REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2021-0105/RAHMAN
(PLEASE QUOTE ON ALL COMMUNICATIONS)

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

Date: 01 Sep 21

Subject: Implementation of Federation of Digital Seismograph Networks (FDSN)
Compliant Web Services

Deadline for Submission: 29 Sep 21
Vienna Local Time: 17:00

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the 'Commission') hereby invites you to submit a proposal that meets the requirements of the attached documents.

You are kindly requested to complete and return the acknowledgement form by fax or email as soon as possible.

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

Yours Sincerely,

_______________________________
Courtney Linley
Chief, Procurement Section
ACKNOWLEDGEMENT FORM

Solicitation No: 2021-0105
Title: Implementation of Federation of Digital Seismograph Networks (FDSN) Compliant Web Services
Closing Date: 29 Sep 21
Vienna Local Time: 17:00

Procurement Staff: Fazal Rahman
CTBTO Req. No.: 0010018352

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

By: ______________________
(date)

Company Name: ________________________________
Contact Name: ________________________________
Email/Tel: ________________________________

B: We may submit and will advise

By: ______________________
(date)

Company Name: ________________________________
Contact Name: ________________________________
Email/Tel: ________________________________

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

___ 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) ________________________________

Company Name: ________________________________
Contact Name: ________________________________
Email/Tel: ________________________________
INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PROPOSALS

1. General

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (the Commission) with its headquarters in Vienna is the International Organization mandated to establish the global verification system foreseen under the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which is the Treaty banning any nuclear weapon test explosion or any other nuclear explosions. The Treaty provides for a global verification regime, including a network of 321 stations worldwide, a communication system, an International Data Centre and on-site inspections to monitor compliance with the Treaty.

This Request for Proposal (RFP) is for the provision of services and supply and delivery of equipment as described in the Terms of Reference.

The Proposal shall meet all requirements stated in the Terms of Reference. For this project, the Commission is seeking capabilities, which will ensure that the equipment is supplied and delivered and the tasks are accomplished expeditiously and at a reasonable cost.

2. Documents included in this RFP

This RFP consists of the following documents:

(a) Letter of Invitation
(b) These Instructions for Preparation and Submission of Proposals and their attachments:
   Attachment A - Mandatory Table of Contents and Format
   Attachment B – Evaluation Methodology
   Attachment C – Sample Format for Pricing
   Attachment D – Procedure for Submission of Electronic Bids in 2 Sealed Files
(c) List of CTBTO Member States
(d) Statement of Confirmation
(e) Vendor Profile Form
(f) The Commission’s Model Contract and its Annexes A – B;
   o The Commission’s General Conditions of Contract (Annex A)
   The Commission’s Terms of Reference (Annex B)

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

3. Amendment of RFP Documents

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

4. Language of the Proposal

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

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 electronically according to the attached “PROCEDURE FOR SUBMISSION OF ELECTRONIC BIDS”.

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

6. **Request for Clarifications and Contacting the Commission**

The Commission will issue clarifications, if required. Bidders are requested to e-mail any questions pertaining to this RFP as soon as possible after receipt of the solicitation documents, but in any case no later than 7 business days prior to the Closing Date. No requests for clarifications will be entertained after this time. Questions will only be accepted via e-mail and should be sent to:

- **E-mail:** procurement@ctbto.org
- **Subject:** Request for Clarifications re RFP No. 2021-0105

The Commission will make all reasonable efforts to issue the clarifications not later than 5 business days prior to the Closing Date.

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

7. **Eligible Goods and Services**

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

8. **Type of Contract and Payment**

The Commission intends to conclude a firm fixed price based on the attached Model Contract. The terms and conditions of payment for services are described in Clause 13 of the attached Model Contract.

9. **Preparation of the Proposal**

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

The Proposal shall be composed of the following separate parts:
I. Technical Proposal; and  
II. Financial Proposal;  

providing, but not limited to, the following information:  

PART I: TECHNICAL PROPOSAL  

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

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

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

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

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

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

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

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

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

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

Personnel  
Curriculum vitae of key staff proposed for this contract, including technical experience to perform the Work.
Sub-Contractors
Names, legal status, address and qualifications of subcontractor(s), if any, and the scope of the subcontracted services. The Proposal shall provide a statement that your organization shall be fully responsible for the performance of sub-contractors. All sub-contractors shall be legally established in one of the CTBTO Member States.

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

Delivery Schedule
The delivery schedule and the period of the services are specified in the Commission’s Terms of Reference (Annex B to the Contract).

PART II: FINANCIAL PROPOSAL
In the financial Proposal, you are required to define the following:

(i) The Total Contract Price in EURO (for EU Companies) or US Dollars, exclusive of taxes.

(ii) In presenting the cost for each item, adequate justification and calculation must be included in the cost Proposal. All individual costs shall be stated in EURO or US Dollars and be computed to constitute the total Contract Price.

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

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

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

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

(iv) Note that clear and detailed explanations would enable us to evaluate the Proposal promptly and proceed with fewer requests for clarifications/justifications in a later stage. This is also a factor influencing the decision for Contract award.

10. Completeness and Correctness of the Proposal

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

11. Validity of Proposal

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

12. Correction of Errors

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

13. Evaluation of Proposal

(a) The Commission, based on the evaluation method given below, will determine the Proposal that ‘most effectively satisfies the technical and operational requirements set out in the solicitation documents’. The relative weighting of each component of the Proposal is 60% for the Technical Proposal and 40% for the Financial Proposal. The successful bidder will be the one with the highest combined score.

(b) The Commission will first conduct a technical evaluation based on the following evaluation criteria:

- Meeting the Requirements of the Terms of Reference
- Experience, Resources and Project Management of the Bidder
- Skills and Experience of Key Staff

A detailed list of the evaluation criteria is provided in Attachment B.

If the Proposal fails to meet the technical requirements for any one item, the entire proposal may be rejected.

