressly incorporated in this Contract by the Parties in accordance with Clause 22 (Contract Amendment) 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.

"FRD" means a Formal Request for Delivery to be issued by the Commission specifying goods and/or services to be provided by the Contractor upon request by the Commission in accordance with the provisions of the Contract and Annexes B and C.

"Goods" means the equipment items to be supplied and delivered by the Contractor under the Contract as requested by the Commission under FRDs.

"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 services provided by the Contractor under this Contract as requested by the Commission under FRDs.

"**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.

"Work" means all the Goods and/or 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 services for Provision of Sources for a Proficiency Test Exercises (PTE) and Other Related Services Involving CTBTO and Other Radionuclide Laboratories on a call-off basis, as and when required by the Commission.

3. ENTRY INTO FORCE AND DURATION OF THE CONTRACT

- **3.1** The Contract shall enter into force upon the date of the last signature by the authorized representatives of the Parties and shall be valid for 3 (three) years thereafter and until the Parties fulfill all their obligations hereunder.
- **3.2** The Commission has the option, but not the obligation, to extend the Contract for a duration of 2 (two) years under the same terms and conditions as those of this Contract. The optional extension will be implemented through a written notification to the Contractor by the Commission.

4. **RESPONSIBILITIES OF THE CONTRACTOR**

- **4.1** The Contractor shall supply the Goods and provide the Services as specified in Annex B.
- **4.2** The Contractor shall provide qualified English-speaking personnel as necessary to perform the Work under this Contract. The key persons shall be available for possible tasks related to the Work throughout the duration of the Contract period. Any replacement of the key personnel shall be made in accordance with Clause 7 of Annex A.

5. FORMAL REQUESTS FOR DELIVERY

5.1 General provisions

- (a) During the Contract duration the Commission will issue individual FRDs based on the firm fixed unit prices of the Goods and/or fixed unit rates for the Services reflected in Annex C, as well as estimated shipping and travel costs
- (b) Each FRD shall be valid until its successful completion by the Contractor and acceptance by the Commission of the Work performed.
- (c) The FRD shall specify, as applicable, the required Work, Goods to be supplied and/or Services to be delivered, details of the consignee (name, address and contact information), ship-to address, shipping instructions, required delivery date and place, notification party(ies) and any other relevant information.
- (d) The Commission may revise the FRD as and when it may deem necessary.

- (e) The Commission makes no commitment under the Contract to call-off any specific quantities of Goods and/or Services specified in Annex B.
- (f) The Commission may, from time-to-time, need to purchase accessories or essential items that do not form part of the list of equipment in Annex C to the Contract. To this end, the Commission may request from the Contractor a quote for an item or items that are not contained in Annex C. The Contractor shall provide this information within seven (7) days of the Commission's request.
- (g) The Commission may issue FRDs in accordance with this Clause 5, which may include the item or items in question. Such items, which may be purchased through FRDs and which do not form part of Annex C, shall henceforth be incorporated by reference into the list of prices in Annex C (hereinafter referred to as the "List of Prices"). The prices for such above mentioned items shall be firm and fixed from the date of issuance of the relevant FRD including such item(s) and henceforth remain valid in accordance with Clause 12 below and Annex C, until the expiry of the Contract.
- (h) In the event of any inconsistencies between the List of Prices and the FRD issued, the relevant FRD shall prevail.
- (i) <u>Per Diem Charges</u>

Per diem charges, which cover lodging, meals and incidental travel expenses, shall be based on the United Nations Daily Subsistence Allowance (UN DSA) rates, unless otherwise specified by the Commission. The Commission may provide a copy of the current UN DSA rates with each request for an estimate and prior to issuing the FRD.

(j) Estimates

(i) For all other required items not addressed above, the Commission shall request the Contractor, prior to the Commission's issuance of an FRD, to provide estimated costs for shipping, airfare, local transportation and other applicable items. The Contractor shall provide such estimates within 1 (one) week from the request. The Commission, at its own discretion, will approve the inclusion of relevant items quoted by the Contractor in accordance with the specific requirements of the FRD.

(ii) Without prejudice to Clauses 23 and 24 of Annex A, if the Commission is not in agreement with the estimates provided, there will be a maximum period of negotiation of 1 (one) month.

(iii) For airfare and local transportation estimates, at the time of payment the Contractor shall submit to the Commission supporting documentation of costs actually incurred, such as copies of air ticket, invoices, insurance policies and shipping documents, as appropriate, which shall not exceed the estimate by more than 10%.

5.2 Delivery Terms

5.2.1. Unless otherwise instructed in the FRD or authorized by the Commission in writing, the following shall apply in respect to the delivery of the Goods under the Contract:

- (a) The Contractor represents that it shall arrange for the most cost effective means for the delivery of the Goods to the specified destinations.
- (b) Depending on the destination, the trade and shipping terms applicable under the Contract shall be door-to-door "**DAP** (delivered at place)" or "**DDP** (delivered duty paid)", based on the INCOTERMS (International Commercial Terms) 2020.
- (c) The Contractor shall be responsible for all shipping arrangements, including customs clearance and local transportation of the Goods to the final delivery address as specified in the FRD.
- (d) As soon as possible prior to effecting the shipment, the Contractor shall send to the Commission and the consignee a detailed delivery schedule and the shipping documentation, such as flight number and date, airway bill and consignment details (content, weight and dimension of the package). The FRD may require that actual shipment is effected only after an authorization from the consignee is obtained.
- **5.2.2.** Delivery shall always be made in full in accordance with each FRD. Partial delivery (i.e. delivery not completed per each FRD) is not acceptable without prior written consent by the Commission.

5.3 Delivery via the United Nations Development Program

The Commission may request that the Contractor arranges the delivery of the Goods through the United Nations Development Programme (UNDP) offices in order to utilize the Commission's agreement with UNDP which waives the payment of import taxes into specific countries. This information will be supplied to the Contractor in the FRD. In this case, the Goods may first be delivered to the UNDP office and then re-routed to the Consignee. The Contractor shall be responsible for all delivery arrangements, as instructed by the Commission.

5.4 **Required Delivery Date**

The Goods shall be received by the consignee within the required date specified in the FRD, or within a longer period, if so agreed by the Commission.

5.5 Title and Risk

Unless stipulated otherwise, title to any Goods supplied by the Contractor or provided by the Commission shall be transferred to the consignee upon the delivery of the Goods to the final destination. A note of acceptance of the Goods shall be obtained by the Contractor from the consignee.

