

REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2017-0203/STOMOV
(PLEASE QUOTE ON ALL COMMUNICATIONS)

Attn:

Phone:
Fax:
Email:

Tel. No.: +43 (1) 26030-6350
Fax No.: +43 (1) 26030 5948
E-mail: procurement@ctbto.org

Date: 26 Sep 17

[Handwritten initials]
[Handwritten initials]

Subject: INDEPENDENT EXPERT SUPPORT FOR THE DEVELOPMENT OF REQUIREMENTS FOR A
MODULAR DESIGN HYDROPHONE MOORING PROTOTYPE

Deadline for Submission: 25 Oct 17

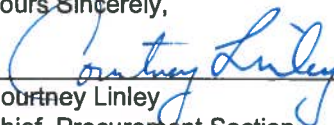
Vienna Local Time: 17:00

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 fax or email as soon as possible.

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

Yours Sincerely,



Courtney Linley
Chief, Procurement Section

ACKNOWLEDGEMENT FORM

Solicitation No: 2017-0203 Title: INDEPENDENT EXPERT SUPPORT FOR THE DEVELOPMENT OF REQUIREMENTS FOR A MODULAR DESIGN HYDROPHONE MOORING PROTOTYPE	Closing Date: 25 Oct 17 Vienna Local Time: 17:00
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Procurement Staff: Alexandre Stomov

CTBTO Req. No.: 0010009523

 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 telefax
 +43-1-26030-5948

A: We shall submit our proposal	
By: _____ (date)	Company Name: _____ Contact Name: _____ Email/Tel: _____

B: We may submit and will advise	
By: _____ (date)	Company Name: _____ Contact Name: _____ Email/Tel: _____

C: We will not submit a proposal for the following reason(s)	
<input type="checkbox"/> our current workload does not permit us to take on additional work at this time; <input type="checkbox"/> we do not have the required expertise for this specific project; <input type="checkbox"/> insufficient time to prepare a proper submission; <input type="checkbox"/> we consider the funds are insufficient to carry out the work required; <input type="checkbox"/> other (please specify) _____	
	Company Name: _____ Contact Name: _____ Email/Tel: _____

INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PROPOSALS

1. General

This Request for Proposal (RFP) is for the provision Independent Expert Support for the Development of Requirements for a Modular Design Hydrophone Mooring Prototype as described in the Terms of Reference (hereinafter referred to as the “Services” and/or the “Work”).

The Proposal shall meet all requirements stated in the Terms of Reference. For this project, the Commission is seeking capabilities, which will ensure that the Services are provided 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,
 - o Including Addendum No. 1;
- (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;
 - o The Commission’s General Conditions of Contract (Annex A);
 - o The Commission’s 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

- (a) 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.
- (b) The Proposal shall be submitted 1 (one) original and 2 (two) copies, each clearly marked as an “Original Proposal” or “Copy of Proposal.” In the event of any discrepancy between the documents, the original shall prevail.
- (c) The Proposal shall be clearly marked as follows:

NAME OF PROJECT: Independent Expert Support for the Development of Requirements for a Modular Design Hydrophone Mooring Prototype
CLOSING DATE: 25 October 2017
CTBTO REF. NO.: 2017-0203/STOMOV
“DO NOT OPEN BEFORE THE CLOSING DATE”

6. Mailing Address and Closing Date

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

Chief, Procurement Section
Room E0524
CTBTO, Vienna International Centre
Wagramerstrasse 5 - A-1400 Vienna
AUSTRIA
E-mail: procurement@ctbto.org

- (b) The Proposal shall be received by the above-mentioned addressee not later than the closing date indicated in the Letter of Invitation. Alternatively, the Proposal can be submitted electronically in PDF format at procurement@ctbto.org, provided it is duly signed by an official legally authorized to enter into contracts on behalf of your organization.

7. Request for Clarifications and Contacting the Commission

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

E-mail: procurement@ctbto.org
Subject: Request for Clarifications re RFP No. 2017-0203/STOMOV

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

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

8. Eligible Goods and Services

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

9. Type of Contract and Payment

The Commission intends to conclude a firm fixed price based on the attached Model Contract. The terms and conditions of payment for services are described in Clause 12 of the attached Model Contract. A progress payment schedule based on the provision of Work Tasks may be included in the proposal.

The terms and conditions of the payment are as follow:

Within 30 days of receipt and acceptance of the Services and of the following documents:

- (1) Invoice(s) showing price of the Services provided. The Contractor shall submit an invoice in 1 (one) original and 2 (two) copies or 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 in the Contract. 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 and actual pre-paid transportation & insurance cost (if applicable);
- (2) Acknowledgement Copy of the Contract with Supplier's signature;
- (3) The Supplier's certificate, counter-signed by the Consignee/end-user, confirming the successful completion of the services; and
- (4) Any other relevant documents.

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

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

10. Preparation of the Proposal

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

The Proposal shall be composed of the following separate parts:

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

providing, but not limited to, the following information:

PART I: TECHNICAL PROPOSAL

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

Personnel

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

Statement of Confirmation

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

Description of Services

An explanation of the bidder's understanding of the services to be provided and an overall preliminary operational plan for the execution of the services.