14. Negotiations of the Proposal and Award

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

The Commission also reserves the right to split the award for this project if deemed desirable.
15. **Modification and Withdrawal of Proposal**

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

16. **The Commission’s Right to Reject the Proposal**

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

17. **Costs of preparation and submission of the Proposal**

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

18. **Proprietary Information**

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

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

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

a. At any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;

b. At any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.
**BIDDER’S STATEMENT**  
**PLEASE STATE BELOW & SUBMIT WITH PROPOSAL**

<table>
<thead>
<tr>
<th><strong>Delivery Time:</strong></th>
<th></th>
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<table>
<thead>
<tr>
<th><strong>Shipping weight (kg) and Volume (m³) – if applicable:</strong></th>
<th></th>
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</table>

<table>
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<tr>
<th><strong>List of recommended consumables and spares including prices and details on local availability, if applicable (please tick):</strong></th>
<th></th>
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<tbody>
<tr>
<td>☐ For a one-year period ☐ For a period of ……………………………</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><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></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ For a two-year period ☐ For a period of ……………………………</td>
<td></td>
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<table>
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<tr>
<th><strong>Availability of local service in Vienna, Austria (if any):</strong></th>
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<tr>
<th><strong>State country of origin or assembly of all items quoted:</strong></th>
<th></th>
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<tr>
<th><strong>Quantity discount and early payment discount (if any):</strong></th>
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<tr>
<th><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></th>
<th></th>
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</table>

<table>
<thead>
<tr>
<th><strong>Included in this quotation: Yes ☐ No ☐</strong></th>
<th></th>
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<tr>
<th><strong>Confirmation that the bidder has reviewed the Commission’s General Conditions of Contract (if attached), Draft Contract (if attached), and the Commission’s Terms of Reference (if attached), and agreed to all terms and conditions.</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐ No ☐</td>
<td></td>
</tr>
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</table>

<table>
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<tr>
<th><strong>Remarks:</strong></th>
<th></th>
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<table>
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<tr>
<th><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></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐ No ☐ Not applicable ☐</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Remarks:</strong></th>
<th></th>
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<table>
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<tr>
<th><strong>Name:</strong></th>
<th></th>
</tr>
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<table>
<thead>
<tr>
<th><strong>Name &amp; Title of Contact Person:</strong></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Signature &amp; date:</strong></th>
<th></th>
</tr>
</thead>
</table>
## Instructions for Preparation and Submission of Proposal

Software Development of FDSN compliant web services

**Technical Proposal - Mandatory Table of Contents and Format**

<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>
</tbody>
</table>
| 2.1 Corporate Profile and Values          | • Background of company, ownership, size, location, profile  
  • Discuss and show the relationship of any sub-contractors.                                                                                                                                                       |
| 2.2 Corporate Experience                  | • Experience in managing and executing work of similar scope and complexity. Please provide a description of past projects of similar scope and complexity.                                                        |
| 2.3 Project Management Team and Staffing  | • Provide management structure and key personnel of the project.                                                                                                                                               |
| 2.4 Availability of resources             | • Please address in as much detail as reasonable what resources you deem necessary for the successful implementation of the project and when they will be made available during the intended project implementation, in terms of:  
  - key personnel;  
  - hardware;  
  - software;  
  - Other resources.                                                                                                                                        |
| 2.5 Quality Management Plan               | • Provide a Quality Management Plan that describes how quality of services will be maintained throughout the Contract period.  
  • Include QA certifications and relevant references, if applicable.                                                                                                                                               |
| 3. Meeting the Requirements               |                                                                                                                                                                                                                |
| 3.1 Assumptions                           | • The bidder should detail key assumptions that impact the Technical Proposal.                                                                                                                                    |
| 3.2 Understanding of the project          | • The bidder’s response should demonstrate a good understanding of the project as described in the Terms of Reference and describe in detail how the required tasks/services will be accomplished.  
  • The bidder’s response should describe in detail the expected inputs/resources to be made available by the Commission.                                                                                     |
<table>
<thead>
<tr>
<th>4. Experience of the Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Describe the technical challenges developing and maintaining a web service written in Python/Flask on Linux;</td>
</tr>
<tr>
<td>• Elaborate on possible approaches and challenges to developing automated tests with reasonable coverage;</td>
</tr>
<tr>
<td>• Describe the software development methodologies used in past and current projects, highlighting experience with Agile software development methodologies;</td>
</tr>
<tr>
<td>• Provide a detailed description (with examples if possible) of end user and system design documentation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Skills and Experience of key staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide the resume of the proposed key personnel which describes in detail all qualifications and experience specified in section 8.3 of the Terms of Reference.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Attachments (as set out in section 10 of the Instructions for the Preparation of Proposals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Statement of Confirmation</td>
</tr>
<tr>
<td>• Vendor Profile Form</td>
</tr>
<tr>
<td>• Statement regarding Model Contract</td>
</tr>
</tbody>
</table>
## Table 1 Evaluation matrix

Points will be awarded to each bidder for each of the requirements in column 1 of Table 1 above in accordance to Table 2 below. Please note that if a bidder is assigned less than 2 points for any criteria, it is considered that that bidder does not satisfy the minimum technical requirements for this criterion. Bidders that satisfy a criterion to the minimum acceptable level in all areas will be assigned 3 points. Bidders whose proposals demonstrate that they satisfy a criterion beyond the minimum level will be assigned additional points, up to 5.
Table 2: Number of points assigned for each of the criteria in Table 1

<table>
<thead>
<tr>
<th>Points</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>Does not meet the minimum technical, functional, or performance related criterion. Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion.</td>
</tr>
<tr>
<td>2</td>
<td>Meets the criterion in most areas but is lacking details and responsiveness in some areas of the criterion.</td>
</tr>
<tr>
<td>3</td>
<td>Meets the criterion in all areas.</td>
</tr>
<tr>
<td>4</td>
<td>Meets the criterion to minimum acceptable levels in all areas and exceeds it in some areas.</td>
</tr>
<tr>
<td>5</td>
<td>Response exceeds the criterion in all areas and adds additional technical, functional and performance related value to the proposed services.</td>
</tr>
</tbody>
</table>

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

\[ X = \text{Max Available Score} \times \frac{Y}{Z} \]

Legend

\( X = \) score to be assigned to the offer being evaluated

\( Y = \) price of the lowest priced, technically compliant offer

\( Z = \) price of the offer being evaluated

The Contract will be awarded to the bidder who receives the highest combined score resulting from the technical and financial evaluation. The weight of the technical and evaluation components is 60% and 40% respectively.

Bidders are expected to accept the Commission’s General Conditions on Contract as well as Model Contract in full. Any deviations from such documents may be a factor in the Commission’s contract award decision.
## Fees

<table>
<thead>
<tr>
<th>Task</th>
<th>Core FDSN web service implementation*</th>
<th>EA</th>
<th>1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff - off site for Task 2: 4.2. Infrastructure Integration and Miscellaneous Support*</td>
<td>Person-Day</td>
<td>50&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ancillary costs under Task 2: 4.2. Infrastructure Integration and Miscellaneous Support*, if applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International return travel*</td>
<td>Trip/person</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowances*** (if applicable)</td>
<td>person/day</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal ancillary costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*) Please change/add categories as appropriate.
**) Please specify currency (USD or Euro only).
***) Daily subsistence allowance (DSA) per person per on-site working day including accommodation and local transport
#) Airfares should be based on the least costly (Economy Class ticket), most direct route.
*) Estimated number of days. The Commission reserves the right to call less or no days at all.
PROCEDURE FOR SUBMISSION OF ELECTRONIC BIDS IN 2 SEALED FILES

Given the current logistics restrictions at the Vienna International Centre as a result of the COVID-19 situation, the Commission invites you to submit your sealed bids in response to Request for Proposal No. 2021-0105: Implementation of Federation of Digital Seismograph Networks (FDSN) Compliant Web Services.

