REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2020-0016/RAHMAN
(PLEASE QUOTE ON ALL COMMUNICATIONS)

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

Date: 07 Feb 20

Attn:
Phone:
Fax:
Email:

Subject: Provision of Software Engineering Services for Continuous Data Acquisition, Continuous Testing and Continuous Integration on a Call-Off Basis

Deadline for Submission: 11 Mar 20
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,

[Signature]
Courtney Linley
Chief, Procurement Section
# ACKNOWLEDGEMENT FORM

**Solicitation No:** 2020-0016  
**Closing Date:** 11 Mar 20  
**Title:** Provision of Software Engineering Services for Continuous Data Acquisition, Continuous Testing and Continuous Integration on a Call-Off Basis  
**Vienna Local Time:** 17:00  
**Procurement Staff:** Fazal Rahman  
**CTBTO Req. No.:** 0010015435  

**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

<table>
<thead>
<tr>
<th>By:</th>
<th>Company Name:</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Contact Name:</td>
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<td>Email/Tel:</td>
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</table>

**(date)**

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## B: We may submit and will advise

<table>
<thead>
<tr>
<th>By:</th>
<th>Company Name:</th>
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<tbody>
<tr>
<td></td>
<td>Contact Name:</td>
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<td>Email/Tel:</td>
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</tbody>
</table>

**(date)**

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

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

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Contact Name:</th>
<th>Email/Tel:</th>
</tr>
</thead>
</table>
INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PROPOSALS
RFP No. 2020-0016/RAHMAN

1. General

This Request for Proposal (RFP) is for the provision of services “Provision of Software Engineering Services for Continuous Data Acquisition, Continuous Testing and Continuous Integration on a Call-Off Basis” as described in the attached Terms of Reference.

Bidder’s Proposal shall meet all requirements stated in the Terms of Reference. The Bidders may also present an alternative technical and related financial proposal, which would result in higher performance, better quality and a more economical solution, provided that the required technical specifications are fully addressed and met. For this project, the Commission is seeking capabilities, which will ensure that the tasks are accomplished at the best possible value for money for the organization.

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: Mandatory Outline and Requirements of the Technical Proposals
   - Attachment 2: Format of Financial Proposal
   - Attachment 3: Technical Evaluation Criteria
(c) List of CTBTO Member States
(d) Statement of Confirmation
(e) Vendor Profile Form
(f) The Commission’s Model Contract and its Annexes A and B:
   o Annex A: The Commission’s General Conditions of Contract
   o Annex B: Terms of Reference

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

3. Amendment of RFP Documents

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

4. Language of the Proposal

The Proposal and all correspondence and documents relating to it shall be in English.
5. Format and Submission of the Proposal

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

The Proposal shall be submitted in two sealed envelopes.

a) One sealed envelope shall contain 1 (one) original of the Financial Section of the Proposal clearly marked as “Original Financial Proposal”.

b) The second sealed envelope shall contain 1 (one) original of the Technical Section of the Proposal marked as “Original Technical Proposal”

c) The second envelope shall also contain a memory stick with:
   1 (one) pdf of the Financial Section of the Proposal without prices, and
   1 (one) pdf of the Technical Section of the Proposal

No pricing/financial information shall be included in the Technical Section of the Proposal. Note however that the list of items (without the prices) shall be included in the Technical Section of the Proposal.

The envelope shall be clearly marked as follows:

NAME OF PROJECT: [Description indicated in Letter of Invitation]
CLOSING DATE: [Date indicated in Letter of Invitation]
CTBTO REF. NO.: [Number indicated in the Letter of Invitation]
"DO NOT OPEN BEFORE THE CLOSING DATE"

6. Mailing Address and Closing Date

(a) The sealed outer envelope shall be sent to the following addressee:

Chief, Procurement Section
Room E0917
CTBTO, Vienna International Centre
Wagramer Strasse 5
A-1400 Vienna
AUSTRIA

(b) The sealed outer envelope shall be received by the above-mentioned addressee not later than the closing date and time indicated in the Letter of Invitation. Any Proposal received after the closing date and closing time will be rejected by the Commission and returned to the invitee unopened. The Commission may, at its discretion, extend the deadline for submission of the Proposal.

(c) NOTE: Proposals sent by fax or e-mail - even if they are submitted before the closing date and time as an “Electronic Advance Copy” for the subsequent submission of the same Proposal as a hard copy in sealed envelopes - will not be considered and may lead to the rejection of the bidder from the procurement process.
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 15 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. 2020-0016/RAHMAN

The Commission will make all reasonable efforts to issue a consolidated response to all requests for clarifications not later than 10 business days prior to the Closing Date.

Except in case of responding to a request 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.

8. Eligible Goods and Services

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

9. Type of Contract and Payment

The Commission intends to conclude a Call-off Contract based on the attached Model Contract. The terms and conditions of payment for services are described in the attached Model Contract.

10. Award

The Commission reserves the right to split the award of a Call-off Contract, based on this RFP, to more than one Contractor.

11. 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.

Contact Person
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.

Mandatory Outline and Requirements of the Technical Proposal
The Technical Proposal shall be written in accordance with the structure set out in 'Mandatory Outline and Requirements of the Technical Proposal' attached hereto. Bidders should provide all the information requested in this document but may provide additional related content as attachments. Where applicable, minimum requirements have also been referenced from the Terms of Reference for the convenience of the Bidder.

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

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

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

Please note that it is the bidder’s responsibility alone to obtain work permits or visa or similar for the personnel proposed to implement this project. The Commission will make no effort nor accept any responsibility for obtaining work permits or visa or similar for the Contractor’s personnel.
Use of former Preparatory Commission for the CTBTO (“Commission”) employees in the preparation of Quotations:

A Bidder must not, in the absence of prior written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a 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 CTBT Member States.