6. STANDARD OF WORK

The Contractor shall perform the Work in a workmanlike manner in conformity with standard professional practices, using qualified personnel and in strict accordance with the Contract. 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 it shall perform the Work in the best way and in the most expeditious and economical manner consistent with the requirements of the Contract.

7. INSURANCE

- 7.1 The Contractor shall provide appropriate insurance, as specified in Clause 9 of Annex A.
- **7.2** In addition, the Contractor shall, without limiting its own or the Commission's obligations and responsibilities under this Contract, provide and thereafter maintain insurance with respect of the Goods from the date of their receipt by the Contractor from the manufacturer until receipt by the delivery party at the final destination. For this purpose, Global insurance shall be arranged with a single insurance company on an as-arranged basis at the same rate of insurance premium for the execution of each FRD. It shall be in an adequate amount to cover the full replacement cost plus an additional sum of ten percent (10%) of such replacement cost to cover any additional cost of, and incidental to, the rectification of loss or damage, including professional fees; the insurance shall cover the Contractor against all losses or damages from whatsoever cause arising from the execution of this Clause shall be in the name of the Contractor and the Commission shall be named as an additional insured party.

8 WARRANTY

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

9 PERMITS, NOTICES, LAWS AND ORDINANCES

- **9.1** 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. This shall include, but not be limited to, work permits, visa, or similar documents.
- 9.2 The Contractor shall give all notices required by the nature of the Work.
- **9.3** 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.

10. PROTECTION OF PERSONS AND PROPERTY

- **10.1** The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programmes in connection with the Work.
- **10.2** 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 persons on the Commission's or the Station's premises, as applicable, who may be affected thereby;

- (ii) property of the Commission or the Station, as applicable.
- **10.3** 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.
- **10.4** 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.
- **10.5** 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.
- **10.6** The Contractor shall be responsible for the prevention of accidents on the Commission's or the Station's premises, as applicable, during the execution of the Work.
- **10.7** In any emergency affecting the safety of persons or property, the Contractor shall promptly act to prevent threatened damage, injury and loss.
- **10.8** The Contractor shall promptly remedy all damage and loss to any property, referred to in Clause 10.2 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 Clause 10.2 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.

11. 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 Work is 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 Work.

12. PRICES

12.1 For each FRD the Commission shall pay to the Contractor, in consideration of the full and proper performance of its obligations under the Contract, the amount based on the firm fixed unit prices of the Goods and/or Services pursuant to Annex C attached hereto, DSA, plus the actual shipping costs.

The firm fixed unit prices of the Goods and/or fixed unit rates for the Services shall be held unchanged for the period indicated in Clause 3 above and shall exclude any applicable Taxes, fees, duties and charges owed by the Contractor in respect to the Goods and/ or Services at the conclusion or implementation of this Contract.

- **12.2** The Prices 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.
- **12.3** 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 issued FRD without the prior written consent of the Commission and a formal written amendment to this FRD.
- **12.4** No Taxes are applicable under this Contract.

13 PAYMENT TERMS

- **13.1** Upon satisfactory completion of each FRD the Contractor shall submit the following supporting documentation to the Commission for payment:
- (a) Original invoice submitted in accordance with Clause 13.2(a) below reflecting the actual costs;
- (b) Delivery note countersigned by the consignee listing the Goods delivered and confirming their receipt and acceptance;
- (c) Copy of the airway bill or bill of lading showing the date of the flight or shipment, if applicable;
- (d) Copy of the carrier's invoice supporting the actual shipping costs on the Contractor's invoice;
- (e) Copy of the certificate of transportation insurance;
- (f) Certificate of origin, if applicable;
- (g) Any other documentation that might be required under the applicable FRD.

13.2 General Payment Provisions

- (a) The Commission shall make the payments to the Contractor on the basis of an invoice submitted by the Contractor. All payments shall be made within 30 (thirty) days of the receipt and acceptance of the original invoice, provided that the Work has been satisfactorily completed and has been accepted by the Commission.
- (b) 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.

(c) The Contractor shall submit an invoice electronically, from the Contractor's official e-mail address in PDF format, duly signed and sealed by the Contractor and submitted to the Commission's email addressed specified under Clause 23 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.

14. MARKET FLUCTUATION

- **14.1** The unit prices of the Goods and unit rates for the Services shall be held fixed for the entire duration of the Contract. If the prices increase for reasons not under the control of the Contractor (e.g. Goods supplied by a third party), or the Goods become unavailable, the Contractor shall propose to the Commission, for its approval, a replacement item with equivalent specifications to honor the firm fixed unit price. In the event that an equivalent Good at the fixed unit price cannot be identified, the Contractor shall notify the Commission as soon as possible.
- **14.2** If the market price of the Goods decreases, the Contractor shall enable the Commission to enjoy the benefit, either by proposing a more efficient replacement item or a lower unit price in accordance with the market price for the Commission's approval. If, however, the market price increases, the agreed firm fixed unit price shall be maintained with the agreed configuration/specifications.

15 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.

16. DELAYS AND EXTENSION OF TIME

- **16.1** 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 22 below for such reasonable time as the Commission may determine.
- **16.2** Any request for extension of the time for reasons referred to in Clause 16.1 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.

17. 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.

18. ENTIRE AGREEMENT

This Contract represents the final agreement in respect of the Goods and/or 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.

19. 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:

- (h) this document;
- (ii) the Commission's General Conditions of Contract (Annex A);
- (iii) the Commission's Terms of Reference (Annex B);
- (iv) the Contractor's Proposal (Annex C);
- (v) the relevant FRD.

20. 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.

21. 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.

22. 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 Parties.

23. TRANSMISSION OF NOTICES AND OTHER DOCUMENTS

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

(a) The Commission:

<u>For Contractual Issues:</u> *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 and related enquiries: 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>Payments@ctbto.org</u>

(b) The Contractor: Name: Address: Tel: Email:

24. EFFECTIVENESS

- **24.1** 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 fax, when received in legible form;
 - (iv) if by electronic communication, when retrievable by the Commission in document form.
- **24.2** A communication given under Clause 24.1 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.

IN WITNESS hereof, the duly authorized representatives of the Parties have executed this Contract in Vienna, Austria:

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

[Name, Position/Title]

Date: _____

Place: _____

For and on behalf of [CONTRACTOR]:

[Name, Position/Title]

Date: _____

Place: _____
LIST OF ANNEXES

ANNEX A: THE COMMISSION'S GENERAL CONDITIONS OF CONTRACT ANNEX B: THE COMMISSION'S TERMS OF REFERENCE

ANNEX C: THE CONTRACTOR'S PROPOSAL



preparatory commission for the comprehensive nuclear-test-ban treaty organization

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.