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

CRITICAL INFORMATION:

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

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

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

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

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

INSTRUCTIONS:

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

We recommend using the open-source, free software 7-zip, but if you are comfortable with other tools, the result should be the same, as long as you can apply encryption to the archive. In the below, we’ll use 7-zip as an example. (You can download the 7-zip code for Windows at: 7-zip.org)

In LINUX, you can use, for instance, ‘sha1sum’ on the command line.

Creating the archives for submission

Regardless of whether the bid is a single file, or a collection of files, the files are easier to manage if delivered as a single, compressed file. Compressing the archive is a common way to meet size limitations in email systems.
As an example of how to submit your bid in the required format: assuming you are supplier “SOFTCOMP” and have the following files related to the bid for “RFP 2020-0010/EDWALD”. *(You will need to replace these elements with the real information for your actual bid.)* Assuming further that you have installed the 7-zip software on the Windows system you are using. We will only go through the creation of the Technical bid component; the Financial bid component is similar.

Figure 1 An example set of files to be submitted

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

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

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

Leave all the other settings as is, except: **add a password to the encryption** (see figure 2 below). This is done by typing the same password (of your choosing) twice in the two text fields in the lower right hand corner. **Make a note of this password. You must choose different passwords for the two zip archives, that is, the Technical and the Financial bids.**
Now, we seek the “SHA1 Hash”, and electronic fingerprint of the archive you have just created. The hash is a string calculated from your file(s) and can be used to guarantee that the file hasn’t been modified since you created it. Any change to the file will result in a different hash value.

There are many ways of calculating this; two common options are described below.

If the appropriate functionality is available in your Windows environment: Select the compressed archive in the Windows file manager, (eg. SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip) and right click. One of the options to select is **CRC SHA >**. Hovering over the “ >” brings a few more options to light, select the **SHA-1** option. A smaller dialog pops up: (see Figure 3, SHA1 below). Clicking Ctrl-C grabs the contents of this box. You can close the box after copying the contents. (You can paste the contents into a mail message, for instance.)
If this CRC SHA function is not available by ‘right-click’ on your Windows version, you can also do this from ‘the command line’, a slightly more complicated way. Open a CMD window (see sidebar below), move to the folder where your archive is, and execute the command: “certutil –hashfile SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip sha1” where you obviously replace the name of the file with your real file name. The output of this command is the SHA1 “hash”. You can copy-and-paste the string for use in the email (below).

Sidebar: How to open a CMD window in Windows:

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

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

Finally,

1. Create a new email, Subject: example- “SOFTCOMP-2020-0010-EDWALD”. Add the two compressed archives, that is, the Technical Bid and the Financial Bid archives as attachments. The text of the email should contain the SHA1 information for both archives.

   SEND THIS TO: sealed_bids@ctbto.org  (note that there is an underscore “_” between “sealed” and “bids”). (Should the email become larger than your mail system allows, you can try sending the two archives in separate emails. Take care to include the right SHA1 information with each file.)

2. Create a new email, Subject: example- “SOFTCOMP-2020-2010-EDWALD-Technical Bid” the contents of which must contain the Encryption Key for the Technical Bid (the password you used when creating the Technical Bid). (Again, note the underscore between ‘bid’ and ‘keys’.)

   SEND THIS TO: bid_keys@ctbto.org

   IMPORTANT NOTE: As stated above, only send the Encryption Key for the Technical Bid to the bid_keys@ctbto.org mailbox when sending your Technical and Financial Bids to the sealed_bids@ctbto.org mailbox. You shall only send the Encryption Key for the Financial Bid
to the Commission if and when informed by the Commission that your Technical Bid had been evaluated as “technically acceptable”.

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

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

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

(Shopping Cart No. )
(SAP No. )

between

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

and

THE NAME OF THE CONTRACTOR

for

the provision of services pertaining to

IMPLEMENTATION OF FEDERATION OF DIGITAL SEISMOGRAPH NETWORKS (FDSN) COMPLIANT WEB SERVICES

This Contract comprises this cover page, a table of contents, 7 (seven) pages of text, a signatories page, a List of Annexes and 3 (three) Annexes (A to C)

August 2021
# TABLE OF CONTENTS

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

This CONTRACT is entered into between the PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (hereinafter referred to as the “Commission”), having its office located at Wagramer Strasse 5, 1400 Vienna, Austria, and ___________________________ (hereinafter referred to as the “Contractor”), having its registered office located at ___________________ [address] (both hereinafter individually referred to as the “Party” and collectively as the “Parties”).

The Parties hereto mutually agree as follows:

1 DEFINITIONS

In this Contract, words and expressions shall have the same meanings as respectively assigned to them in the General Conditions of Contract and the Terms of Reference. In addition, the following words and expressions shall have the meanings hereby assigned to them:

“Annex A” means the Commission’s General Conditions of Contract.

“Annex B” means the Commission’s Terms of Reference.

“Annex C” means the Contractor’s Proposal 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 21 below.

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

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

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

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

“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 namely, Implementation of Federation of Digital Seismograph Networks (FDSN) Compliant Web Services (hereinafter referred to as the “Services” or “Work”) to the Commission.

3 ENTRY INTO FORCE AND DURATION OF THE CONTRACT

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.

4 COMMENCEMENT AND COMPLETION OF THE WORK

(i) Regarding the firm Services within the meaning of Section 3.2. a) and Section 4.1. “Core FDSN web service implementation” of Annex B, the Contractor shall complete the Work within (12) twelve months from the Effective Date.

(ii) Regarding the callable Support Services within the meaning of Section 3.2. b) and Section 4.2. “Infrastructure Integration and Miscellaneous Support” of Annex B, the Commission shall have the right, but not obligation, to call-off the Works in the form of WO within a period of (18) eighteen months from the Effective Date or the performance of a maximum of 50 (fifty) 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.

(iii) The WO issued by the Commission shall be the basis for acceptance, invoicing and payment of any Work performed by the Contractor.

(iv) The performance of the Work 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.

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

(vi) The Commission may revise an WO as and when it may deem necessary.

5 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.

6 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.

[SUB-CLAUSE (c) BELOW IS TO BE USED ONLY WHEN THE COMMISSION REQUIRES THE DEVELOPMENT OF SOFTWARE.]