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

Specifications

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

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

Commission's Inputs

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

Time Schedule

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

Qualifications

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

Personnel

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

Sub-Contractors

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

Model Contract

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

Delivery Schedule

Delivery time shall be indicated in accordance with requirements detailed in the Terms of Reference, Annex B, and shall be firm during the validity of the Proposal.

PART II: FINANCIAL PROPOSAL

In the financial Proposal, you are required to define the following:

- (i) The Total Contract Price in EURO (for EU Companies) or US Dollars, exclusive of taxes.
- (ii) A breakdown of the Contract Price, indicating the price for the following items:
 - (1) The sub-total cost of each category mentioned in the Terms of Reference (TOR);
 - (2) Costs agreed with sub-contractors (if any);
 - (3) Overheads (if any);
 - (4) Any other direct costs (insurance, communications, licenses etc. if not already included elsewhere).
- (iii) In presenting the cost for each item, adequate justification and calculation must be included in the cost Proposal. All individual costs shall be stated in EURO or US Dollars and be computed to constitute the total Contract Price.
- (iv) In principle the Commission is exempt from taxes. Since the arrangement under which such exemption is respected varies from country-to-country, the selected bidder will be informed by the Commission whether tax exemption will occur at source or whether taxes paid by the selected bidder will be reimbursed by the Commission upon submission of the original supporting documentation.

(1) For Austrian companies

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

(2) For European Union (EU) Companies

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

(3) For Non-EU Companies

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

to the tax exemption at source applicable to the Commission, no Taxes shall be charged to the Commission under the Contract.

- (v) 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.

11. Completeness and Correctness of the Proposal

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

12. Validity of Proposal

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

13. Correction of Errors

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

14. Evaluation of Proposal

- (a) The technical evaluation shall include the following evaluation criteria:
 - (i) compliance of the equipment with the Terms of Reference;
 - (ii) Contractor's experience and qualifications;
 - (iii) Completion schedule.
- (b) Subject to the conformance of the Technical Proposal to the Terms of Reference, the Financial Proposal shall be evaluated as follows:
 - (i) contractual compliance;
 - (ii) commercial acceptability.
- (c) The Commission, based on the evaluation method given above, will determine the Proposal, which is the "most effectively satisfies the technical and operational requirements".

15. Negotiations of the Proposal

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

16. Modification and Withdrawal of Proposal

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

17. The Commission’s Right to Reject the Proposal

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

18. Costs of preparation and submission of the Proposal

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

19. Proprietary Information

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

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

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

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

BIDDER'S STATEMENT
PLEASE STATE BELOW & SUBMIT WITH PROPOSAL

Delivery Time:

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

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

For one year period For a period of

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

For a two year period For a period of

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

State country of origin or assembly of all items quoted:

Quantity discount and early payment discount (if any):

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

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

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

Yes **No**

Remarks:

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

Yes **No** **Not applicable**

Remarks:

Name:

Name & Title of Contact Person:

Signature & date:

ADDENDUM NO. 1

Independent Expert Support for the Development of Requirements for a Modular Design Hydrophone Mooring Prototype

1. Overview

This document describes the evaluation criteria of the bidder's technical proposal (hereinafter referred to as the "Bidder's Technical Proposal"). The technical evaluation of the bidder's technical proposals (hereinafter referred to as the "Bidder's Technical proposals") is based on an assessment of compliance with all requirements in the Terms of Reference (hereinafter referred to as the "Terms of Reference", abbreviated ToR), and with the requirements for the technical proposal as set out in the Instructions to Bidders. The technical evaluation criteria and scoring sheet presented in Section 2 will be used by the Technical Evaluation Team during the technical evaluation.

The Technical Evaluation Team shall conduct the technical evaluation and prepare a written report thereof, describing the relative weight of the competing Bidder's Technical proposals and ranking the Bidders Technical proposals from best to worst in order to establish a competitive range of most responsive Bids.

2. Evaluation of Compliance with the requirements

Bidders shall comply with all requirements of the ToR, and with the requirements for the technical proposal as set out in the Instructions to Bidders. Non-compliance with at least one (1) of the requirements causes the Bidder's technical disqualification.

A separate technical value will be assigned for each requirement based on the following scale from 0 – 10 points, where 0 denotes the lowest degree of non-compliance and 10 the highest degree of compliance:

- 10: Compliant –Outstanding
- 8-10: Compliant – Very Good
- 7: Compliant –Good
- 6: Compliant –Satisfactory
- 4-5: Compliant - Minimal Requirement met
- 3: Non-Compliant – Minimal Requirement only partially met
- 2: Non-Compliant – Major Deficiencies
- 1: Non-Compliant – Critical Deficiencies
- 0: Non-Compliant – Unsuitable

The technical score in the range 0 – 10 for each entry in the technical scoring sheet presented below will be multiplied by a pre-determined fixed weight. This provides the weighted score for each requirement.

The final combined technical and financial ranking of Proposals will be obtained by combining the technical evaluation with a weight of 70% and the commercial price with a weight of 30%.