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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.

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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:

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

PURCHASE NO.	
GROSS WEIGHT	·
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.

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:
 - (i) 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

¹ UN Guiding Principles on Business and Human Rights, available at <u>https://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf</u>.

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

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, postemployment 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

TERMS OF REFERENCE

PROVISION OF SOURCES FOR A PROFICIENCY TEST EXERCISES (PTE) AND OTHER RELATED SERVICES INVOLVING CTBTO AND OTHER RADIONUCLIDE LABORATORIES ON A CALL-OFF BASIS

1. INTRODUCTION

The International Monitoring System Division (IMS) on behalf of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as "the Commission") implements a Proficiency Test Programme for the CTBTO radionuclide laboratories supporting its network of radionuclide stations. Under this Programme, the IMS organizes proficiency test or intercomparison exercises once a year since 2000. IMS intends to organise annual proficiency test exercise (hereinafter referred to as "the Exercise"). Each Exercise is part of continuing performance evaluation of these laboratories within the scope of their CTBT-specific activities.

The Commission desires to engage a contractor (hereinafter referred to as "the Contractor") for the planning, preparation and distribution of samples to Exercise participating laboratories (hereinafter referred to as "Participants") for the Exercise and preparation of the Sample Preparation Report and as an option to the Commission, preparation of the Exercise Report in accordance with these Terms of Reference.

Since the Exercise is conducted once per year, the Contractor shall perform the work for the annual Exercise in 2023 and up to 2027 if so requested by the Commission under a Call-Off contract.

The Commission outlines here the Terms of Reference (ToR) that the Contractor shall use as a basis for the Provision of Sources for PTE and Provision of Other Related Services (hereinafter referred to as the "Services" and/or "Work").

These Terms of Reference define the technical framework of all related activities to be performed during the Services and contain all technical requirements for the activities which shall be carried out by the Contractor.

The Contractor shall provide the Services in accordance with the requirements of these ToR and in the most cost-effective manner possible.

For all Work tasks, the Contractor must inform the Commission of the appropriate and current points of contact, including contacts for: 1) technical matters, 2) logistics matters and 3) commercial matters. If these points of contact change during any phase of the Work Tasks, the Contractor must inform the Commission immediately in writing.

2. REQUIREMENTS OF THE COMMISSION

The Commission will conclude a standing Contract (hereinafter referred to as the "Call-Off Contract") with a Contractor for provision of Services with firm fixed prices for a period of 3 (three) years and optional 2 (two) year depending on the Contractor's performance, at its sole discretion. If required by the Commission, the Contractor shall provide Services under Optional Extension based on the same terms and conditions as those of the Call-off Contract.

The Contractor shall deliver Services during this timeframe. The Commission however does not guarantee the number of Services to be purchased under the Contract. The Contractor must be able to supply Services as and when requested by the Commission based on the unit prices quoted in the Contractor's proposal.

As and when the requirement for provision of Services arises, the Commission will contact the Contractor to provide these services. The Commission will issue Formal Request for Delivery (hereinafter referred to as the "FRD") in writing to order Services required under the Call-off Contract.

3. SCOPE OF WORK

On request by an FRD from the Commission, the Contractor shall execute an Exercise using one of the following six (6) sample geometries as specified in the FRD;

- A. Provision of sources with "MANUAL3M" full or split geometry
- B. Provision of sources with "Cinderella" full or half geometry
- C. Provision of sources with "RASA" full or half geometry

The Contractor shall be responsible for 4 tasks under each FRD: 1) planning the Exercise; 2) preparation of the Exercise samples; 3) distribution of the samples to nominated Participants; 4) preparation of Sample Preparation Report, at the option of 5) the Commission Exercise Report, and 6) Presentation at the CTBTO Workshop for Radionuclide Laboratories.

The below mentioned sections of the ToR describe these tasks, which shall be performed by the Contractor under each FRD, as follows.

3.1 Task 1 – Planning the Exercise

3.1.1. Initial Discussions

Within 2 (two) months of each FRD acknowledgement, the Contractor shall:

- a) Contact the Commission via email to establish the relevant points of contract for both parties and initiate planning discussions
- b) in cooperation with the Commission, formulate a schedule for the completion of all contracted tasks (except for the optional services), which shall not exceed the period of six month after issuance of the FRD
- c) in cooperation with the Commission, formulate the final radionuclide composition and activities of reference samples;

d) in cooperation with the Commission, formulate a method for spiking, compressing and packaging of samples;

3.1.2. Final Plan

Within 3 (three) months of each FRD acknowledgement, the Contractor shall submit via email a Final Plan for acceptance by the Commission that includes:

- (a) a schedule for the completion of contracted tasks 2, 3 and 4, which shall not exceed the period of six months;
- (b) radionuclide composition and activities of calibration and reference samples;
- (c) full contact and shipping details of all Participants.

The Commission will assess the technical suitability of the Final Plan and inform the Contractor of its assessment within 2 (two) weeks from receipt of the Plan. Upon approval of the Final Plan by the Commission, the Contractor shall carry out the remaining work tasks according to the approved schedule. In addition, the Contractor will also send to the Commission a description of its sample preparation method together with pictures, which the Commission will send to Participants for their information before the conduct of the Exercise.

Within 1 (one) month of Final Plan acceptance, the Commission will:

- a) inform the Contractor of the total number of Participants with their full contact and shipping details.
- b) deliver to the Contractor the necessary filter media for preparation of all samples and sample containers.

3.2 Task 2 – Preparation of the Exercise Samples

Each FRD will specify the sample geometry for each Exercise from among those described below.

3.2.1. General sample description - "MANUAL3M" full or split geometry -

CTBTO radionuclide stations which are not automatically operated but require an operator to perform the daily filter change, preparation, compression and counting, use a filter referred to as "MANUAL3M". MANUAL3M filter material is supplied in rectangular 46cm x 57cm sheets $(\pm 0.5 \text{ cm for each side})$. Typically, such stations use one filter sheet per sampling period (24) h) and expose the entire filter area aside from a 1.5cm wide strip around the filter perimeter (see Fig. 1). The filter sheet comprises of a filtration layer of polypropylene media (3M 5379 BMF, 20gm²) supported by one layer of "scrim" (Typar) underneath. The filtration layer and scrim are sealed together along the longer edges of the rectangular filter sheet. After sampling, the supporting scrim underneath the filtration media is removed and the filtration media is compressed to form a cylindrical sample of diameter 50mm and height of approximately 4.5mm. The resulting disc is then placed in a PVC container (Fig. 2a) and after allowing a decay period of ≤ 24 h, is placed on top of a high-purity Germanium (HPGe) gamma-ray spectrometer for a measurement period of ≥ 20 h. The spectrum is sent directly to the International Data Centre (IDC), where it is analyzed. Under certain conditions, stations are asked to split the compressed sample into two equal halves (Fig. 2b), and to send the split samples to two different laboratories.