(c) The Contractor acknowledges that after the completion of the Work under this Contract, the Commission shall own the Software and source code described in Annex B and the Contractor shall have no rights in that Software or source code unless granted by the Commission [under Clause 24 of this Contract or in writing under a separate agreement].

7 ORGANISATION OF CONTRACT IMPLEMENTATION

(a) During the term of the Contract, the Commission has the right, but not the obligation, to initiate performance of the Work through the issuance of individual WOs 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 an WO. However, the Contractor may propose a WO for the Commission’s evaluation.

(b) The WO issued by the Commission shall be the basis for acceptance, invoicing and payment of any Work performed by the Contractor.

(c) The performance of the Work 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 Work 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.

8 WARRANTY

(a) The provisions of Clause 28 of Annex A shall apply to the Work 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.
9 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. This shall include, but not be limited to, work permits, visa, or similar.

(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.

10 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.

11 RESPONSIBILITIES OF THE COMMISSION

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

12 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 the firm Services within the meaning of Section 3.2. a) and Section 4.1. “Core FDSN web service implementation” of Annex B and, subject to Clause 4(i) above, the firm fixed price pursuant to Annex C;

For each WO issued during the Call-off Period specified in Clause 4(ii) above, a firm fixed daily rate pursuant to Annex C, plus, if applicable, the variable costs (travel costs and other expenditure), mentioned in section 6.1 of Annex B, pursuant to Annex C, hereinafter referred to as the “Contract Price”.

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

(c) 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).

(d) [PLEASE IDENTIFY WHETHER TAXES ARE APPLICABLE UNDER THIS CONTRACT AND SELECT ONE OF THE FOLLOWING OPTIONS AT THE TIME OF AWARD]:

The Contractor shall be reimbursed by the Commission for such taxes on the basis of actual amounts paid and duly documented by the Contractor as per Clause 13(e) below.

OR

No Taxes are applicable under this Contract.

13 PAYMENT

(a) The Contract Price shall be paid upon satisfactory completion of each deliverable for the Work and satisfactory completion of each WO and submission of the following:
i)  Invoice drawn up in accordance with this Clause 13;

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 as per Sub-Clause (d) below. All payments shall be made within 30 (thirty) days of the receipt and acceptance of the invoice, provided that the Work has been satisfactorily completed and has been accepted by the Commission.

(c) The making of any payment hereunder by the Commission shall not be construed as an unconditional acceptance by the Commission of the Work accomplished by the Contractor up to the time of such payment.

(d) The Contractor shall submit an invoice in 1 (one) original and 2 (two) copies or electronically, from the Contractor’s official e-mail address in PDF format, duly signed and stamped by the Contractor and submitted to the Commission’s email address specified in Clause 22 below. Each invoice shall contain the Contract number (CTBTO and SAP numbers), detailed banking instructions, including the name and address of the Contractor’s bank, account number, account holder’s name and SWIFT, IBAN and/or ABA codes for payment by electronic transfer.

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

14 TEMPORARY SUSPENSION OF WORK

The Commission may, at any time, temporarily suspend the Work, in whole or in part, being performed by the Contractor under this Contract by giving 30 (thirty) days’ advance notice in writing to the Contractor. The Work so suspended shall be resumed by the Contractor on the basis of a revised time schedule and on terms and conditions to be mutually agreed upon between the Parties.

15 DELAYS AND EXTENSION OF TIME

(a)  If the Contractor is delayed at any time in the progress of the Work by any act or omission of the Commission or by any of its employees, or by any other contractor employed by the Commission, or by changes in the Work ordered by the Commission, or by any causes beyond the Contractor’s reasonable control, or by any other cause which the Commission
determines may justify the delay, then the time for completion of the Work shall be extended by an amendment to this Contract in accordance with Clause 21 below for such reasonable time as the Commission may determine.

(b) Any request for extension of the time for reasons referred to in Clause 15(a) above shall be submitted to the Commission not later than 20 (twenty) days after the commencement of the delay, otherwise said request shall be deemed to be waived. Such request shall state grounds for the delay and shall provide an estimate of the probable effect of such delay on the progress of the Work.

16 CONTRACTOR’S CLAIMS AND REMEDIES

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

17 ENTIRE AGREEMENT

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

18 DISCREPANCIES

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

(i) This document;

(ii) The Commission’s General Conditions of Contract (Annex A);

(iii) The Commission’s Terms of Reference (Annex B);

(iv) The Contractor’s Proposal (Annex C);

(v) The relevant WO.

19 SEVERABILITY

If any term and/or provision of this Contract is or becomes invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Contract shall not in any way be affected or impaired thereby.
20 NO WAIVER

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

21 CONTRACT AMENDMENT

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

22 TRANSMISSION OF NOTICES AND OTHER DOCUMENTS

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

(a) The Commission:

For Contractual Issues:

Chief, Procurement Section
Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6350
E-mail: procurement@ctbto.org

For Invoices 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:

For Contractual Issues and Invoices and Related Enquiries:

Name: ..............
Title ................
Address ..............
Tel: ...................
Email: ..............
23 EFFECTIVENESS

(a) Except as provided below, any communication in connection with the Contract will be deemed to be given as follows:

(i) if delivered in person, at the time of delivery;

(ii) if by registered mail or courier, when received;

(iv) if by electronic communication, when retrievable by the Commission in document form.

(b) A communication given under Clause 23(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.

24 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: ______________
LIST OF ANNEXES [UPDATE AS APPLICABLE]

ANNEX A: THE COMMISSION’S GENERAL CONDITIONS OF CONTRACT

ANNEX B: THE COMMISSION’S TERMS OF REFERENCE

ANNEX C: THE CONTRACTOR’S PROPOSAL
General Conditions of Contract

1. DEFINITIONS
(a) In these general conditions of contract the terms beginning with a capital letter shall have the meaning as defined in the Contract.
(b) “Services” means all services to be rendered under the Contract.
(c) “Goods” shall mean all goods, equipment, materials and/or other supplies to be provided under the Contract.
(d) “Taxes” shall mean all direct and indirect taxes (including value added tax, general sales tax or goods and services tax), assessments, fees, customs duties, liens and charges in as much as they are levied in conclusion or implementation of the Contract, including customs restrictions and charges of similar nature in respect of articles imported or exported for the Commission’s official use.

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

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

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

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

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

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

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

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

10. ENCUMBRANCES/LIENS

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

11. OBSERVANCE OF THE LAW

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

12. CONFIDENTIALITY

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

13. LANGUAGES, WEIGHTS AND MEASURES

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

14. PUBLICITY

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

(a) The Contractor warrants that:
(i) No person or selling agency has been employed or retained by it to solicit or secure the Contract upon an agreement or understanding for a commission, percentage, brokerage, contingent fee or retainer, except regular employees or bona fide and officially established commercial or selling agencies maintained by the Contractor for the purpose of securing business;
(ii) No official or servant or retired employee of the Commission who is not a regular employee of the Contractor, has been or shall be admitted by the Contractor to any direct or indirect benefit arising from the Contract or the award thereof.