Statement of Confirmation

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

Vendor Profile Form (VPF)

The attached Vendor Profile Form, if not previously submitted to the Commission, shall be duly signed and submitted together with the Proposal.

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. Any deviations may be a factor in the award decision.

PART II: FINANCIAL PROPOSAL

Bidders are required to submit the Financial Proposal as follows:

Format of the Financial Proposal

i. The Financial Proposal shall be submitted in the format set out in Attachment 2 “Format of Financial Proposal” attached herewith. Bidders shall provide all the information requested in this matrix but may provide additional related content as attachments.

This will be evaluated as part of the responsiveness of the Financial Proposal. A Proposal that fails to meet this requirement may be disqualified and not be considered for further evaluation.
ii. The Bidder shall quote firm fixed person-day fees/rates in EURO or US Dollars. The quoted fees/rates should include all overheads and ancillary expenses, unless included as firm-fixed “Other Costs”, or otherwise stated in Attachment 2 “Format of Financial Proposal”.

**Note:** the estimated number of person-days outlined in the Terms of Reference is included for evaluation purposes only, and does not represent a commitment on behalf of the Commission.

iii. Estimated costs for travel based on the most economic and direct route shall be specified in the Financial Proposal. Costs for DSA shall be paid based on the UN DSA rate applicable at the time when a specific WO is issued. Estimated costs included in the WO will be invoiced based on actual costs against relevant supporting documentation e.g. invoices for travel, shipping etc. and shall not exceed 10% of the estimate. Daily Subsistence Allowance (DSA) for on-site work shall be reimbursed based on the applicable United Nations DSA rate.

**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.

**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 EU Suppliers under the Contract (Ref. EU VAT Council Directive 2006/112/EC, Article 151). A tax exemption certificate issued by the relevant Austrian authorities will be provided upon request.
(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.

12. 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.

13. 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.

14. 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.

15. Evaluation of Proposal

(a) The Commission will first conduct a technical evaluation based on the following main evaluation criteria categories:
   • Meeting the overall Requirements
   • Requirements for the Contractor and for the Contractor's staff
   • Capacity and Technical Expertise to deliver services listed in the Terms of Reference

Please see Attachment 1 (Mandatory Outline and Requirements of the Technical Proposal) and Attachment 3 (Technical Evaluation Criteria) for a complete list of the criteria that form the basis of the technical evaluation for each of the above listed categories. 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 requirements, the Commission reserves the right to invite the proposed personnel to an interview in order to complete the technical evaluation of the Proposal.

(b) Only the Financial Proposals of those bidders that meet or exceed the minimum technical requirements of all items will be opened and evaluated for their commercial acceptability.

(c) Contractual compliance.
(d) The Commission, based on the evaluation method given above, will award the bidder whose bid substantially conforms to the requirements set forth in the Solicitation Documents and is evaluated to be the one with the lowest cost to the Commission.

16. 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.

17. 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.

18. The Commission’s Right to Reject the Proposal

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

19. 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.

20. Proprietary Information

All documentation and information contained in this RFP are proprietary to the Commission and shall not be duplicated, used or disclosed -in whole or in part- for any purpose other than to evaluate them and respond to the Commission's request for Proposal or otherwise without prior written agreement of the Commission.
**BIDDER’S STATEMENT**
**PLEASE STATE BELOW & SUBMIT WITH PROPOSAL**

<table>
<thead>
<tr>
<th><strong>Delivery Time:</strong></th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping weight (kg) and Volume (m³) – if applicable:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>List of recommended consumables and spares including prices and details on local availability, if applicable (please tick):</strong></td>
<td></td>
</tr>
<tr>
<td>□ For one year period  □ For a period of ……………………………..</td>
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<tr>
<td><strong>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:</strong></td>
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<tr>
<td>□ For a two year period  □ For a period of ……………………………..</td>
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<tr>
<td><strong>Availability of local service in Vienna, Austria (if any):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>State country of origin or assembly of all items quoted:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Quantity discount and early payment discount (if any):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>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.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Included in this quotation :</strong></td>
<td>Yes  □  No  □</td>
</tr>
<tr>
<td><strong>Confirmation that the bidder has reviewed the Commission’s Terms of Reference, General Conditions of Contract, Draft Model Contract, and agreed to all terms and conditions.</strong></td>
<td></td>
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<tr>
<td><strong>Remarks:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>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).</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Remarks:</strong></td>
<td></td>
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<tr>
<td><strong>Name:</strong></td>
<td></td>
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<tr>
<td><strong>Name &amp; Title of Contact Person:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Signature &amp; date:</strong></td>
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</table>
## ATTACHMENT 1