Fig. 1. MANUAL3M filter: each filter has 1 filtration sheet and one support layer underneath (scrim).



Fig. 2a. Full MANUAL3M sample with scrim removed and compressed.



Fig. 2b. Split MANUAL3M sample.

The Contractor shall:

- a) prepare 2 types of MANUAL3M compressed either full or split samples as specified in the FRD, i.e. (1) calibration and (2) reference samples. The Commission will supply the Contractor with sufficient filter stock and sample containers in order for the Contractor to prepare these samples.
- b) for the split samples, cut a filter half, remove the scrim and the spike in each filter, then compress it into half-moon shape using half-moon shaped die and piston.
- c) have the equipment needed for the compression and splitting of the filter material to the required geometry.
- d) ensure that the activity distribution on the samples of calibration and reference is as homogenous as possible and confirm sample homogeneity by suitable tests before sample dispatch. The Contractor shall describe in the proposal how overall homogeneity is verified and its estimated upper limit of total uncertainty.
- e) seal each sample container to prevent leakage of spiked filter media under conditions typical during shipping and laboratory handling. All containers shall be sealed separately in plastic in a way that prevents radioactive contamination of the outside surface and further contamination of recipients' facilities by the outside surface. The Contractor shall verify that the surface is not contaminated and describe the prevention and verification methods in the proposal.

The Commission will prepare and send the blank samples to the Participants, using the same filter stock as that supplied to the Contractor.

3.2.2. General sample preparation - "Cinderella" full or split geometry -

The "Cinderella" sample geometry (CINDERELLA_77x8mm FULL) is a sample collected from IMS stations operating an automatic system referred to as Automatic Radionuclide Air Monitoring Equipment or ARAME.

Cinderella filter material which is Whatman GF10 glass fibre, is a rectangular sheet with dimensions of 458mm x 285mm (Fig.3a). At the station, the filter frame has a sampling mask, which directs the airflow through fifteen separate circular areas on the filter (Fig.3b).



Fig.3a. Cinderella uncut and unexposed filter Fig.3b. Uncut filter showing exposed areas.

The ARAME robot cuts the sample coming out of the sampling position by a sharp cutting edge into fifteen small filters (82 mm x 84 mm, uncertainty of ± 1 mm each side). Each small filter has a circular (diameter of 77 ± 1 mm) exposed area at the centre. The robot piles the 15 small filters one of top of each other into a stack and puts the stack into a plastic measurement container. (Fig. 4a). The final full sample then is a stack of 15 filters (82 mm x 84 mm), each filter with an exposed circular area having a diameter of 77 ± 1 mm (Fig. 2b). The Cinderella split sample is a stack of eight (8) small filters instead of 15 small filters.



Fig.4a. Filter cut into 15 small filters with dimensions of 82mm x 84mm) and placed in a plastic container



Figure 4b. Cinderella filter, view from top. Material is Whatman GF10 glass fibre. Oneday air sample has 15 sheets.

The Contractor shall:

- a) prepare 2 types of either full or split Cinderella samples as specified in the FRD, i.e. (1) calibration and (2) reference samples. The Commission will supply the Contractor with sufficient filter stock and sample containers in order for the Contractor to prepare these samples. Split Cinderella sample consists of seven or eight filters, which will be decided by the Commission.
- b) be responsible for all equipment and costs associated with preparations of the filter material to the required geometry.
- c) ensure that the activity distribution on the samples of calibration and reference is as homogenous as possible and confirm by tests by the Contractor before distribution of samples. The Contractor shall describe in the proposal how homogeneity is verified and its estimated upper limit of overall uncertainty.
- d) seal each sample container to prevent leakage of spiked filter media under conditions typical during shipping and laboratory handling. All containers shall be sealed separately in plastic in a way that prevents radioactive contamination of the outside surface and further contamination of recipients' facilities by the outside surface. The Contractor shall verify that the surface is not contaminated and describe the prevention and verification methods in the proposal.

3.2.3. General sample preparation - "RASA" full or split geometry -

The RASA type is a sample collected from IMS stations operating an automatic system referred to as the Radionuclide Aerosol Sampler/Analyzer (RASA).

The RASA filter type is 3M 5379 BMF20 (Polypropylene with scrim). The filter material comprises a layer of polypropylene filtration media sandwiched between two supporting layers ("scrim"), and is supplied in continuous rolls of width 12.5 cm. Each RASA sample from one typical RASA process cycle at a radionuclide station is formed from 6 simultaneously sampled 80cm long segments of filter material, where each segment is referred to as a filter. After sample collection, the 6 filters are stacked one on top of each other and then wrapped in mylar. The exposed/active area is 10.5cm x 40cm per filter for full-RASA and 10.5cm x 20cm for split-RASA. Therefore, the total exposed area per sample (6 filters) is 2,520cm² (see Figure 5a) for full-RASA and 1,260cm² (see Figure 5b) for split-RASA. Figure 6 shows how a full-RASA sample is usually split to two half-RASA samples at IMS monitoring stations.



Figure 5a. RASA filter, view from top. Each filter has 1 (one) filtration sheet and 2 (two) support layers (scrims), and 6 filters comprise one sample.



Figure 5b. split-RASA filter, view from top. Each filter has 1 (one) filtration sheet and 2 (two) support layers (scrims), and 6 filters comprise one sample.

The "split-RASA" is usually prepared by splitting a set of full-RASA filter into two at the stations.



Figure 6. Splitting of the full RASA sample at a station. A cutting tool is used.