16. INTELLECTUAL PROPERTY AND OTHER PROPRIETARY RIGHTS

(a) Except to the extent the Contractor has granted a license to the Commission, the Contractor 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 for infringement of intellectual property rights, the Contractor shall continue to be in full force and effect up to the expiration of such intellectual property rights.

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

17. DEFAULT BY THE CONTRACTOR

(a) In case the Contractor fails to fulfil its obligations and responsibilities under the Contract and provided the Contractor has not remedied such failure(s) within thirty (30) days of having been given written notification by the Commission of the nature of the failure(s), the Commission may, at its entire discretion and without prejudice to its right to withhold payment(s), hold the Contractor in default under the Contract.

(b) When the Contractor is thus in default, the Commission may, by giving written notice to the Contractor, terminate the Contract as a whole or such part or parts thereof in respect of which the Contractor is in default. Upon such notice, the Commission shall have the right to seek completion, at the Contractor’s expense, of that part or those parts of the Contract with respect to which the Contractor is in default.

(c) The Contractor shall, in this case, be solely responsible for any reasonable costs of completion of the Services and/or delivery of Goods, including such costs, which are incurred by the Commission over and above the originally agreed Contract Price.

18. WITHHOLDING OF PAYMENT

(a) The Commission may withhold any payment to the Contractor or, on account of subsequently discovered evidence, nullify the whole or part of any payment approval theretofore given, to such an extent as may be necessary to protect the Commission from loss under the Contract on account of:
(i) The Contractor’s failure to carry out its obligations or to make adequate progress with the obligations, except for failure arising out of force majeure;
(ii) The Contractor’s failure to remedy unsatisfactory performance, when such failure has been drawn to his attention by the Commission;
(iii) The Contractor’s failure to submit on time the reports required.

(b) The withholding by the Commission of any interim payment shall not affect the Contractor’s obligation to continue performance of his obligations under the Contract.

(c) No interest shall accrue on payments eventually withheld by the Commission in application of the stipulations of this paragraph.

19. LIQUIDATED DAMAGES

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

20. FORCE MAJEURE

(a) Force majeure as used herein shall mean acts of God, industrial disturbances, acts of the public enemy, civil disturbances, explosions and any other similar cause of equivalent force not caused by nor within the control of either party and which neither party is able to overcome.

(b) As soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the Commission of such force majeure if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract.

(c) In this event, the following provisions shall apply:

(i) The obligations and responsibilities of the Contractor under the Contract shall be suspended to the extent of its inability to perform them and for as long as such inability continues;

(ii) The term of the Contract shall be extended for a period equal to the period of suspension taking, however, into account any special conditions which may cause the time for completion of the obligations to be different from the period of suspension;

(iii) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure to perform its obligations and meet its responsibilities under the Contract, the Commission shall have the right to terminate the Contract on the same terms and conditions as are provided for in the Termination Clause of the Contract, except that the period of notice may be seven (7) days instead of thirty (30) days;

(iv) For the purpose of the preceding sub-clause, the Commission may consider the Contractor permanently unable to perform in case of any period of suspension in excess of ninety (90) days. Any such period of ninety (90) days or less shall be deemed temporary inability to perform.

21. INSOLVENCY AND BANKRUPTCY

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

22. INDEMNIFICATION

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

23. AMICABLE SETTLEMENT

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

24. ARBITRATION

(a) In the event of a failure to reach an amicable settlement in accordance with Clause 23 above (amicable settlement), any dispute arising out of the interpretation or application of the terms of the Contract or any breach thereof shall be settled in accordance with the arbitration rules established by UNCITRAL as at present in force. The number of arbitrators shall be one. The arbitration shall be in Vienna, Austria, and it shall be conducted in the English language.

(b) The arbitrator shall take into account the internationally recognized general principles of commercial transactions. The arbitrator shall have no authority to award punitive damages, nor to award interest in excess of five (5) per cent, and any such interest shall be simple interest only. The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute.

25. PRIVILEGES AND IMMUNITIES

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

25(a). TAX EXEMPTION

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

26. TERMINATION

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

27. GOODS

In the event that the Contract requires the Contractor to supply Goods, the following clauses shall apply in addition to the above.

28. WARRANTY

(a) The Contractor warrants that the Goods, including packaging, conform to the specifications for the Goods ordered under the Contract and are fit for the purpose for which such Goods are ordinarily used and for purposes expressly made known to the Contractor by the Commission, and are new and free from defects in design, workmanship and materials.

(b) This warranty shall remain valid for twenty-four (24) months after the Goods or any part thereof have been delivered and accepted, whichever is later, unless the Contractor has granted a longer period. Should the Commission transfer the title of the Goods to a third party during the warranty period, the right to enjoy the warranty shall be transferable to the new title-holder.

(c) If, during the warranty period mentioned in Sub-clause (b) above, the Goods or any part thereof are found to be defective or not in conformity with the specifications under the Contract, the Contractor shall, upon notification, promptly and at its own expense correct all such defects and non-conformities. If these defects and non-conformities cannot be corrected, the Commission shall have the right, at the Contractor’s expense, to either demand replacement of the defective item, or receive appropriate reimbursement, or have the defective item repaired or otherwise procured from a third party.

29. INSPECTIONS AND TESTS

(a) The Commission shall have the right to inspect and/or to test the Goods to confirm their conformity to the technical specifications. The technical specifications shall specify what inspections and tests the Commission requires.

(b) The inspections and tests may be conducted on the premises of the Contractor or its subcontractor(s), at a point of delivery designated by the Commission and/or at the Goods’ final destination. The Contractor shall give all reasonable facilities and assistance-including drawings and production data-to the Commission at no charge to the Commission.

(c) Should any inspected or tested Goods fail to conform to the technical specifications, the Commission reserves the right to reject them and the Contractor shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of cost to the Commission.

(d) The Commission’s right to inspect, test and, where necessary, reject the Goods after the Goods’ arrival at the point of delivery designated by the Commission or at the Commission’s offices, shall in no way be limited or waived by reason of the Goods’ having previously been inspected, tested and passed by the Commission.

(e) Nothing in this Section on Inspections and Tests shall in any way release the Contractor from any warranty or other obligations under the Contract.

(f) All equipment/material supplied under the Contract may be subject to pre-shipment inspection by a third party to be specified by the Commission. The Contractor is not liable for cost of this inspection.

30. PACKING

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

(a) The Goods shall be packed as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit.