ADDENDUM NO. 1

Independent Expert Support for the Development of Requirements for a Modular Design Hydrophone Mooring Prototype

SCORING SHEET

Technical Evaluation	Max Points	Fixed Weight	Max Score
Qualifications of the Bidder: Experience in the development, installation and operation of Ocean Observatory sensor packages and in the development of Ocean Acoustic Instrumentation. The experience must be demonstrated by reference to specific projects in these areas in which the bidder was involved, with a short description of each project that is referenced and a description of the bidder's involvement.	10	10	100
Qualifications of the Bidder: Demonstrable experience in deep sea cabled ocean equipment/technology, underwater acoustic system design and modular designs using wet/dry mate-able connectors. Practical experience with the actual specification, development, manufacture and deployment of such systems in deep water, ideally in harsh and remote environments. The experience must be demonstrated by reference to specific projects in these areas in which the bidder was involved, with a short description of each project that is referenced and a description of the bidder's involvement.	10	10	100
Addressing Work-Package 1: down-selection of Modular Design Options to identify possible future HA Modular Hydrophone Triplet Designs (Section 2.1 of the TOR)	10	10	100
Addressing Work-Package 2: writing of the technical requirements for the first HA Modular Hydrophone Mooring Prototype (Section 2.2 of the TOR)	10	10	100
Addressing Work-Package 3: suggest viable Prototype test-bed(s) (Section 2.3 of the TOR)	10	8	80
Ability to deliver on-time, to attend the meetings, perform the related tasks and produce the required reports as specified in Section 3 of the TOR.	10	8	80
Viable Timetable conforming to Section 5 of the TOR and statement to the effect that the bidder will allocate sufficient resources to start and finish the project on-time	10	6	60

MODEL CONTRACT NO. 2017-XXXX

between

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

and

(NAME OF THE CONTRACTOR)

for

the provision of services pertaining to

**INDEPENDENT EXPERT SUPPORT FOR THE DEVELOPMENT OF
REQUIREMENTS FOR A MODULAR DESIGN HYDROPHONE
MOORING PROTOTYPE**

This Contract comprises this cover page, 11 (eleven) pages of text, including a table of contents and a signature page, and 3 (three) Annexes (A to C)

November 2017

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ANNEX A - The Commission's General Conditions of Contract;	
ANNEX B - The Commission's Terms of Reference;	
ANNEX C - The Contractor's Proposal shall be included (if applicable).	

CONTRACT NO. 2017-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 _____ (hereinafter referred to as the “Contractor”), having its registered office located at _____ [address] (both hereinafter referred to as the ‘Party/ies’).

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 dated

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

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

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

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

“**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.

2. AIM OF THE CONTRACT

The aim of this Contract is to provide services, namely, Independent Expert Support for the Development of Requirements for a Modular Design Hydrophone Mooring Prototype (hereinafter referred to as the “Services” or “Work”), for the Commission.

3. ENTRY INTO FORCE AND DURATION OF THE CONTRACT

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

4. COMMENCEMENT AND COMPLETION OF THE SERVICES

The Contractor shall commence the Services on the Effective Date. The Services shall be completed not later than end of November 2018.

5. STANDARD OF WORK

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

6. RESPONSIBILITIES OF THE CONTRACTOR

- (a) The Contractor shall provide the Services described in Annex B and C.
- (b) The Contractor shall provide qualified English-speaking personnel as necessary to perform the Services under this Contract. The key persons shall be available for possible tasks related

to the Services throughout the duration of the Contract period. Any replacement of the key personnel shall be made in accordance with Clause 7 of Annex A.

7. WARRANTY

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

8. PERMITS, NOTICES, LAWS AND ORDINANCES

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.

The Contractor shall give all notices required by the nature of the Work.

If the Contractor notices that the Work or any part thereof required under this Contract is not in accordance with applicable laws and Rules, or with technical or safety standards, it shall promptly notify the Commission thereof in writing.

9. PROTECTION OF PERSONS AND PROPERTY

- (a) The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programmes in connection with the Work.
- (b) The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury and loss to:
 - (i) all employees on the Commission's premises and all other persons who may be affected thereby;
 - (ii) all the Work, Equipment, its spare parts, materials and supplies to be incorporated therein, whether in storage on or off the Commission's premises, which are under the care, custody or control of the Contractor or any of its subcontractors; and
 - (iii) other property on the Commission's premises or adjacent thereto.

- (c) The Contractor shall give all notices and comply with all applicable laws and Rules bearing on the safety of persons and property and/or their protection from damage, injury and loss.
- (d) The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for the safety and protection of persons and property, including posting danger signs and other warnings against hazards and promulgating safety regulations.
- (e) When the use or storage of combustible, explosive or other hazardous materials is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- (f) The Contractor shall be responsible for the prevention of accidents on the Commission's premises during the execution of the Work.
- (g) In any emergency affecting the safety of persons or property, the Contractor shall promptly act to prevent threatened damage, injury and loss.
- (h) The Contractor shall promptly remedy all damage and loss to any property, referred to in Sub-Clause (b) above, caused in whole or in part by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Sub-Clause (b) above, except damage and loss attributable to the acts or omissions of the Commission or anyone directly or indirectly employed by it, or of anyone for whose acts the Commission may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Clause 9 of Annex A.