The Contractor shall:

- a) prepare 2 types of either full or split RASA samples as specified in the FRD, i.e. (1) calibration and (2) reference samples prepared as 6 individual 50cm long filters for full-RASA and as 6 individual 25cm long filters for split-RASA. Each of the individual filters will be spiked in the exposed/active area with the nuclide mixture that is agreed between the Contractor and the Commission (See Figure 5B). The stack of 6 filters will then be wrapped in mylar/barcode film and sealed. The filters when placed inside the mylar/barcode film shall not be folded and shall be in alignment. The Commission will supply the Contractor to prepare these samples.
- b) compress maximum of 2 (two) calibration samples, reference samples, and blank samples each into a cylindrical disc using the participant-specific method to be provided to the Contractor, upon the request of the Commission. The Contractor shall take the measures to avoid any contamination on the blank samples. The compressed calibration sample and reference sample shall each be placed in a PVC container. The container shall be sealed.
- c) ensure that the activity distribution on each filter of the calibration and reference samples shall as homogeneous as possible and shall be confirmed by tests by the Contractor before sample dispatch. The Contractor shall describe in the proposal how homogeneity is verified and its estimated upper limit of overall uncertainty.
- d) seal each sample to prevent leakage of spiked filter media under conditions typical during shipping and laboratory handling. All samples shall be sealed separately in plastic in a way that prevents radioactive contamination of the outside surface and further contamination of recipients' facilities by the outside surface. The Contractor shall verify that the surface is not contaminated and describe the prevention and verification methods in the proposal.

The Commission will prepare and send the blank samples to the Participants except max. 2 (two) participants described in b) above, using the same filter stock as that supplied to the Contractor.

3.2.4. Calibration sample nuclide mixture and activities

The Contractor shall prepare three (3) calibration samples for distribution to the two (2) uncertified laboratories BRL04 and CNL06 and the Commission according to Participant location detailed in Table 3. The number of samples may be slightly changed every year depending on the status of certification and revalidation of laboratories, and the accurate number will be described in FRD.

In case other laboratories or other institutes identified by the Commission should want to order a calibration sample at their own expense, the Contractor shall provide them at the same unit cost as it charges the Commission and with the same delivery schedule as for the uncertified laboratories.

The mixture of radionuclides in the calibration sample shall be a set of nuclides suitable for the calibration of high-resolution HPGe-based gamma spectrometers covering the energy range from 46.5–1836 keV. When possible, the nuclides shall be single line emitters. A recommended mixture includes Pb-210, Am-241, Cd-109, Co-57, Ce-139, Sn-113, Sr-85, Cs-137, Mn-54, Y-88, Zn-65 and Co-60. Hg-203 and other elements prone to evaporation from the samples shall be avoided.

The activities of the radionuclides in the calibration spectrum shall be such that they provide a good calibration measurement in close geometry, i.e. sample directly on top of the detector, without unnecessary detector dead time, within a reasonable calibration measurement time. The recommended total activity is around 5 kBq. The individual nuclide activities should be such that they produce peaks of approximately similar areas in the calibration measurement at the time of the Exercise.

The Participants should be able to produce a good calibration over the energy range of 30-2700 keV on the basis of the calibration sample.

3.2.5. Reference sample nuclide mixture and activities

The Contractor shall prepare seventeen (17) reference samples and provide to the Commission the certified reference activity of each sample and other data according to Section 2.2.4. The seventeen (17) reference samples shall be shipped to the Participant location detailed in Table 3.

In case other institutes identified by the Commission want to order a reference sample at their own expense, the Contractor shall provide them with the calibration sample at the same unit cost as it charges the Commission and with the same delivery schedule as for the laboratories.

The reference samples shall include radionuclides from the list of CTBT-relevant fission and activation products, and other nuclides shown in Table 1 that the Commission chooses, with sufficient activities for detection by the labs at the time of sample arrival. The typical minimum MDAs in the past PTEs will be provided to the bidder upon request.

The Exercise nuclides shall be chosen with the following factors in mind:

- a) the number of major nuclides in the mixture should preferably be somewhere between 10 and 15;
- b) The total activity shall not exceed 5 kBq;
- c) nuclides activities shall be such that they are above detection limits (< than 5% statistical uncertainty);

- d) the half-lives of the nuclides shall be long enough for the decay not to present any problems within the timescale of the Exercise with the above low activity levels in mind;
- e) at least five nuclides with coincidence summing shall be proposed, in order that the Commission may test for true coincidence summing corrections to HPGe efficiency calibrations
- f) a parent/daughter nuclide to allow for determination of zero time shall be proposed; ⁹⁵Zr/⁹⁵Nb is preferred. The reference samples shall be delivered to the participants within such a time from the separation point that they can determine the separation time from the ⁹⁵Zr/⁹⁵Nb activity ratio.

For a given Exercise, the Commission will choose the method of production of the nuclide mix in the reference samples from the following: (i) mixture of single or mixed solutions of the nuclides of interest; (ii) neutron irradiation of ²³⁵U and/or ²³⁸U target, (iii) high-energy particle-induced fission of ²³⁵U and/or ²³⁸U target, (iv.) other method to be proposed by the Contractor. The Contractor shall specify all the method(s) that it is able to use and include the cost of each method in its proposal. The method(s) (ii) and (iiii) include dissolving the target material, chemical separation, and mix the additional nuclides such as activation produces and natural nuclides, as necessary.

An estimate shall be given for the total uncertainties of final activities in the reference sample and the contribution of all relevant uncertainty factors.

The distribution of activities in the reference samples must be as homogeneous as possible over the exposed area illustrated in Section 2.2. Verification method for homogeneity and estimation of its uncertainty shall be described in the proposal and agreed with the Commission.

		CTBT-relev	ant nuclides			
Fission Products				Activation Products		
Fission Product	Half-life	Primary γ Energy ^{a)} (keV)	Activation Product	Half-life	Primary γ Energy (keV)	
⁹¹ Sr	9.63 h	1024.3	²⁴ Na	14.96 h	1368.6	
⁹¹ Y	58.51 d	1204.8	⁴² K	12.36 h	1524.7	
⁹³ Y	10.18 h	266.9	⁴⁶ Sc	83.79 d	889.3	
⁹⁵ Zr	64.02 d	756.7	⁴⁷ Sc	3.349 d	159.4	
⁹⁵ Nb	34.98 d	765.8	⁵¹ Cr	27.70 d	320.1	
⁹⁷ Zr	16.91 h	743.4	⁵⁴ Mn	312.1 d	834.8	
⁹⁹ Mo	65.94 h	140.5 D	⁵⁷ Co	271.8 d	122.1	
^{99m} Tc	6.01 h	140.5	⁵⁸ Co	70.82 d	810.8	
¹⁰³ Ru	39.26 d	497.1	⁵⁹ Fe	44.50 d	1099.2	
¹⁰⁵ Rh	35.36 h	319.1	⁶⁰ Co	5.271 y	1332.5	
¹⁰⁶ Ru	373.59 d	621.9	⁶⁵ Zn	244.3 d	1115.5	
¹¹¹ Ag	7.45 d	342.1	^{69m} Zn	13.76 h	438.6	
112 Pd	21.03 h	617.5 D	⁷² Ga	14.1 h	834.1	
^{115m} Cd	44.6 d	933.8	⁷⁴ As	17.77 d	595.8	
¹¹⁵ Cd	53.46 h	336.2	⁷⁶ As	1.078 d	559.1	
¹²⁵ Sn	9.64 d	1067.1	⁸⁴ Rb	32.77 d	881.6	
¹²⁵ Sb	2.76 у	427.9	⁸⁶ Rb	18.63 d	1076.7	
¹²⁶ Sb	12.46 d	695.0	⁸⁸ Y	106.7 d	1836.1	
¹²⁷ Sb	3.85 d	685.7	⁸⁹ Zr	78.41 h	909.0	
¹²⁸ Sb	9.01 h	743.2	¹⁰² Rh	207 d	475.1	