(b) In the case of a cross-border shipment, the Goods shall have appropriate export packing. If necessary, all cases/crates must be wrapped inside with heavy-duty plastic lined paper, should be steel-strapped and must be able to withstand tough handling. Skids for truck handling are imperative if the gross weight is more than 30 kilograms.

(c) The consignment shall be marked and shipped as per address shown on the Purchase Order Form.

(d) Neither partial delivery nor transhipment shall be made unless specifically agreed by the Commission in writing.

(e) Each case/crate/package shall carry a consecutive number, dimensions, volume, and weight (i.e. Case No. X of Y cases, A x B x C cm, E m3, D Kg.) and shall be marked as follows:

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

PURCHASE NO. ____________________
GROSS 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

for the

Implementation of Federation of Digital Seismograph Networks (FDSN) Compliant Web Services
CONTENTS

Contents................................................................................................................................. 2

1. Introduction .......................................................................................................................... 3

2. Background .......................................................................................................................... 3

3. Scope of work ....................................................................................................................... 3
   3.1. Objectives ....................................................................................................................... 3
   3.2. Requested services .......................................................................................................... 4
       a) Core FDSN web service implementation ...................................................................... 4
       b) Infrastructure Integration and miscellaneous support ................................................ 5
   3.3. Output and deliverables .................................................................................................. 5

4. Organization of work .......................................................................................................... 6
   4.1. Core FDSN web service implementation ...................................................................... 6
   4.2. Infrastructure Integration and Miscellaneous Support ................................................ 6

5. Commission’s responsibilities ........................................................................................... 6

6. Work Location and timeframe ............................................................................................ 7
   6.1. Location .......................................................................................................................... 7

7. Reporting .............................................................................................................................. 7
   7.1. Core FDSN web service implementation ...................................................................... 7
   7.2. Infrastructure Integration and miscellaneous support ................................................ 7

8. Requirements for the contractor ........................................................................................ 7
   8.1. Contractor’s responsibilities .......................................................................................... 7
   8.2. Contractor’s requirements .............................................................................................. 7
   8.3. Contractor’s key personnel requirements ...................................................................... 8

9. CTBTO procedures and policy for data access and publications ........................................ 8
1. INTRODUCTION

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organisation (hereafter referred to as the “Commission” or “CTBTO”), located in Vienna, Austria, is the international organisation establishing the global verification system under the provisions of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which bans any nuclear explosion on the surface of the earth, underground, in the atmosphere, underwater and on the surface of the water. The verification system includes the International Monitoring System (IMS), a global network of monitoring stations that employ waveform technologies (seismic, hydro-acoustic and infrasound) and radionuclide technologies (particulate and noble gases), a global satellite communications infrastructure (hereinafter referred to as the GCI), an International Data Centre (IDC) and the capability to carry out on-site inspections (OSI).

The IDC supports the verification responsibilities of the Commission by providing data products and services for effective global monitoring. The IDC collects and analyses data from the IMS network to detect and locate possible nuclear events. At the IDC, data are automatically processed by computer algorithms and then interactively analysed and reviewed by human analysts. Near-real time data and data products/bulletins are distributed to the State Signatories.

To improve the distribution of its data and products, the Commission has decided to adopt the standardized FDSN webservices protocol. This additional option will enable State Signatories to access IMS data and IDC products with client software that supports this standard.

2. BACKGROUND

The International Federation of Digital Seismograph Networks (FDSN) is a global organization. Its membership is comprised of groups responsible for the installation and maintenance of seismographs either within their geographic borders or globally.

The FDSN established a standardized protocol that enables compliant client software to access and retrieve seismic network configuration information as well as seismic data and products.

The Commission operates a network of seismic, infrasound and hydro acoustic (SHI) stations. It stores its data and products in a CSS3.0 database and currently distributes them to State Signatories using custom data formats and protocols.

3. SCOPE OF WORK

The Commission seeks to establish a contract to implement access to its SHI data and products through FDSN compliant webservices for time series metadata (station configuration), time series data (waveforms), event parameter and related data (bulletins) and time series data availability. Since the IMS data and IDC products are restricted to authorized users from State Signatories, the implementation is required to provide adequate authentication and authorization mechanisms as well as to be implemented in a scalable and maintainable way.

3.1. Objectives

The objective of providing FDSN web services compliant access to IMS data and IDC products is to simplify access for authorized users from State Signatories.
3.2. Requested services

a) Core FDSN web service implementation

Based on the existing CSS 3.0 IDC database, the Contractor shall implement the following FDSN web services:


The commonalities between these four web services are specified in FDSN Web Service Specification Commonalities, version 1.2 (http://www.fdsn.org/webservices/FDSN-WS-Specification-Commonalities-1.2.pdf)

The CSS 3.0 data schema is defined in: https://l2a.ucsd.edu/local/Manuals/CSS3.0_Format_Manual.pdf. Some of the information provided by the fdsnws-station and fdsnws-dataset web services reside in response and time series files. These files are found through the CSS 3.0 instrument and wfdisc tables. While time series files can be easily converted from CSS to SEED format (e.g. using the python package obspy or IDC provided software), response files need to be parsed to extract the requested information.

The IDC operates two CSS 3.0 databases, one for operational use and one with archived data. The FDSN web service implementation needs to be able to work with both databases and the timespan where the implementation switches from the operational database to the archive database must be configurable by the system administrator.

The implementation of FDSN webservices shall provide detailed and configurable logging output to support issue resolution and it should collect and store traffic related information in a SQL database for accounting purposes.

The FDSN web services shall be implemented in a micro service architecture using the Python programming language (version 3.6) and the Python Flask web application framework. It shall be deployed in a containerized environment based on docker. Base images for containers are required to be certified by Red Hat (https://catalog.redhat.com/software/containers/search)

The usage of existing Python packages that can work with CSS 3.0 and FDSN web services data, such as obspy (https://obspy.org), is encouraged.

The Commission is currently re-engineering its software and it is expected that the CSS 3.0 IDC database will be replaced in the medium-term future with a modern, REST API based architecture. Therefore, the Contractor is expected to implement a data access layer that can be adapted to the re-engineered software once it becomes available.
In addition to implementing the four FDSN web services, the Contractor is expected to provide unit and integration tests that can be used in automated build and deployment pipelines. Integration tests must use independently developed FDSN webservice compliant client software such as the obspy FDSN client (https://docs.obspy.org/packages/obspy.clients.fdsn.html).

b) Infrastructure Integration and miscellaneous support

Since IMS data and IDC products are only available to authorized users from State Signatories, the IDC FDSN web services implementation requires protection through adequate authentication and authorization mechanisms. The Commission uses a Single Sign-On (SSO) service based on the Oracle Access Manager (OAM) product which will be used to grant access rights to the FDSN web services. It offers several options of integration into back-end services, among them basic HTTP authentication, HTTP header authentication and OpenID Connect. The Contractor is expected to propose a secure and efficient method of authenticating and authorizing FDSN web service API usage and to integrate the proposed authentication and authorization capabilities of SSO into the FDSN web services deliverable.