10. RESPONSIBILITIES OF THE COMMISSION

The Commission shall designate members of its staff to act as points of contact for the Contractor to ensure that the Services are carried out in accordance with Annexes B and C, and shall promptly

notify the Contractor thereof. The Commission shall respond promptly to requests for information by the Contractor regarding the Services.

11. CONTRACT PRICE

- (a) The Commission shall pay to the Contractor, in consideration of the full and proper performance of its obligations under the Contract, a firm fixed price of [EURO/US\$] _____ [in numbers and words], hereinafter referred to as the “Contract Price”.
- (b) The Contract Price shall cover all costs and expenses, excluding Taxes, incurred by the Contractor for the full and proper performance of all obligations under the Contract (including travel, allowances, management and remuneration of the personnel, national income tax, medical insurance, and social security contributions). It also includes work performed by the Contractor’s personnel outside the Commission’s normal working hours.
- (c) The Contract Price shall be firm and fixed and shall not be subject to escalation. The Contractor shall not do any work, provide any materials or equipment, or perform any services which may result in any charges to the Commission over and above the Contract Price without the prior written consent of the Commission and a formal written amendment to this Contract.
- (d) Taxes is/are applicable under this Contract. The Contractor shall be reimbursed by the Commission for such taxes on the basis of actual amounts paid and duly documented by the Contractor as per Clause 12(e).

OR

No Taxes are applicable under this Contract.

12. PAYMENT

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

- (b) The Commission shall make the payments to the Contractor on the basis of an invoice submitted by the Contractor as per 12(d) below. All payments shall be made within 30 (thirty) days of the receipt and acceptance of the invoice, provided that the Work has been satisfactorily completed and has been accepted by the Commission.
- (c) The making of any payment hereunder by the Commission shall not be construed as an unconditional acceptance by the Commission of the Work accomplished by the Contractor up to the time of such payment.
- (d) The Contractor shall submit an invoice in 1 (one) original and 2 (two) copies or electronically, from the Contractor's official e-mail address in PDF format, duly signed and sealed by the Contractor and submitted to the Commission's email address specified in Clause 21 below. Each invoice shall contain the Contract number (CTBTO and SAP numbers), detailed banking instructions, including the name and address of the Contractor's bank, account number, account holder's name and SWIFT, IBAN and/or ABA codes for payment by electronic transfer.
- (e) Applicable Taxes payable by the Contractor and/or its subcontractor(s) in respect of the Work shall be invoiced separately or be separately identified on the invoice. Actual payment of the Taxes must primarily be supported by original documentation such as bank account statements, transfer orders, or receipts issued by the local tax or customs authorities. If submission of such original documentation is not possible for justifiable reasons, their copies could be accepted by the Commission provided that they are duly signed and certified by local tax or customs authorities. In case the currency in which the Taxes are levied is not the currency of the Contract, bank statements (or equivalent) showing the exchange rate used for the conversion should be submitted to the Commission, in addition to any other supporting documentation.

13. TEMPORARY SUSPENSION OF WORK

The Commission may, at any time, temporarily suspend the Work, in whole or in part, being performed by the Contractor under this Contract by giving 30 (thirty) days' advance notice in writing to the Contractor. The Work so suspended shall be resumed by the Contractor on the basis

of a revised time schedule and on terms and conditions to be mutually agreed upon between the Parties.

14. DELAYS AND EXTENSION OF TIME

- (a) If the Contractor is delayed at any time in the progress of the Work by any act or omission of the Commission or by any of its employees, or by any other contractor employed by the Commission, or by changes in the Work ordered by the Commission, or by any causes beyond the Contractor's reasonable control, or by any other cause which the Commission determines may justify the delay, then the time for completion of the Work shall be extended by an amendment to this Contract in accordance with Clause 20 below for such reasonable time as the Commission may determine.
- (b) Any request for extension of the time for reasons referred to in Clause 14(a) above shall be submitted to the Commission not later than 20 (twenty) days after the commencement of the delay, otherwise said request shall be deemed to be waived. Such request shall state grounds for the delay and shall provide an estimate of the probable effect of such delay on the progress of the Work.

15. CONTRACTOR'S CLAIMS AND REMEDIES

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

16. ENTIRE AGREEMENT

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

17. DISCREPANCIES

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

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

18. SEVERABILITY

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

19. NO WAIVER

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

20. CONTRACT AMENDMENT

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

21. TRANSMISSION OF NOTICES AND OTHER DOCUMENTS

Notices, invoices, reports and other documentation under the Contract shall be delivered or sent to the relevant Party as follows (or to such person/title, address, facsimile number or email address as

the Party may substitute by notice after the date of the Contract):

(a) The Commission:

For Contractual Issues:

*Chief, Procurement 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
Fax: + (43 1) 26030 5948
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: Payments@ctbto.org*

(b) The Contractor:

22. EFFECTIVENESS

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

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

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

Ms. Courtney Linley, Chief, Procurement Section, Division of Administration

Date: _____

Place: _____

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

[Name, Position/Title]

Date: _____

Place: _____

ANNEX A

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 customs and conform to a high standard of moral and ethical conduct.