33.6 d	695.9	^{106m} Ag	8.28 d	717.2
12.36 h	536.1	^{108m} Ag	418 y	722.9
30 h	773.7	^{110m} Ag	249.8 d	657.8
8.02 d	364.5	¹²⁰ Sb	5.76 d	1171.7
3.20 d	772.6 D	¹²² Sb	2.724 d	564.2
20.8 h	529.9	¹²⁴ Sb	60.20 d	602.7
6.57 h	1260.4	¹³² Cs	6.479 d	667.7
13.16 d	1048.1	¹³³ Ba	10.52 y	356.0
30.07 y	661.7 D	^{134}Cs	2.065 y	604.7
12.75 d	537.3	^{152m} Eu	9.312 h	841.6
1.678 d	1596.2	¹⁵² Eu	13.54 y	1408
32.50 d	145.4	¹⁶⁸ Tm	93.1 d	816.0
33.04 h	293.3		23.72 h	685.7
284.9 d	133.5		11.78 d	186.7
10.98 d	531.0	192 Ir	73.83 d	316.5
53.08 h	286.0	¹⁹⁶ Au	6.183 d	355.7
28.40 h	340.1	^{196m} Au	9.7 h	147.8
46.27 h	103.2	¹⁹⁸ Au	2.695 d	411.8
4.761 y	105.3		51.87 h	279.2
9.4 h	203.8		3.66 d	241.0
15.19 d	1153.7		6.75 d	208.0
15.18 h	370.5	²³⁹ Np	2.357 d	277.6
	Non-CTBT-rele	evant nuclide	s	
Half-life				
	(keV)			
53.22d	477.6	Natural		
2.60 y	1274.5	Natural	[
24.10 d	63.29	Natural	[
432.6 y	59.54	Activat	ion product	
	12.36 h 30 h 8.02 d 3.20 d 20.8 h 6.57 h 13.16 d 30.07 y 12.75 d 1.678 d 32.50 d 33.04 h 284.9 d 10.98 d 53.08 h 28.40 h 46.27 h 4.761 y 9.4 h 15.19 d 15.18 h Half-life 53.22d 2.60 y 24.10 d	12.36 h 536.1 30 h 773.7 8.02 d 364.5 3.20 d 772.6 D 20.8 h 529.9 6.57 h 1260.4 13.16 d 1048.1 30.07 y 661.7 D 12.75 d 537.3 1.678 d 1596.2 32.50 d 145.4 33.04 h 293.3 284.9 d 133.5 10.98 d 531.0 53.08 h 286.0 28.40 h 340.1 46.27 h 103.2 4.761 y 105.3 9.4 h 203.8 15.19 d 1153.7 15.18 h 370.5 Non-CTBT-rele Half-life Primary γ Energy (keV) 53.22d 477.6 2.60 y 1274.5 24.10 d 63.29	12.36 h 536.1 $10^{8m}Ag$ 30 h 773.7 $110^{m}Ag$ 8.02 d 364.5 120 Sb 3.20 d 772.6 D 122 Sb 20.8 h 529.9 124 Sb 6.57 h 1260.4 132 Cs 13.16 d 1048.1 133 Ba 30.07 y 661.7 D 134 Cs 12.75 d 537.3 $152m$ Eu 1.678 d 1596.2 152 Eu 32.50 d 145.4 16^8 Tm 33.04 h 293.3 18^7 W 284.9 d 133.5 190 Ir 10.98 d 531.0 19^2 Ir 53.08 h 286.0 196 Au 284.9 d 133.5 190 Ir 10.98 d 531.0 192 Ir 53.08 h 286.0 196 Au 28.40 h 340.1 $196m$ Au 46.27 h 103.2 198 Au 4.761 y 105.3 203 Pb 9.4 h 203.8 224 Ra ^b)	12.36 h536.1 ^{108m}Ag 418 y30 h773.7 ^{110m}Ag 249.8 d8.02 d364.5 ^{120}Sb 5.76 d3.20 d772.6 D ^{122}Sb 2.724 d20.8 h529.9 ^{124}Sb 60.20 d6.57 h1260.4 ^{132}Cs 6.479 d13.16 d1048.1 ^{133}Ba 10.52 y30.07 y661.7 D ^{134}Cs 2.065 y12.75 d537.3 ^{152m}Eu 9.312 h1.678 d1596.2 ^{152}Eu 13.54 y32.50 d145.4 ^{168}Tm 93.1 d33.04 h293.3 ^{187}W 23.72 h284.9 d133.5 ^{190}Ir 11.78 d10.98 d531.0 ^{192}Ir 73.83 d53.08 h286.0 ^{196}Au 6.183 d28.40 h340.1 ^{196m}Au 9.7 h46.27 h103.2 ^{198}Au 2.695 d4.761 y105.3 ^{203}Pb 51.87 h9.4 h203.8 $^{224}Ra^{b}$ 3.66 d15.19 d1153.7 ^{237}U 6.75 d15.18 h370.5 ^{239}Np 2.357 dNon-CTBT-relevant nuclidesHalf-lifePrimary γ Energy (keV)Remark (keV)53.22d477.6Natural2.60 y1274.5Natural2.410 d63.29Natural

^{a)} D denotes that the radionuclide is detected through the primary line of the short-lived daughter.

^{b) 224}Ra needs to be screened with respect to the 224 Ra/ 228 Ac ratio.