The Commission uses Gitlab CI/CD to automate the build, testing and deployment of its software. The Contractor is expected to support the Commission in integrating the deliverables specified in 3.3.a) into its automated build and test infrastructure.

3.3. Output and deliverables

a) FDSN compliant web services

The Contractor shall deliver a containerized, Python 3.6/Flask microservice based implementation of the FDSN web services as specified in 3.2. a) that uses data stored in the IDC CSS 3.0 database and from linked response and data files where necessary. The implementation of FDSN web services shall run and will be tested on Red Hat Enterprise Linux, version 7.

Acceptance of the fdsnws-station and fdsnws-dataset select service requires that they produce output equivalent to the output of the IRIS FDSN webservice (https://service.iris.edu/fdsnws/), for all IMS stations listed in the IRIS IM network (https://www.fdsn.org/networks/detail/IM/). A list of IMS stations available on the IRIS FDSN webservice will be provided to the Contractor after contract signature. Furthermore, the Python package obspy.clients.fdsn.client (https://docs.obspy.org/packages/autogen/obspy.clients.fdsn.client.Client.html) will be used to verify that the implementation is compliant with the FDSN web service standard.

The Contractor shall provide adequate documentation consisting at a minimum of:
- Software Design documentation
- Installation and Administration Guide

b) Infrastructure Integration and Miscellaneous Support
The Contractor shall integrate the deliverables under 3.3 a) into the Commission’s Single Sign-On infrastructure to protect the IDC FDSN web services from unauthorized access.

The Contractor shall support the Commission to integrate the deliverables under 3.3 a) into its continuous integration and deployment (CI/CD) infrastructure.

4. ORGANIZATION OF WORK

4.1. Core FDSN web service implementation
The Contractor is expected to provide the deliverables as specified in 3.3. a) for a firm, fixed price within a period of 12 months.
To monitor the implementation, monthly status online and off-site meetings will be held where the Contractor will report to the Commission on progress achieved and issues encountered.
The Contractor is encouraged to use an Agile development methodology and provide incremental snapshots of the FDSN webservice implementation for early testing and feedback by the Commission.

4.2. Infrastructure Integration and Miscellaneous Support
The Commission shall have the right, but not the obligation, to call-off the Infrastructure Integration and Miscellaneous Support services, as specified in 3.3. b), in the form of Work Orders during the Contract term. The number of called-off person-days will be limited to a maximum of 50 days and they are all to be online and off-site.
The call-off period starts on the day of signature of the Contract and ends 18 months thereafter.
The Commission reserves the right, at its sole discretion, to call-off less or no person-days at all.

5. COMMISSION’S RESPONSIBILITIES
The Commission will provide to the Contractor remote access to the relevant infrastructure in the PTS network, should it be deemed necessary. “Infrastructure” comprises, but is not limited to software, servers, VLANs and databases. The Commission will also make reasonable efforts to cooperate with the Contractor in connection with its performance under the Contract, including, but not limited to, reasonable and timely access to the Commission’s personnel, documentation, and databases and other necessary identified sources of information.
For on-site work to be performed at the PTS headquarters in Vienna, Austria, the Commission will provide at its premises a suitable work environment (work space, meeting rooms for presentations and trainings, standard stationery, internet connection) to the Contractor’s personnel to perform the services under the Contract, as required.
6. WORK LOCATION AND TIMEFRAME

6.1. Location
For all tasks, the Contractor’s personnel will be expected to work off-site the premises of the Commission in Vienna, Austria. Only for the purposes of meetings, on-site installation, or other activities as required, the Contractor’s personnel 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.

The Contractor shall make all the travel arrangement (visas, hotels etc.) for their personnel, if travels are required. Daily Subsidiary Allowance (DSA) shall be calculated by the Commission based on the amounts provided by the International Civil Service Commission (ICSC) at https://icsc.un.org/Home/DailySubsistence.

7. REPORTING
All communication, including reports, must be submitted in English.

7.1. Core FDSN web service implementation
The Contractor is required to submit a status report two (2) days prior to the monthly status meeting. This status report shall outline the activities performed during the month, any progress achieved as well as any issues encountered. It shall also clearly specify items that require attention and/or support by/from the Commission.

7.2. Infrastructure Integration and miscellaneous support
The Contractor is required to submit a status report for any completed Work Order that has been issued under 4.2. This status report must clearly list the tasks performed and the number of person-days spent on every completed task.

8. REQUIREMENTS FOR THE CONTRACTOR

8.1. Contractor’s responsibilities
For off-site work, the Contractor shall provide their 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, electronic mail, or video teleconferencing, 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.

8.2. Contractor’s requirements
The Contractor shall satisfy the following mandatory requirements:

- A minimum of three (3) years of experience in developing containerized, microservice based web services, experience in software development for geophysical applications is an advantage;
- A minimum of three (3) years of experience in developing Python based web services or web applications, experience with the Python Flask framework is an advantage;
- Experience in preparing compelling end user and system design documentation;
- Experience with writing unit, integration and regression tests; and
- A proven track record in applying Agile methods to software development.

### 8.3. Contractor’s key personnel requirements

The Contractor’s key personnel **overall considered** shall comply with the following requirements throughout the duration of the Contract:

- University degree in computer science or in geophysics with a demonstrated and strong computing emphasis;
- A minimum of three (3) years of recent experience developing containerized microservices using Python, experience in software development for geophysical applications is an advantage;
- A minimum of three (3) year of recent experience using Linux as a software development platform, usage of RedHat derived distributions such as RedHat Enterprise Linux or CentOS is an advantage;
- Demonstrated experience with iterative and/or agile software development methodologies; and
- Ability to communicate fluently in written and spoken English in a structured, clear and concise manner.

### 9. CTBTO PROCEDURES AND POLICY FOR DATA ACCESS AND PUBLICATIONS

CTBTO procedures and policies for accessing IMS data and IDC products by contractors are laid down in the report of Working Group B to the 14th session of the Preparatory Commission for the CTBTO, CTBT/PC-14/1/Annex II and in particular in Appendix IV, “Procedures for access to IMS data and IDC products by contractors”.