7. ASSIGNMENT OF PERSONNEL

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

8. CONFLICT OF INTEREST

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

9. INSURANCES

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

10. ENCUMBRANCES/LIENS

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

11. OBSERVANCE OF THE LAW

- (a) The Contractor shall comply with all laws, ordinances, rules and regulations, including but not limited to health, environmental and labour laws bearing upon the performance of its obligations under the terms of the Contract.
- (b) In particular, the Contractor shall comply with the labour laws of the country in which the Services or Goods are to be furnished providing for benefits covering injury or death in the course of employment.

12. CONFIDENTIALITY

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

13. LANGUAGES, WEIGHTS AND MEASURES

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

14. PUBLICITY

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

15. OFFICIAL NOT TO BENEFIT/CONTINGENT FEES

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

16. INTELLECTUAL PROPERTY AND OTHER PROPRIETARY RIGHTS

- (a) Except to the extent the Contractor has granted a license to the Commission, the Commission, shall be entitled to all intellectual property, including but not limited to copyrights, patents and trademarks, with regard to products, documents or other materials which bear a direct relation to or are produced or collected under the Contract. The Contractor shall take all necessary steps, prepare and process all necessary documents and assist in securing such property rights and transferring them to the Commission and/or to the government where the Services or Goods are to be provided, in compliance with the requirements of the applicable law.
- (b) The Contractor declares that it does not know of any intellectual property rights of third parties, which might be infringed in the execution of the Contract. Should, contrary to the Contractor's expectation, claims be raised against the Commission charging it with infringement of intellectual property rights, the Contractor shall hold harmless the Commission and shall indemnify it to the full extent of any damages or awards arising from such claims. This obligation of the Contractor shall continue to be in full force and effect up to the expiration of such intellectual property rights.
- (c) The Commission shall give the Contractor due notice in writing of any charges of infringement brought against the Commission and of the filing of any suit for infringement of intellectual property rights of third parties due to the execution of the Contract, and, without prejudice to the immunity enjoyed by the Commission as an international organization from every form of legal process, including enforcement and execution, the Commission shall give the Contractor the opportunity to defend the Commission against the said suit at its discretion and shall not,

without the Contractor's consent in writing, make any admission or consent to any claim of any third party, which might be prejudicial to the Contractor's position.

17. DEFAULT BY THE CONTRACTOR

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

18. WITHHOLDING OF PAYMENT

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

19. LIQUIDATED DAMAGES

Subject to Clause 20 below (force majeure), if the Contractor fails to deliver any or all of the Services and/or Goods within the latest time period(s) specified in the Contract, the Commission may, without prejudice to its other remedies under the Contract, deduct from the Contract Price as liquidated damages, a sum equivalent to 0.2 per cent of the portion of the Contract Price for the delayed Services and/or Goods for each working day of

delay until actual performance, up to a maximum of sixty (60) working days. The recovery by the Commission of proven damages shall not be excluded.

20. FORCE MAJEURE

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

21. INSOLVENCY AND BANKRUPTCY

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

22. INDEMNIFICATION

The Contractor shall indemnify, hold and save harmless and defend at its own expense the Commission, its officers, agents, servants and employees from and against all suits, claims, demands and liability of any nature or kind, including cost and expenses arising out of acts or omissions

of the Contractor or its employees or subcontractors in the performance of the Contract. This requirement shall extend, inter alia, to claims or liabilities in the nature of workers' compensation and to claims or liabilities pertaining to intellectual property rights. The obligations under this clause do not lapse upon termination of the Contract.

23. AMICABLE SETTLEMENT

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

24. ARBITRATION

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

25. PRIVILEGES AND IMMUNITIES

Nothing in or relating to the Contract shall be deemed a waiver 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, the following clauses 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 transshipment shall be made unless specifically agreed by the Commission in writing.
- (e) Each case/crate/package shall carry a consecutive number, dimensions, volume, and weight (i.e. Case No. X of Y cases, A x B x C cm, E m3, D Kg.) and shall be marked as follows:

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

PURCHASE NO. _____
GROSS 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.

1 April 2016

ANNEX B TERMS OF REFERENCE

INDEPENDENT EXPERT SUPPORT FOR THE DEVELOPMENT OF REQUIREMENTS FOR A MODULAR DESIGN HYDROPHONE MOORING PROTOTYPE

1 BACKGROUND AND PURPOSE OF THE PROJECT

The Comprehensive Nuclear-Test-Ban Treaty (the Treaty) provides for a global verification regime to ensure that no nuclear explosion goes undetected. To this aim, the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organisation (the Commission) has been established with a mandate of building up the verification regime in preparation for the Treaty's entry into force as well as promoting the Treaty's universality.

The International Monitoring System (IMS) is the verification regime component which will, when complete, consist of 337 facilities worldwide to monitor signs of nuclear explosions using seismic, hydroacoustic, infrasound and radionuclide technologies. Pursuant to Annex 1 to the Protocol of the Treaty, 11 hydroacoustic stations shall be established, of which 6 are hydrophone stations (the remaining ones are T-phase stations equipped with land-based seismometers). Hydrophone station HA04 Crozet was certified in June 2017, after successful installation in December 2016. This event marked the completion of the hydroacoustic component of the IMS.