As a starting point for designing the reference sample activity levels, the measurement systems at the participating laboratories shall correspond to the following minimum requirements and conditions:

- (a) high resolution HPGe detector;
- (b) resolution at 1332.5 keV Co-60 line < 2.3 keV;
- (c) detector relative efficiency > 40%;
- (d) number of channels in the spectrum is at least 8192;
- (e) lead shield of >10cm, low background building materials, appropriate control of background radiation level;
- (f) MDA for Ba-140 is <24 mBq for a blank sample of compressed cylindrical geometry with dimensions of 70 ± 0.5 mm in diameter, 6 ± 0.5 mm in height and 0.7 ± 0.1 g/cm³ in density within a 7-day measurement.

While the MDA figure above is not directly applicable for the active reference sample, it should give some guidance for the range of activities required. The reference samples should contain one nuclide at an activity close to decision/detection limit detailed above. The Commission is able to provide limited feedback on such activity levels based on experience gained from previous exercises.

Maximum care shall be taken by the Contractor to prevent contamination of samples during preparation. The Commission reserves the right by way of penalty, not to pay the cost of any

sample that is proven to be accidentally contaminated and/or admitted by the Contractor to be accidentally contaminated by nuclides which are not declared on the reference sample certificate(s) submitted to the Commission

3.2.6. Certificates

For the certificates of calibration samples, the Contractor shall:

- a. provide the reference time in Universal Time Coordinated (UTC).
- b. provide calibration samples with a hardcopy certificate specifying activity values and uncertainties of each radionuclide. The certificate shall be sent together with the calibration sample, and an electronic copy sent to the Participant by e-mail.
- c. document the traceability of the activity values to international standards and include this information on the certificate.
- d. indicate the components of the uncertainty budget on the certificate.
- e. indicate any known contaminants or impurities on the certificate.
- f. provide an electronic copy of the certificate to the Commission by email.
- g. able to issue certificates for calibration and reference samples, compliant with international standard ISO17025

For reference samples, in as much as the exercise is based on Participant determination of an unknown reference sample, the Participants shall not be provided with reference sample certificates. For reference samples, the Contractor shall:

- a. provide the reference time in Universal Time Coordinated (UTC).
- b. provide the Commission with an electronic copy of reference sample certificates by email within two weeks from dispatch of the samples to the participating laboratories and a hard copy by post.

In case of delay of delivery of the reference certificates, the Commission would deduct 10% of unit price of the reference samples for each week of delay.

- c. document the traceability of the activity values to international standards and include this information on the certificate. It is acceptable to assay the reference samples by gamma ray spectrometry using detectors that have been directly calibrated with absolute standardized solutions, in order to provide traceability to primary standards.
- d. indicate the components of the uncertainty budget on the certificate.
- e. indicate any known contaminants or impurities on the certificate.
- f. indicate zero time if it is applicable
- g. in addition to the certificate of calibration prepared according to the established procedures of the Contractor, the same certificate shall also be provided to the Commission in <u>csv format</u> (comma-separated values) or text format (.txt) containing the data on radionuclide, its corresponding certified activity in Bq and combined standard uncertainty expressed in % (with k=1) at the activity reference date and calculated activity concentration in Bq/m³ and combined standard uncertainty expressed in % (with k=1) using the template to be provided by the Commission. The activity concentration shall be decay-corrected to the start of sample collection which will be provided to the Contractor.

The Contractor shall indicate the reference used for the nuclear decay data on the certificates for the reference and calibration samples. The use of Decay Data Evaluation Project (DDEP) http://www.nucleide.org/DDEP.htm is recommended. In case the nuclide is not included in DDEP, the use of Evaluated Nuclear Structure Data File (ENSDF) produced by Brookhaven for this nuclide is recommended.

3.3 Task 3 – Distribution of Samples

The Contractor shall distribute the samples according to Participant location and requirements detailed in Table 2. Shipment shall be via a door-to-door transport (courier) service in an efficient and secure manner, and the Contractor shall be responsible for a successful timely delivery to each Participant.

The Contractor shall deliver:

- a. reference samples to Participants and to the Commission according to Section 3 (Time schedule) of this ToR;
- b. calibration sample to the uncertified laboratories , laboratories under revalidation, other institutions identified by the Commission, and to the Commission <u>at least one month</u> <u>before</u> the delivery of reference samples;

The Contractor shall contact the Participants well in advance and acquire all necessary licences, permissions, end-user statements and other paperwork where necessary with a view to minimising shipment delays. In case the Contractor does not communicate well in advance to acquire the necessary information and the significant delay (more than two weeks) happens as this result, the Contractor may be required to provide another set of reference samples for all the Participants with no additional costs.

Participant Name	City	Country
ARL01	Buenos Aires	Argentina
AUL02	Melbourne	Australia
ATL03	Seibersdorf	Austria
BRL04	Rio de Janeiro	Brazil
CAL05	Ottawa	Canada
CNL06	Beijing	China
FIL07	Helsinki	Finland
FRL08	Bruyères le Châtel	France
ILL09	Yavne	Israel
ITL10	Rome	Italy
JPL11	Tokai	Japan
NZL12	Christchurch	New Zealand
RUL13	Moscow	Russian Federation
ZAL14	Pelindaba	South Africa
GBL15	Aldermaston	UK
USL16	Richland	USA
СТВТО	Vienna	Austria
(The Commission)		

Table 2. Location of CTBTO laboratories.

The Contractor shall be fully responsible for and comply with the international regulations for the safe transport of radionuclide material as appropriate with regard to the radionuclide content and activities of the samples and provide a dispatch notification to the recipients and to the Commission (by email) before shipping. If there are import or customs duties to be paid to certain destinations, due to the value of the samples or otherwise, the Contractor shall inform the Commission, and after Commission's approval (communication via email will be sufficient)

pay the duties and charge the Commission (providing documentation of the actual amounts paid) within the invoice for the contract.

To enable correct handling of the samples upon delivery to the Participants, the Contractor shall provide the necessary information for the recipients, such as the activity level of the samples and the classification of the package according to international regulations and standards on the safe transport of radioactive material. It is anticipated that a number of Participant institutions will require precise information on sample content before delivery. The Contractor shall therefore be prepared to coordinate supply of reference sample activity information to the Participant institution if required while ensuring that such information is not provided directly to the Participant.

The Contractor shall request from the Participant a confirmation of each delivery and keep a record of the delivery times. This record shall be provided to the Commission via email in the Sample Preparation Report.