**Mandatory Outline and Requirements of the Technical Proposals**

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive Summary</td>
<td>• Provide an overview of proposal</td>
</tr>
<tr>
<td>2. Experience, Resources and Project Management</td>
<td></td>
</tr>
<tr>
<td>2.1 Corporate Profile and Values</td>
<td>• Background of company (or consortium), ownership, size, location, profile</td>
</tr>
<tr>
<td></td>
<td>• If developers are full time developers or outsourced from other companies.</td>
</tr>
<tr>
<td>2.2 Corporate Experience</td>
<td>• Experience in offering off-site software development services and the list</td>
</tr>
<tr>
<td></td>
<td>of organizations (five maximum) for which such services have been provided in</td>
</tr>
<tr>
<td></td>
<td>the last year-Please provide list and description of projects.</td>
</tr>
<tr>
<td>2.3 Project Management Team and Staffing</td>
<td>• Provide management structure and key personnel of the company.</td>
</tr>
<tr>
<td>2.4 Availability of resources</td>
<td>• Please address in as much detail as reasonable what resources you will make</td>
</tr>
<tr>
<td></td>
<td>available for the successful provision of software development such as:</td>
</tr>
<tr>
<td></td>
<td>• key developers;</td>
</tr>
<tr>
<td></td>
<td>• offsite facilities for developers;</td>
</tr>
<tr>
<td>3. Meeting the Requirements</td>
<td></td>
</tr>
<tr>
<td>3.1 Assumptions</td>
<td>• The bidder should detail key assumptions that impact the Proposal.</td>
</tr>
<tr>
<td>3.2 Understanding of the Scope</td>
<td>• The bidder’s response should demonstrate detailed knowledge and understanding</td>
</tr>
<tr>
<td></td>
<td>of the development activities described in the Terms of Reference. The bidder’s</td>
</tr>
<tr>
<td></td>
<td>response should describe in detail the expected inputs/resources to be made</td>
</tr>
<tr>
<td></td>
<td>available by the Commission.</td>
</tr>
<tr>
<td>3.3 Continuous Data Acquisition</td>
<td>Please address in as much detail as reasonable:</td>
</tr>
<tr>
<td></td>
<td>• A description of similar projects completed in the past;</td>
</tr>
<tr>
<td></td>
<td>• Experience with CDtools, libidcwf, libidcodbc;</td>
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<tr>
<td></td>
<td>• A plan for analysis of the “as-is” system, intended to achieve adequate</td>
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<td></td>
<td>understanding of the system to meet the knowledge requirements for developing</td>
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<tr>
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<td>the tasks in the TOR;</td>
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<tr>
<td></td>
<td>• The list of required documents to be provided by the Commission to facilitate</td>
</tr>
<tr>
<td></td>
<td>the successful delivery of the development services.</td>
</tr>
</tbody>
</table>
3.4 Continuous Testing and Integration  Please address in as much detail as reasonable:
- A description of similar projects completed in the past;
- Experience with CATS, Jenkins and/or Robot framework, the basis for automated testing of Seismic, Hydroacoustic and Infrasound software in the Commission;
- A plan for analysis of the “as-is” system, intended to achieve adequate understanding of the system to meet the knowledge requirements for developing the tasks in the TOR;
- The list of required documents to be provided by the Commission to facilitate the successful delivery of the development services.

4. Skills and Experience of key staff
- Provide the resume of the proposed developer(s) which describes in detail all qualifications and experience in software development and in particular the level to which the requirements of the TOR are met with them;
- Provide reference to previous software development projects conducted by the proposed developer in the last three years, identifying the language(s) in which the work was conducted.

5. Attachments
- Statement of Confirmation
- Vendor Profile Form
- Statement regarding Model Contract
## ATTACHMENT 2

### FORMAT OF FINANCIAL PROPOSAL

Provision of Software Engineering Services for Continuous Data Acquisition, Continuous Testing and Continuous Integration on a Call-Off Basis

<table>
<thead>
<tr>
<th>Description (ToR)</th>
<th>Unit</th>
<th>QTY</th>
<th>Initial Call-off period 12 months (Est. 200 person-days) Unit Price</th>
<th>1st Optional extension 12 months (Est. 200 person-days) Unit Price</th>
<th>2nd Optional extension 12 months (Est. 200 person-days) Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Engineering Services for Continuous Data Acquisition, Continuous Testing and Continuous Integration</td>
<td>Person/Day</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Estimated travel cost: Return Ticket per person per trip (RT).                    | RT         | 1   |                                                               |                                                               |                                                               |

**NB:**

1) Please complete all applicable columns (labor rates, and estimated travel cost, if applicable).

2) Please specify currency (USD or Euro only). The rates shall be firm and fixed throughout the term of the Contract.

3) This is a unit-based Contract. The exact number of working days will be determined/called-off in the form of Work Orders (WOs) at the rates quoted in this Attachment.

4) The estimated travel cost is required *for the purpose of tender evaluation*.

5) The Commission will request the Contractor to submit estimated costs/expenses for travel including, inter alia, airfare and terminal costs before issuing WOs. Travel costs will be reimbursed by the Commission to the following extent:
   - International/regional travel by air: simple economy return airfare for the most direct route between the place of establishment of the Contractor and the premises of the Commission in Vienna, Austria. In exceptional circumstances and with prior written approval of the Commission, the Contractor may be reimbursed for flexible economy return airfare but it remains for the Commission to approve the type of airfare that will be reimbursed.
   - International travel by other means than air travel: the rate accepted by the Commission for the most direct route between the place of establishment of the Contractor and the premises of the Commission in Vienna, Austria.
   - Reasonable terminal expenses, if any: at cost against supporting documents.
   - The actual travel costs paid by the Commission shall not exceed the estimate by more than 10%.

6) Daily Subsistence Allowance (DSA): applicable for *a working day only* and shall be calculated based on the values provided by "the International Civil Service Commission (ICSC)" for Vienna, during the month when the WO is issued.