The IMS hydrophone stations provide long range detection, localization and identification capability for man-made explosive events, both below and above the ocean surface. They are installed in deep water at remote and environmentally challenging locations. The first IMS hydrophone station started contributing data to the Commission in 2000. The design lifetime of all hydroacoustic stations is at least 20 years, therefore the early installations will soon reach their design life mark. Although this does not mean that they will stop functioning past the 20 year mark, common sense and good engineering practices dictate that timely sustainability provisions be investigated for the network.

The Underwater System (UWS) of the current IMS hydrophone stations uses a continuous linear design which includes three hydrophone moorings for each triplet. Hydrophones in each triplet are in a triangular configuration, and are separated by a horizontal distance of 2 km and floated as close as possible to the axis of the SOFAR channel. Hydrophones may be deployed up to about 200 km from the shore station. Fiber-optic repeaters are not used. All hydrophone stations are equipped with two triplets, one on each side of the island to avoid shadowing by the island itself, except for HA01 Cape Leeuwin (Australia), which has only one triplet to the West of the coast.

Repair options for the current IMS hydrophone station hydrophone triplets are very limited. In most cases, the failure in one of the hydrophone channels in the triplet requires

replacement of the entire triplet, due to the lack of modularity in the current linear design of the hydrophone stations.

In 2016, the Commission conducted an independent expert Desktop Study on Improving Sustainability, Maintainability and Data Availability of CTBTO Hydrophone Hydroacoustic Stations. The objectives of the 2016 study were to:

- improve sustainability by reducing the impact of events that may negatively affect data availability,
- facilitate reparability through modular designs,
- develop options for non-interfering instrumentation able to improve the scientific value of the International Monitoring System's (IMS) hydroacoustic data and
- investigate stand-alone, sensor equipped components able to either operate autonomously or to be linked to an existing platform.

The overriding requirements for all proposed concepts were the minimum 20-year UWS design life and the fulfilment of all other CTBT operational manual specifications (see Attachment I part 1). The 2016 study was limited to the sensor end (triplet) of the UWS. A number of viable modular design options emerged from this study, each with its specific trade-offs *vis-à-vis* technical/operational complexity and related risks.

The present Terms of Reference address the successive step towards the development of a Modular Design HA Hydrophone Mooring Prototype, in which the Commission seeks Independent Expert advice and support in the following areas:

1. Writing of the Technical Requirements for a Terms of Reference for the Procurement of the first HA Modular Hydrophone single Mooring Prototype.
2. Investigation and suggestion of viable Prototype test-bed(s).
3. Down-selection and refinement of Modular Design options from the 2016 study to identify the possible future HA Modular Hydrophone Triplet Designs.

The above points 1 – 3 constitute the Work Packages (WPs) of this project. For this project, the Commission requires the services of a qualified vendor (hereinafter referred to as the “Contractor”) to deliver the services described herein.

2 DEFINITION OF WORK PACKAGE TASKS

Work-packages 1 – 3 described above consist of the following tasks.

2.1 Work Package 1: Down-selection and refinement of Modular Design options from the 2016 study to identify the possible future HA Modular Hydrophone Triplet Designs

- (i) Review of recent IMS HA hydrophone station Terms of Reference (TOR) and any other relevant documentation. Such information will be provided to the Contractor at the beginning of the project.
- (ii) Review of the 2016 Desktop Study on Improving Sustainability, Maintainability and Data Availability of CTBTO Hydrophone Hydroacoustic Stations.
- (iii) Review of a 2017 Desktop Study on Autonomous Monitoring Buoy Systems that was made available to the Commission.
- (iv) Conduct a study to address the trade-offs of Remotely Operated Vehicle (ROV) use for the various Modular Design Options and Autonomous Monitoring Buoy Options *vis-à-vis* (a) the Weather and Operational Risks at the six locations of the IMS hydrophone stations, and (b) the associated requirement for a Cable Ship or a Vessel of Opportunity (VOO) with or without Dynamic Positioning (DP) capabilities.

The study shall compare the possible on-site duration (i.e. excluding transit from/to the location of ship mobilization) of the envisaged installation and repair missions, including weather delay risk that is to be estimated in each case. The weather delay risk shall be derived from a probabilistic analysis and may be obtained for example from installation/repair sequence Monte Carlo simulations taking into account historical weather statistics/time-series. The Contractor shall provide and have access to the relevant weather data (e.g. ECMWF databases or similar).

Support the Commission in the down-selection of design options for future HA Modular Design Prototypes, subject to the overriding requirements of a minimum 20-year UWS design life and the fulfilment of all other CTBT operational manual specifications (see Attachment I part 1). This down-selection shall also cover the possibility of autonomous buoy systems, if solutions incorporating such an element are deemed viable.

2.2 Work Package 2: Writing of the Technical Requirements for a Terms of Reference for the Procurement of the first HA Modular Hydrophone Mooring Prototype

- (i) Based on the output of WP 1, propose viable HA Modular Hydrophone Mooring Prototypes. Only one prototype or more prototypes may be proposed. The prototype may be based on a single hydrophone mooring.

- (ii) For each of the proposed prototype(s), provide rough order-of-magnitude (ROM) costs and timelines for
 - a. Development and Procurement of the prototype(s),
 - b. Possible testing scenario(s).