3.4 Task 4 – Reports

3.4.1. Sample Preparation Report

Within 2 (two) weeks of each delivery of the calibration and reference samples, the Contractor shall provide via email a Sample Preparation Report (calibration or reference sample preparation reports) to the Commission that contains the following details:

- (a) shipment and delivery times of all samples
- (b) activity certificates for the reference samples and the calibration samples and for the reference samples, the .csv or .txt files based on the Commission's template and in accordance with Section 2.2.4
- (c) a description of preparation methods for the reference samples and the calibration samples including:
 - stock solution activity concentration data including uncertainties
 - dispensing, drying, folding, compression, and splitting (if applicable) methods
 - masses of delivered solution to each filter/sample including uncertainties
 - any checks performed for verification of activity delivery and distribution
 - checks to ensure non-contamination of reference samples
 - uncertainty budgets in the reference activities of the samples
 - homogeneity tests
 - packaging methods
 - delivery service(s)

The Contractor shall respond to any issues or questions raised by participants or the Commission on sample homogeneity, certified reference activity values or their combined standard uncertainty, or false positives.

The Commission will notify the Contractor about the acceptance of the Sample Preparation Report. The acceptance of the Sample Preparation Report is subject to completion of the Works in accordance with the Contract and to the satisfaction of the Commission.

3.4.2. Exercise report (Optional)

At the option of the Commission, the Commission will provide the Contractor with the data submitted by the Participants. The Contractor shall analyze and interpret each Participant's data according to the acceptance criteria to be provided by the Commission. As a minimum, the Contractor shall:

- analyze the data (activity and activity concentration) submitted by each Participant by applying the zeta test, % deviation, false negative, false positive and relative uncertainty ratio statistical methods and perform an outlier test for the uncertainties. The limits of these different tests and basis for over-all rating will be provided by the Commission to the Contractor.
- analyze the Participants' data on zero time; explain discrepant lab results
- respond to any issues or questions raised by participating laboratories or the Commission on sample homogeneity, certified reference activity values or their combined standard uncertainty, or false positives. Determine the frequency distribution of Participants' data
- interpret the data, including possible reasons for missed nuclides and false positives and possible sources of error for discrepant lab results
- analyze the uncertainty budgets of the Participants and compare with the Contractor's uncertainty budgets
- compare the results of the zeta test to those of the z-score, if applicable
- submit to the PTS a preliminary report containing an evaluation of each Participant's results against the reference values based on PTS acceptance criteria. The PTS will send this to each Participant for comments. The comments will be provided to the Contractor for appropriate action, before preparation of the final report.
- prepare a report on the analysis and interpretation of the data. This report will be used by the Commission in preparing its Technical Report and the Contractor shall allow the Commission to include parts or the entire report in its Technical Report. The Contractor shall not publish the results of the Exercise.

The Commission will notify the Contractor about the acceptance of the Exercise Report. The acceptance of the Exercise Report is subject to completion of the Works in accordance with the Contract and to the satisfaction of the Commission.

3.4.3. Workshop presentation (Optional)

The Commission has the option to request the Contractor to make a presentation on the preparation of the samples and data analysis and interpretation at the Radionuclide Laboratories Workshop to be organized by the Commission at a date after the Exercise. In the event that this option is exercised, the Commission shall notify the Contractor of the date and place of the Workshop.

4. TIME SCHEDULE

The Contractor shall commence Work upon entry into force of the Contract on the date of its last signature and receipt of the relevant FRD from the Commission. The Contractor shall ensure that Work is performed and completed in accordance with the timelines as set out in the below table 3 under each FRD.

Table 3 presents a summary of the planned timeline of each Exercise. The third column in the table presents the timeline based on that starting date.

Task	Description	Timeline required under
		each FRD
1	Email discussion and agreement on the Final Plan	2 months
1	Final Plan by the Contractor	1 month
2	Preparation of the reference and calibration samples can	
	begin	
2, 3	Preparation of the calibration samples and delivery to the	1 month
	laboratories	
	Calibration sample preparation report sent to the Commission	
2	Preparation of the reference samples complete	1 month
3	Delivery of the reference samples to Participants	2 weeks
4	Draft Sample preparation report for the reference samples	2 weeks
	including the certificates sent to the Commission	
4	Draft Preliminary Exercise Report sent to the Commission, at	Within 1 month from
	the option of the Commission	receipt of Participants'
		data
4	Final Exercise Report sent to the Commission and	Within 15 days from
	Participants, at the option of the Commission	approval of all required
		changes to the draft from
		the Commission

Table 3. Timeline of the Exercise for 2023

5. COMMUNICATION DURING THE EXERCISE

If feasible, the Contractor shall set up an email address dedicated for communication with the Commission during the Exercise and inform the Commission of this email address within the final plan stage. The Commission will act as a co-ordinator between the Contractor and the Participants. Whenever messages are sent directly between the Contractor and the Participants, they shall be copied to the Commission. The Contractor shall inform the Commission by email of any problems during the Exercise and answer promptly to any questions the Commission may have (e.g. about the status and progress). The Contractor shall not disclose any information to Participants nor make public any information that could give any of the Participants advantage over the others for reporting their results. If there are questions from Participants about the Exercise sent directly to the Contractor, they shall be forwarded to the Commission. The Commission and the Contractor will agree how to answer the questions, and in general cases an update email will be sent to all Participants.

6. QUALIFICATIONS OF THE CONTRACTOR

The contractor shall have appropriate national accreditation such as ISO9001, ISO17043 or ISO 17025. The Contractor shall have at least 5 years relevant experience in the preparation and delivery of reference samples for the purpose of testing analysis capabilities by high-resolution gamma spectrometry. The Contractor shall also demonstrate that they are familiar with methods and performance statistics applied in the evaluation of PTE results.

7. ACCEPTANCE OF THE DELIVERABLES

Under each FRD, the Contractor shall submit the below mentioned Reports as follows:

1) Final Plan by the Contractor

2) Sample Preparation Report including the certificates of reference samples

3) Final Exercise Report (optional) set to the Commission, at the option of the Commission

The above-mentioned Reports as well as any plans or any other documentation shall be submitted in English and reports shall be submitted in hard copy and electronic version. The Commission has to review and accept these reports in written form in order to consider Work completed **under each FRD**. In the event that the Commission is not satisfied with the submitted reports, it can instruct the Contractor to carry out remedial action pursuant to the latter's commitment under this Contract. The Contractor shall remedy the defects and re-submit the revised Reports within two weeks.