7) Different day/hour rates for overtime and a weekend day, respectively, if any, shall be indicated separately in the proposal.
ATTACHMENT 3
Technical Evaluation Criteria

TECHNICAL EVALUATION CRITERIA
FOR THE
PROVISION OF SOFTWARE ENGINEERING SERVICES
FOR CONTINUOUS DATA ACQUISITION, CONTINUOUS TESTING AND CONTINUOUS INTEGRATION
ON A CALL-OFF BASIS
I. Requirements for the Contractor

I.1 General requirements

The Contractor shall satisfy the following mandatory requirements:

- To be a company established for at least seven (7) years;
- A staff turnover below 20% per year over the past 3 years;
- Use of a formal project management methodology;
- Experience working with modern issues tracking and ticket management systems, preferably Jira;
- Use of the English language for all written and oral communication with the Commission;
- The company has successfully executed projects in the area of digital signal processing, environmental monitoring and scientific visualization in the past;
- Warranty period of two (2) years after the completion of the user acceptance testing. Terms and conditions of post-warranty support and bug fixes should be available and clearly specified;
- Documented evidence that the Contractor will be able to adjust the working hours of staff assigned to the Team Roster, to overlap at least two hours with the Commission’s working hours (9am to 5pm CET), as deemed necessary by the Commission.

I.2 Team Roster

I.2.1 Constitution of the Team Roster

In its Proposal, the Contractor shall provide details of staff that are expected to be involved in the performance of work off-site for the Commission. At a minimum, the following information shall be provided for each of these staff:

- Name
- Role
- Employed since
- Type(s) of Service(s) from Section III of the TOR in which the staff may be involved
- Curriculum Vitae

Each member of the Team Roster shall be appropriately skilled and experienced to carry out the role and one or both Service(s) listed in section III of the TOR.

The Contractor shall demonstrate:

- The capacity of the suggested Team Roster to tackle all Services described in section III of the TOR;
- The compliance of the suggested Team Roster with requirements set out in sections I.2.1, I.2.2 and I.2.3 of this document;
The capability and capacity of the suggested Team Roster to provide Software Services in the environment described in Section II of the TOR.

I.2.2 Requirements for each staff on the Team Roster

Each of the Contractor’s staff on the Team Roster must have at least the following qualifications:

- A university degree in Computer Science, Mathematics, Physics or a related scientific/technical subject; alternatively, a minimum of ten (10) years of relevant professional experience would be recognized in lieu of a university degree;
- Five (5) years of experience in the last ten (10) years as a system analyst, designer and/or software developer in the area of digital signal processing;
- Solid knowledge of geophysical concepts, at least three (3) years of experience in seismic data processing and related computational methods;
- At least five (5) years of experience in object oriented development and using design patterns, in-depth experience with the programming language C;
- A minimum of five (5) years of experience providing software maintenance and support services for complex and custom software systems;
- At least six (6) months experience in array signal processing and in applying signal processing to environmental monitoring applications;
- Good knowledge of seismic bulletins, like the IDC SHI products or similar, their structure and content, at least six (6) months of relevant experience related with seismic bulletins;
- At least twelve (12) months of professional experience in the last three years with SQL and database programming, ideally using Oracle and/or PostgreSQL databases, experience using data access layers and enhancing data models for an application;
- At least six (6) months experience using the Perl and UNIX shell scripting languages;
- At least twelve (12) months experience with the Linux operating systems as a system administrator and/or system programmer;
- At least six (6) months of user experience with Defect Tracking Tools, preferably Jira;
- At least six (6) months of direct experience with one or more Agile frameworks, preferably Scrum;
- Experience with all elements of the software development lifecycle: eliciting and documenting business process flows, use cases, requirements, quality management plans, user acceptance testing, and end-user training;
- Effective communicates skills with ability to participate in meaningful and articulate verbal discussions;
- Excellent business presentation and facilitation skills;
- Working knowledge of written English and fluency in spoken English.

I.2.3 Skills and experience that must be available in the Team Roster

Besides the requirements above, the following skills and experience shall be available in the Team Roster, and maintained for the duration of the Contract:
- Three (3) years of experience in the last ten (10) years in developing software to automatically process data in near-real-time, preferably in the area of environmental or operational monitoring;

- Four (4) years of experience within the last ten (10) years using a disciplined approach for planning, designing, executing and reporting on software testing;

- Four (4) years of experience in the last ten (10) years using, configuring and customizing the Jenkins Continuous Integration Servers;

- Two (2) years of experience within the last ten (10) years using a disciplined approach for continuous integration;

- At least twelve (12) months of developer experience with all of CD1.0 and CD1.1 formats and protocols, CDtools, libidcwf and libidcodbc;

- At least twelve (12) months of experience with the inner workings of the CATS (Continuous Automated Testing System) used for SHI software;

- At least twelve (12) months of experience of developing applications using private-public key encryption and Public Key Infrastructure (PKI), including experience with libraries implementing encryption algorithms, in particular openssl;

- At least six (6) months of developer experience with the programming languages C++, Java, Perl and Python;

- At least six (6) months of developer experience with scripting techniques for automated testing;

- At least six (6) months of developer experience using the GNU Autotools for software packaging, compilation and distribution;

- Ability to write quality Software Documentation in English language.
MODEL CONTRACT
(SAP No. .... )
(Shopping Cart No. .... )

between

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

and

THE NAME OF THE CONTRACTOR
(THE CONTRACTOR)

for

PROVISION OF SOFTWARE ENGINEERING SERVICES FOR CONTINUOUS DATA ACQUISITION, CONTINUOUS TESTING AND CONTINUOUS INTEGRATION ON A CALL-OFF BASIS

February 2020

This Model Contract comprises this cover page, 13 (thirteen) pages of text (including a table of contents and a signatories page), and 3 (three) Annexes (A to C)
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ANNEXES: A, B, and C
MODEL CONTRACT

This CONTRACT is entered into between THE PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (hereinafter referred to as “the Commission”), having its headquarters located at Wagramerstrasse 5, 1400 Vienna, Austria, and «SS_NAME» (hereinafter referred to as “the Contractor”), having its principal office located at XXXX, XXXX.

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 XXX.

“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.