2.3 Suggest viable Prototype test-bed(s)

- (i) Provide advice on the possible technical solutions for connecting a prototype to an undersea test-bed (e.g. ocean observatory, undersea research center facility, autonomous communication buoy),
- (ii) Elaborate on the estimated ROM costs and timelines for the interface development,
- (iii) Address the possibility of using autonomous communication buoys (possibly provided by a third party) as a test-bed to which a prototype hydrophone mooring can be connected.

3 PROJECT ORGANIZATION AND REPORTING

The Contractor shall define, detail and clearly document in its proposal how it intends to address the three WPs detailed above. These may be addressed sequentially or in parallel.

The Commission foresees a regular and continuous involvement with the Contractor throughout the duration of the project in order to ensure timely feedback and close collaboration. This may take place via weekly or bi-weekly minuted phone conferences, frequent e-mail exchanges and discussions.

The project work shall be organized as follows.

3.1 Project Kick-Off Meeting (no later than 10 calendar days after Contract signature):

The project will be kicked off with a three-day meeting to be held at the Commission's offices in Vienna, Austria, no later than 10 calendar days after Contract signature. Meeting facilities in Vienna will be provided by the Commission.

The Contractor shall be responsible for the costs that it incurs in attending the meeting. The Contractor may decide to send more than one person to the meeting, provided that the roles are substantiated at the proposal stage.

Before the kick-off meeting the Contractor will be given access to the requirements, information and documentation relating to the IMS hydrophone station network and other pertinent documentation. Access to the requirements, information and documentation is subject to the signature of a non-disclosure and confidentiality agreement.

Additional documentation which may be requested by the Contractor shall be discussed and made available during the meeting.

The objectives of the kick-off meeting and of the associated meeting report are:

- (i) Review the documentation that will be provided by the Commission;
- (ii) Provide an initial high-level assessment of the reviewed documentation and of the project status at the time of the meeting;
- (iii) Define and agree with the Commission the details of the work that is to be conducted throughout the duration of the project, taking into account the documentation that was reviewed.

The structure of the meeting shall be defined by the Contractor, who will also lead and report on the meeting. Initial suggestions for the structure of the meeting are to be included in the proposal. A refined meeting structure must be submitted by the Contractor by e-mail within 7 calendar days after the entry into force of the Contract.

The draft meeting report shall be submitted to the Commission electronically as an attachment to an e-mail or via access to a suitable and secure file transfer site (e.g. in case that large attachments or other additional files need to be submitted). The draft meeting report shall be made available to the Commission within 10 calendar days of completion of the meeting. This report shall present the mutually agreed detailed plan and approach for the conduct of the work.

The Commission shall provide to the Contractor feedback on the draft meeting report within 5 calendar days, and the Contractor shall submit electronically (e-mail or secure file transfer site) the final version of the report to the Commission within 5 calendar days after receipt of the Commission's comments.

3.2 Modular Prototype TOR elements Meeting (no later than five (5) months after Contract signature):

A second three-day meeting is to be held at the Commission's offices in Vienna, Austria, no later than 5 months after Contract signature. Meeting facilities in Vienna will be provided by the Commission.

The Contractor shall be responsible for the costs that it incurs in attending the meeting. The Contractor may decide to send more than one person to the meeting, provided that the roles are substantiated at the proposal stage.

The structure of the meeting shall be defined by the Contractor, who will also lead and report on the meeting. The meeting structure must be submitted by the Contractor no later than one month before the agreed date of the Meeting.

The purpose of this meeting is to:

- (i) Provide the final down-selected Modular Prototype Hydrophone Mooring design Options and agree with the Commission on the option(s) that should be pursued.
- (ii) Provide to the Commission the elements that will enable the CTBTO to write the TOR for the procurement of the envisaged Modular Prototype Hydrophone Mooring(s). To this effect, the Commission may consider to engage with the Contractor in the drafting of such TOR's early in the Project, after the completion of the Kick-off Meeting and at a date to be mutually agreed.

The Modular Prototype down-selection and TOR elements meeting report shall be in the form of a Draft Final Project report and shall be made available to the Commission within 1 month of completion of the meeting. The report shall be submitted to the Commission electronically as an attachment to an e-mail or via access to a suitable and secure file transfer site (e.g. in case that large attachments or other additional files need to be submitted).

The Commission shall provide to the Contractor feedback on the meeting report within 14 calendar days and the Contractor shall submit electronically (e-mail or secure file transfer site) the final version of the report to the Commission no later than the end of month 7 after contract signature.

All reports submitted to the Commission shall be in English and all interactions between the Contractor and the Commission pertaining to the project shall be in English.

4 OTHER REQUIREMENTS

The Commission requires that this study be conducted by experienced specialists with significant experience in Ocean Observatories and ocean acoustic instrumentation. Familiarity with the IMS hydroacoustic components is an asset. The Contractor's personnel assigned for the implementation of the project shall have demonstrable experience in deep sea cabled ocean equipment/technology, underwater acoustic system design and modular designs using wet/dry mate-able connectors. Practical experience with the actual specification, development, manufacture and deployment of such systems in deep water, ideally in harsh and remote environments, is also required.