“Goods” means the equipment to be supplied and delivered by the Contractor under the Contract as requested by the Commission under the WO.

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

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

Work Orders (‘WO’) mean orders issued by the Commission which specify the (parts or portions of) Work to be performed by the Contractor upon request by the Commission in accordance with Annexes B and C.

2 AIM OF THE CONTRACT

The aim of this Contract is to provide Services (hereinafter referred to as “Work”) pertaining to “Provision of Software Engineering Services for Continuous Data Acquisition, Continuous Testing and Continuous Integration on a Call-off Basis” to the Commission, as and when required by the Commission.

3 ENTRY INTO FORCE, DURATION OF THE CONTRACT AND COMMENCEMENT AND COMPLETION OF THE WORK

(a) The 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 shall be valid until the Parties fulfill all their obligations hereunder.

(b) The Commission shall have the right to call-off the Works in the form of WO within a period of 12 months from the Effective Date or the performance of a maximum of 200 person-days by the Contractor, whichever occurs first (hereinafter referred to as the “Call-off Period”). The commencement and completion date for the performance of the Works (hereinafter referred to as “Commencement Date” and “Completion Date”, respectively) will be set out in the respective WO. This sub-clause (b) shall also apply to any extension exercised under sub-clause (c) below.

(c) The Commission shall have the option to extend the Call-off Period twice (2), subject to the availability of funds, under the same terms and conditions as those of this Contract. The Commission will inform the Contractor about its intention to extend the Work at least one (1) month prior to the expiry of the Contract. The optional extensions will be implemented through a written notification to the Contractor by the Commission.
4 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.

5 RESPONSIBILITIES OF THE CONTRACTOR

a) The Contractor shall provide the Work described in Annex B.

b) 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.

c) The Contractor shall provide the Software and Services described in Annexes B and C.

d) The Contractor acknowledges that after the completion of the Work under this Contract, the Commission shall own the Software and source code and the Contractor shall have no rights in that Software or source code unless granted by the Commission under Clause 23 of this Contract.

6 ORGANISATION OF CONTRACT IMPLEMENTATION

(a) During the term of the Contract, the Commission has the right, but not the obligation, to initiate performance of Services through the issuance of individual WO in accordance with section 4 of Annex B based on the firm fixed unit prices set out in Annex C. The Contractor shall not perform any Work if not requested by the Commission through a WO. However, the Contractor may propose WO for Commission’s evaluation.

(b) The WO issued by the Commission shall be the basis for acceptance, invoicing and payment of any Services performed by the Contractor.
(c) The performance of Services shall be made in full in accordance with the respective WO. Partial service performance of a WO will not be accepted and reimbursed without prior written agreement by the Commission.

(d) The Services shall be performed at the place and within the approved Work Plan specified in the relevant WO.

(e) The Commission may revise a WO as and when it may deem necessary.

7 WARRANTY

(a) The provisions of Clause 28 of Annex A shall apply to the Works performed by the Contractor.

(b) The Contractor shall ensure that the Commission shall experience no loss of service or support level by sub-contractors or repair agents acting on behalf of the Contractor.

8 PERMITS, NOTICES, LAWS AND ORDINANCES

(a) The Contractor shall obtain and pay for all permits and inspections necessary for the proper execution and completion of the Work that are customarily obtained upon execution of this Contract and that are legally required at the time the Proposal is received by the Commission.

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

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

9 PROTECTION OF PERSONS AND PROPERTY

(a) The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programmes in connection with the Work.

(b) The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury and loss to:

(i) all employees on the Commission’s premises and all other persons who may be affected thereby;
(ii) all the Work, Equipment, its spare parts, materials and supplies to be incorporated therein, whether in storage on or off the Commission’s premises, which are under the care, custody or control of the Contractor or any of its subcontractors; and

(iii) other property on the Commission’s premises or adjacent thereto.

(c) The Contractor shall give all notices and comply with all applicable laws and Rules bearing on the safety of persons and property and/or their protection from damage, injury and loss.

(d) The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for the safety and protection of persons and property, including posting danger signs and other warnings against hazards and promulgating safety regulations.

(e) When the use or storage of combustible, explosive or other hazardous materials is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

(f) The Contractor shall be responsible for the prevention of accidents on the Commission’s premises during the execution of the Work.

(g) In any emergency affecting the safety of persons or property, the Contractor shall promptly act to prevent threatened damage, injury and loss.

(h) The Contractor shall promptly remedy all damage and loss to any property, referred to in Sub-Clause (b) above, caused in whole or in part by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Sub-Clause (b) above, except damage and loss attributable to the acts or omissions of the Commission or anyone directly or indirectly employed by it, or of anyone for whose acts the Commission may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Clause 9 of Annex A.
10 RESPONSIBILITIES OF THE COMMISSION

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

11 CONTRACT PRICE

a) The Commission shall pay to the Contractor, in consideration of the full and proper performance of its obligations under the Contract, as follows:

(i) for each WO issued during the firm Call-off Period specified in Clause 3(b), the firm fixed labor rates/fees set out in Annex C;

(ii) subject to sub-clause (b) below, for each WO issued during the first optional extension of the Call-off Period specified in Clause 3(c), the firm fixed labor rates/fees set out in Annex C;

(iii) subject to sub-clause (b) below, for each WO issued during the second optional extension of the Call-off Period specified in Clause 3(c), the firm fixed labor rates/fees set out in Annex C;

(iv) per diem charges (DSA), which cover lodging, meals and incidental travel expenses, based on the United Nations Daily Subsistence Allowance (UN DSA) rates effective at the time of the respective travel (the WO, will include the UN DSA rates applicable at the time of issuance of the WO), unless specified otherwise by the Commission;

(v) the actual incurred Travel Costs, excluding DSA on the basis of simple economy return tickets for most direct route, not to exceed the estimated Travel Costs pursuant to the relevant WO, by more than 10% for each return travel under an issued WO, unless specified otherwise by the Commission;

(vi) if applicable, Other Costs pursuant to Annex C;

hereinafter referred to as the “Contract Price”. 
b) In the event that the Commission decides to extend the Call-off Period early, as foreseen in Clause 3(c) of this Contract, the Contactor will be reimbursed for the person-days called off in this period as follows:

(i) until the expiry of the initial Call-off Period, the daily rate set out in subparagraph (a)(i) above;

(ii) after the expiry of the initial Call-off Period, the daily rate agreed for the respective extension (subparagraph (a)(ii) or (iii) above)

c) The unit prices set out in Annex C shall be held fixed for the entire duration of the Contract.

d) The Contract Price shall cover all costs and expenses incurred by the Contractor for the full and proper performance of all relevant obligations under the Contract (including travel, allowances, management and remuneration of the personnel, national income tax, medical insurance, and social security contributions).

e) [PLEASE SELECT, AS APPLICABLE, ONE OF THE FOLLOWING AT THE TIME OF AWARD]:

[Identify type [and amount] of 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 arrears upon satisfactory completion of each WO and submission of the following:

i) Invoice drawn up in accordance with this Clause 12;

ii) Any other documentation that might be required under the applicable WO.

(b) The Commission will 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 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 stamped 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);
(ii) Terms of Reference (Annex B);
(iii) Contractor’s Proposal (Annex C);
(iv) The relevant WO.
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:
[insert details]

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.

23 SOFTWARE LICENCE

The Commission hereby grants the Contractor a non-exclusive, non-transferable, irrevocable license to use the Software for the duration of the Contract and for the purpose of doing the Work under the Contract. The use of the source code is only for the duration of the Contract and for the Work required under the Contract. All title, ownership rights and intellectual property rights in and to the Software shall remain with the Commission. The Contractor acquires no title, right or interest in the Software, other than the license(s) specifically granted herein by 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:

Name, Position/Title

Date: ___________________  Place: Vienna, Austria

For and on behalf of [REGISTERED NAME OF THE CONTRACTOR]:

Name, Position/Title

Date: ___________________  Place: ________________
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, 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 satisfactorily 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 warranty 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

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I. INTRODUCTION

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (the Commission/CTBTO) operates software to process time-series data from seismic, hydro-acoustic, and infrasound (SHI) sensors from around the world. The data are transmitted to the International Data Centre (IDC) in Vienna in near-real-time (within 5 min).

The data are processed to locate events that may be nuclear test explosions. Thus the processing system is required to be very sensitive to small events in unusual locations.

Most of the software is designed to run on the open-source 64bit Linux operating environment (currently RHEL 6.10).

The processing software is mostly written in ANSI C, with some supporting libraries in C++, and FORTRAN. A few programs are in Java. Several key applications are written using Scheme as an extension language. All software accesses the CTBTO Oracle RDBMS using ODBC, OCI, and ProC libraries. There are a number of support programs and scripts written in PERL, Python and TCL/Tk.

The Commission seeks to establish a new Contract for the supply of software engineering services for the maintenance and enhancement of the software Continuous Data Acquisition, Continuous Testing and Continuous Integration for SHI processing software.
II. SCOPE OF WORK

The Commission seeks to establish a one year Contract, with two (2) optional extensions of one year each. These Terms of Reference (hereinafter referred to as “ToR”) form the technical framework for the supply of off-site software engineering services for continuous Seismic, Hydroacoustic and Infrasound (SHI) data acquisition and continuous software testing and integration (hereinafter referred to as “the Services” or “the Work”).

The following Services are sought (see Section III):

III.1 Continuous Data Acquisition
III.2 Continuous Testing and Integration

These ToR define the technical requirements the Contractor and its services shall meet.

II.1 Second level support and maintenance for existing software systems

Provision of second-level support and maintenance for existing systems generally involves the review and execution of the software transition and operation phases through the provision of support and maintenance services, mainly for custom software systems.

In particular, the work may involve the following steps:

- Perform troubleshooting;
- Provide proactive and/or reactive support services;
- Analysis of the current functionality of a software system;
- Implement software patches and updates;
- Migrations for major releases of software;
- Implement deployment and release policies;
- Provide installation and usability assistance;
- Provide training or other services associated with operating the software.
III. PROVISION OF SOFTWARE ENGINEERING SERVICES

This section breaks down the description of the Work into separate types of services.

III.1 Work Specifications

At the time when the Work is called-off (see Section VII), the detailed scope of the service shall be defined.

III.1.1 Continuous Data Acquisition

The Work may involve the following tasks:

- Enhancements to acquisition and processing of continuous data;
- Design and integrate general enhancements of the CDtools software, including bug fixes, operational support, and auxiliary tools (scripts);
- Design and integrate enhancements of the libidcodb and libidcwf libraries, including bug fixes, support, and auxiliary tools (scripts);
- Provide third-level help desk support for third parties having technical issues on sending and handling CD frames, in case the Commission staff cannot answer them;
- Perform data analytics to inspect performance of existing implementation and propose improvements to algorithms;
- Perform system analysis and translate software requirements into architecture and design using Agile software development methodologies;
- Unit-test, black-box and performance testing for the systems being developed / maintained.