Detailed curricula and qualifications of all Contractor personnel involved in the project shall be submitted with the Proposal.

5 TIME TABLE

The duration of the project shall be seven (7) months starting from the date of Contract signature, noting that changes to the timeline may be agreed with the Commission, provided that the project duration does not exceed twelve (12) months.

The time table below is nominally based on the indicative 7 months project duration. Any alternative timetable proposed by the Contractor shall be proposed as an additional Contractor's Option, bearing in mind that the timetable up to and including milestone M2 shall remain as per the table below.

No	Activity	Deadline	Milestone	TOR Section Reference
1	Kick-off Meeting in Vienna	No later than 10 calendar days after contract signature.	M1	3.1
2	Draft kick-off Meeting Report due	No later than 10 calendar days after completion of the meeting.		3.1
3	Review comments of draft kick-off Meeting Report sent from the Commission to the Contractor	No later than 5 calendar days after receipt of the draft kick-off meeting report.		3.1
4	Final kick-off Meeting Report due	No later than 5 calendar days after receipt of the Commission's feedback.	M2	3.1
5	Modular Prototype TOR Meeting in Vienna	No later than 5 months after contract signature.	M3	3.2
6	Draft Final Project report due	No later than 1 month after completion of the meeting.	M4	3.2
7	Review comments of draft final project report sent from the Commission to the Contractor	No later than 14 calendar days after receipt of the draft final project report.		3.2
8	Final project report submitted to the Commission	No later than the end of month 7 after contract signature.	M5	3.2

ATTACHMENT 1

I. Minimum Requirements for IMS Hydrophone Station Specifications

Characteristics	Minimum Requirements
Sensor type	Hydrophone with wet end digitiser
Passband	1 – 100 Hz
Sensor response	Flat to pressure over the passband
Number of Sensors	2 Triplets
Sensor location	In the Sound Fixing and Ranging (SOFAR) Channel
Location Precision	≤ 500 meters
Number of cables	2 (triplets) at the site to prevent local (acoustic) blockage
System noise	≤ 10 dB below Urlick's deep ocean low noise curve
Calibration	Within 1 dB, no phase requirements
Sampling rate	≥ 240 samples per second
Timing accuracy	≤ 10 ms
Delay in transmission to the IDC	≤ 5 minutes
State of health	Status to be transmitted to the International Data Centre (IDC): hydrophone, clock, calibration, telemetry
Data availability	≥ 98%
Timely data availability	≥ 97% (data received at the Commission within a maximum delay time of 5 minutes)
Dynamic range	120 dB
Data transmission	Continuous (CD 1.1 protocol)
Data frame length	≤ 10 seconds
Buffer at dry end	≥ 7 days

II. Other Requirements for IMS Hydroacoustic (Hydrophone) Stations

Characteristics	Minimum requirements
Hydrophone Location	Typically two hydrophone triplets at each location with a hydrophone horizontal separation of two kilometres.
Number of Hydrophone Triplets	Island based stations have two triplets of hydrophones, one North and one South of the island, to circumvent acoustic shadowing problems and to provide redundancy. One station, based in Cape Leeuwin (Australia) has only one triplet, deployed off-shore to the West.
Data Transmission	The data from each of the hydrophones in the triplet are sent continuously to the CTBTO International Data Centre (IDC) via satellite link. The Treaty mandates that all data transmitted to the IDC must be raw. It is not acceptable to transmit pre-processed data. However, compressed data in accordance with the CD1.1 protocol is acceptable. This requirement may represent a bottleneck/challenge w.r.t. satellite data transmission protocols available for non-fixed platforms (e.g. autonomous buoys). Aspects related to CD1.1 data transmission from the station to Vienna are not part of this study.
Data Authentication	Data authentication should be performed at the dry end; that is on shore at the termination of the undersea optical fibre cable (studies related to the data authentication are not part of the present project).
Hydrophone Height above the Seafloor	The hydrophones are generally suspended at the SOFAR axis at a height above the sea floor to minimise acoustic coupling from the bottom. Hydrophones on both sides of an island shall be at a sufficient distance from the shore to minimise background noise and to ensure that shadow formation by the island is sufficiently small.

III. Approximate triplet centroid locations and sensor depths of the IMS HA hydrophone stations

Station Name and State Responsible	Station Code	Latitude (deg. N)	Longitude (deg. E)	Sensor Depth (m)	Water Depth (m)
HA01 Cape Leeuwin, Australia	H01W	-34.892	114.153	1055	1558
HA03 Juan Fernandez Is., Chile	H03N	-33.449	-78.938	820	2000
	H03S	-33.823	-78.846	810	2100
HA04 Crozet Is., France	H04N	-46.180	51.590	555	1310
	H04S	-46.885	51.794	551	1309
HA08 Diego Garcia/BIOT, UK	H08N	-6.342	71.014	1250	2300
	H08S	-7.645	72.474	1350	1800
HA10 Ascension Island, USA	H10N	-7.845	-14.480	847	2005
	H10S	-8.941	-14.648	860	1733
HA 11 Wake Island, USA	H11N	19.713	166.891	750	1400
	H11S	18.508	166.702	750	1150