III.1.2 Continuous Testing and Integration

The Work may involve the following tasks:

- Enhancements to the CATS (Continuous Automated Testing System);
- Writing automated tests for SHI applications that are part of the IDC automated processing pipeline;
- Provide support for developers using and integrating software into CATS and/or Jenkins for continuous integration;
- Perform data analytics to inspect performance of existing implementation and propose improvements to algorithms;
- Perform system analysis and translate software requirements into architecture and design using Agile software development methodologies;
- Support the ongoing Continuous Delivery / Continuous Deployment initiative project in the IDC.

III.2 Deliverables

The deliverables shall be defined at the time when the Work is called-off (see Section VII). The Commission may request deliverables deemed relevant to the project.
IV. Location of Performance

For all tasks, Contractor’s staff will be expected to work off-site the premises of the Commission in Vienna, Austria. Only for the purpose of meetings, on-site installation, or other activities as required, the Contractor’s staff might be required to work for limited periods at the Commission’s premises. These on-site days shall be agreed with the Commission prior to the issuance of the relevant Work Order (see section VII).

The Contractor shall make all the travel arrangement (visas, hotels, etc.) for their staff. Airline tickets may be purchased by the Commission, should it be deemed appropriate at the time when the Work is called off; Daily Subsidiary Allowance (DSA) shall be calculated based on the amounts provided by the International Civil Service Commission (ICSC)¹.

¹ https://icsc.un.org/Home/DailySubsistence
V. **Term of Contract and Optional Extensions**

Performance of the Work may commence immediately after signature of the Contract and continue for at most 12 months, to the extent requested by the Commission in the form of Work Orders.

The volume of the Work contracted will be limited up to 200 person-days for the initial period of 12 months, of which the Contractor’s staff shall spend no more than 20 person-days on site at the Commission’s headquarters. The number of travels needed (if applicable) shall be no more than 4 travels to and from the Commission’s headquarters.

At the end of the initial 12-month period, the Commission shall have the right but not the obligation to extend the Contract twice at the same terms and conditions as set out in this Contract. For each extension the equal number of days (up to 200 person-days), on-site days (up to 20 person-days) and travels (up to 4 travels to and from the Commission’s headquarters) can be called off.

The Commission reserves the right, at its sole discretion, to call-off less or no person-days at all.
VI. Requirements for the Contractor

VI.1 General requirements

The Contractor shall satisfy the following mandatory requirements:

- To be a company established for at least seven (7) years;
- A staff turnover below 20% per year over the past 3 years;
- Use of a formal project management methodology;
- Experience working with modern issues tracking and ticket management systems, preferably Jira;
- Use of the English language for all written and oral communication with the Commission;
- The company has successfully executed projects in the area of digital signal processing, environmental monitoring and scientific visualization in the past;
- Warranty period of two (2) years after the completion of the user acceptance testing. Terms and conditions of post-warranty support and bug fixes should be available and clearly specified;
- Documented evidence that the Contractor will be able to adjust the working hours of staff assigned to the Team Roster, to overlap at least two hours with the Commission’s working hours (9am to 5pm CET), as deemed necessary by the Commission.

For off-site work, the Contractor shall provide its own infrastructure, hardware and software environment necessary for the completion of its work under the Contract. The Contractor shall communicate with the Commission by telephone, or electronic mail, as appropriate. All costs incurred by the Contractor as a result of such communication with the Commission for the performance of Work under the Contract, shall be borne by the Contractor.

VI.2 Team Roster

VI.2.1 Constitution of the Team Roster

In its Proposal, the Contractor shall provide details of staff that are expected to be involved in the performance of work off-site for the Commission. At a minimum, the following information shall be provided for each of these staff:

- Name
- Role
- Employed since
- Type(s) of Service(s) from Section III in which the staff may be involved
- Curriculum Vitae

Each member of the Team Roster shall be appropriately skilled and experienced to carry out the role and one or both Service(s) listed in section III.

The Contractor shall demonstrate:
• The capacity of the suggested Team Roster to tackle all Services described in section III;
• The compliance of the suggested Team Roster with requirements set out in sections VI.1, VI.1.2.3 and VI.1.2.4;
• The capability and capacity of the suggested Team Roster to provide Software Services in the environment described in Sections II, III, IV and VIII.

VI.2.2 Maintenance of the Team Roster, conditions of amendment

The Contractor shall maintain an up-to-date version of the Team Roster for the duration of the Contract. The Contractor shall be responsible to inform the Commission when staff is to be removed or added to the Team Roster, and if the details of a staff are modified.

If the Commission estimates that the Team Roster lacks capacity or capability to perform a specific work within the specified timeframe or quality, the Contractor shall provide, within five (5) working days after a request is made by the Commission, the details of skilled and experienced staff to be added to the Team Roster for consideration by the Commission.

The Commission shall be entitled to confirm whether or not the proposed Team Roster amendment is acceptable.

VI.2.3 Requirements for each staff on the Team Roster

Each of the Contractor’s staff on the Team Roster must have at least the following qualifications:

• A university degree in Computer Science, Mathematics, Physics or a related scientific/technical subject; alternatively, a minimum of ten (10) years of relevant professional experience would be recognized in lieu of a university degree;
• Five (5) years of experience in the last ten (10) years as a system analyst, designer and/or software developer in the area of digital signal processing;
• Solid knowledge of geophysical concepts, at least three (3) years of experience in seismic data processing and related computational methods;
• At least five (5) years of experience in object oriented development and using design patterns, in-depth experience with the programming language C;
• A minimum of five (5) years of experience providing software maintenance and support services for complex and custom software systems;
• At least six (6) months experience in array signal processing and in applying signal processing to environmental monitoring applications;
• Good knowledge of seismic bulletins, like the IDC SHI products or similar, their structure and content, at least six (6) months of relevant experience related with seismic bulletins;
• At least twelve (12) months of professional experience in the last three years with SQL and database programming, ideally using Oracle and/or PostgreSQL databases, experience using data access layers and enhancing data models for an application;
• At least six (6) months experience using the Perl and UNIX shell scripting languages;
• At least twelve (12) months experience with the Linux operating systems as a system administrator and/or system programmer;
• At least six (6) months of user experience with Defect Tracking Tools, preferably Jira;
- At least six (6) months of direct experience with one or more Agile frameworks, preferably Scrum;
- Experience with all elements of the software development lifecycle: eliciting and documenting business process flows, use cases, requirements, quality management plans, user acceptance testing, and end-user training;
- Communicates effectively with meaningful and articulate verbal discussions;
- Excellent business presentation and facilitation skills;
- Working knowledge of written and fluent in spoken English.

VI.2.4 Skills and experience that must be available in the Team Roster

Besides the requirements under VI.2.3 above, the following skills and experience shall be available in the Team Roster, and maintained for the duration of the Contract:

- Three (3) years of experience in the last ten (10) years in developing software to automatically process data in near-real-time, preferably in the area of environmental or operational monitoring;
- Four (4) years of experience within the last ten (10) years using a disciplined approach for planning, designing, executing and reporting on software testing;
- Four (4) years of experience in the last ten (10) years using, configuring and customizing the Jenkins Continuous Integration Servers;
- Two (2) years of experience within the last ten (10) years using a disciplined approach for continuous integration;
- At least twelve (12) months of developer experience with all of CD1.0 and CD1.1 formats and protocols, CDtools, libidcwfl and libidcodbc;
- At least twelve (12) months of experience with the inner workings of the CATS (Continuous Automated Testing System) used for SHI software;
- At least twelve (12) months of experience of developing applications using private-public key encryption and Public Key Infrastructure (PKI), including experience with libraries implementing encryption algorithms, in particular openssl;
- At least six (6) months of developer experience with the programming languages C++, Java, Perl and Python;
- At least six (6) months of developer experience with scripting techniques for automated testing;
- At least six (6) months of developer experience using the GNU Autotools for software packaging, compilation and distribution;
- Ability to write quality Software Documentation in English language.

The Contractor shall ensure that the Team Roster complies with the above-mentioned requirement at all times, notwithstanding any possible replacement of the Team Roster members during the lifespan of the Contract.
VII. ORGANIZATION OF WORK

The Commission may ask for Services as described in section III through the issuance of Work Orders (WOs). The work will be organized based on Scrum, and each WO will correspond to a Sprint, with defined scope, duration and deliverables.

VII.1.1 Completion and Acceptance

At the end of a particular Work under the WO, the Contractor shall submit to the Commission the deliverables within the period of performance stated in the respective WO. The deliverables may include:

- Updated Software Design Documents;
- Updated Software User Guide;
- Description of how to use the programming interfaces developed under this contract;
- Updated source code for software and common libraries, including documentation.

VII.1.2 Invoicing and Payment

The work and deliverables, after being evaluated and accepted as satisfactory by the Commission, will form the basis for invoicing and payment of a particular Work performed under a WO.
VIII. Methodology, Standards, and Technology

The Contractor shall deliver software through incremental releases according to the Agile software development methodology (specifically Scrum). In particular, the Contractor shall follow the “Release Early, Release Often” (RERO) software development philosophy which emphasizes the importance of early and frequent releases in creating a tight feedback loop between developers, testers and users. Each new delivery shall include a description of what changes were made relative to the previous release, along with a list of files that were modified by each change.

Generally, the Commission favours continuity when maintaining the existing software. Modifications or additions should follow the best practices established in the existing code base, including the use of the programming languages, libraries, and design patterns. The Contractor should use the same technologies unless otherwise agreed with the Commission in the course of performing work under this Contract.

All software developed under this contract shall follow the IDC Coding Standards (which includes recommended coding style, the required implementation of unit tests, and use of open standards and open-source libraries where possible) and shall compile and run under the Linux operating system family (RHEL/CentOS 6.x + 7.x, or compatible). The IDC guidelines for requirements engineering shall form the basis for eliciting and documenting requirements.

The software that the Contractor shall be working on is being maintained in the Git/GitHub version control system and all software releases shall be delivered via this version control system, using “Pull Requests” unless agreed upon differently.

The Commission has a change management process in place that covers reporting and tracking software problems, as well as releasing software updates in its Development, Testbed and Operational environments. An Integrated Ticketing System based on the JIRA software is used to support this change management process. The Contractor personnel shall familiarize themselves with this process and follow it when releasing software upgrades. All software and configuration changes shall be approved by the Commission’s Configuration Change Board.

The Contractor shall update the respective documentation to reflect changes caused by any upgrade to the software. All documentation shall adhere to the IDC Documentation Standards. Both standards mentioned above will be made available to the Contractor upon request after the entry into force of the Contract.

VIII.1 Work environment

If needed, remote access to the relevant infrastructure in the PTS network should be given to the Contractor. «Infrastructure» comprises, but is not limited to software, servers, VLANs and databases.

For on-site Services provided at the PTS headquarters in Vienna, Austria, the working language is English and the normal weekly working hours are forty (40), Monday to Friday. Exceptionally, there may be a need to work overtime or on Saturdays and Sundays. The working period in a given day will be defined on the basis of actual needs even though the usual working hours Mondays to Fridays are between 08:00am and 06:00pm.
IX. Work Order Report

The Contractor shall submit a Work Order Report to the Commission, electronically via email and before invoicing a Work Order, describing all the activities performed for the Work Order, including but not limited to:

- Summary of technical support activities done;
- Status of active technical support issues;
- Status of tickets, bug reports and possible fixes;
- Status and updated plan for all active development tasks.