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**PROCEDURES FOR ACCESS TO IMS DATA AND IDC PRODUCTS BY CONTRACTORS**

**INTRODUCTION**

1. Document CTBT/PC-13/1/Annex II states that

   “WGB recognizes that, for purposes of the development of the IMS and IDC, the PTS is interested in interaction with the international scientific community. Therefore, in order to develop and optimize the IMS and the IDC, the PTS could request the contributions of organizations for scientific purposes. Such organizations might need to have access to IMS data and IDC products for the purpose of the contracted scientific studies. IDC products for specific verification cases are not involved.”

**POLICY FOR ACCESS BY CONTRACTORS**

2. The CTBTO PrepCom document CTBT/PC-13/1/Annex II (28 November 2000) defines the policy for provision of access to IMS data and IDC products...
to organizations contracted by the Provisional Technical Secretariat (PTS) of the Commission to do work for the PTS as follows:

- “Each Contractor will access only those IMS data and IDC products necessary for fulfilling its task.
- The IMS data and IDC products will be used only for research associated with the development of the IMS and IDC or for the purposes stated in the contracts.
- Access provided to an organization for the purposes of fulfilling a contract will terminate when the contract is completed.
- The restrictions placed on all users will not exclude the presentation of data or products (or information derived therefrom) for peer review at scientific meetings or in scientific journals and other scientific publications. The inclusion of IMS data and IDC products in scientific journals and other scientific publications will be limited to those required to reflect the scientific achievements.
- The Contractor should not redistribute these data to third parties.”

3. IDC bulletins that incorporate event screening criteria shall not be included.

**PROCEDURES**

4. Procedures to be followed at the PTS to ensure implementation of this policy are as follows.

**Contractual Issues for Access by Contractors**

5. A scientific organization that submits a proposal to the PTS should state the need to have access to IMS data and IDC products and for what purpose(s). If the proposal is accepted by the PTS, a section defining the terms for access to data and products will be included in the contract.

6. If, during contracted scientific work, a need for access arises that was not foreseen when the contract was signed, the PTS can propose to the contracted scientific organization an amendment to the contract giving the contractor additional access to IMS data and IDC products to the extent needed.

**Access by Contractors**

7. The IDC is the focal point within the PTS for distribution of IMS data and IDC products.

8. The IDC will give a scientific organization access to the IMS data and IDC products as stipulated in the contract or its amendments.

9. The access will be in accordance with the policy defined in policy paragraph above.

10. The IDC may, if appropriate, give the Contractor automatic access to IMS data and/or IDC products through the AutoDRM system. Access will be monitored to ensure that only those data and/or products that are agreed to be necessary for the particular contract work are accessed by the Contractor.

11. If access through the AutoDRM system is not given to a Contractor, access will instead be handled manually by the IDC to ensure that access is only given to the data and/or products as stipulated in the contract.
12. Only requests from the persons authorized in the contract to request IMS data and IDC products will be considered. The number of such persons will be limited to three per contract.

13. Technical assistance with accessing the data and products will only be given to the persons referred to in item 5 in this paragraph.

14. The Fusion, Review and Services Unit of the IDC Division will support access by Contractors.

15. The IDC will terminate the access when the contract is completed or terminated.

**Publications of Presentations**

16. The Contractor will provide the PTS with a copy of any publication or presentation in advance. If the PTS does not raise any objections within five working days after the receipt by the PTS of the advance copy, the publication or presentation shall be considered as approved. While considering the request for publication or presentation, the PTS will verify that the publication or presentation is limited to the reflection of scientific achievements only. A disclaimer, stating that the PTS is not responsible for the views of the author, should be included in the publication or presentation.
REFERENCES


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<th>CTBTO Member States</th>
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STATEMENT OF CONFIRMATION

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

a) The firm/organization possesses the legal status and capacity to enter into legally binding contracts with the Commission for the supply of equipment, supplies, services or work.

b) The firm/organization is not insolvent, in receivership, bankrupt or being wound up, and not under administration by a court or a judicial officer, and that it is not subject to the suspension of its business or legal proceedings for any of the foregoing reasons.

c) The firm/organization has fulfilled all its obligations to pay taxes and social security contributions.

d) The firm/organization has not, and that its directors and officers have not, within the last five years been convicted of any criminal offense related to professional conduct or the making of false statements or misrepresentations as to their capacity or qualifications to enter into a procurement or supply contract.

e) The Commission, in the event that any of the foregoing should occur at a later time, will be duly informed thereof, and in any event, will have the right to disqualify the firm/organization from any further participation in procurement proceedings.

f) The firm/organization did not/will not attempt to influence any other bidder, organization, partnership or corporation to either submit or not submit a proposal/bid/quotation;


g) The firm/organization will not, in the absence of a written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Quotation/Bid/Proposal or the procurement process if the person:

   a. at any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;

   b. at any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.

h) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) have been identified on, or associated with any individual, groups, undertakings and entities identified on, the list established pursuant to the UN Security Council Resolution 1267 (Consolidated Sanctions List).^1

i) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) are subject to any form of sanction imposed by an organization or body within the United Nations System, including the World Bank.

^1 The Consolidated United Nations Security Council Sanctions List can be found on the following website: https://www.un.org/securitycouncil/content/un-sc-consolidated-list
j) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any), is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child’s education, or to be harmful to the child’s health or physical, mental, spiritual, moral, or social development.

k) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) will use the funds received under contracts/purchase orders with the Commission to provide support to individuals, groups, undertakings or entities associated with terrorism.

l) The prices in the firm/organization’s proposal/bid/quotation have been arrived at independently, without consultation, communication or agreement with any other interested companies, competitor or potential competitor with a view to restricting competition.

m) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings, if it offers, gives or agrees to give, directly or indirectly, to any current or former staff member of the Commission a gratuity in any form, an offer of employment or any other thing of service or value, as an inducement with respect to an act or a decision of, or a procedure followed by, the Commission in connection with a procurement proceeding.

n) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings if it does not disclose to the Commission any situation that may appear as a conflict of interest, and if it does not disclose to the Commission if any official or professional under contract with the Commission have an interest of any kind in the firm/organization’s business or any kind of economic ties with the firm/organization.

Name (print): ___________________________  Signature: ___________________________

Title/Position: __________________________

Place (City and Country): __________________________  Date: ___________________________
**VENDOR PROFILE FORM (VPF) – FOR PRODUCTS/SERVICES/WORK**

1. Name of Company:  

2. Street Address:  

3. Telephone:  

P.O. Box:  
City:  

4. E-Mail:  

Zip Code:  
Country:  

5. Website:  

6. Contact Person:  
Title:  

7. Legal Status (e.g. Partnership, Private Limited Company, Government Institution)

8. Year Established:  

9. Number of Employees:  

10. Gross Corporate Annual Turnover (US$m)*:  

11. Annual Export Turnover (US$m)*:  

12. Type of Business/Products:  
Manufacturer [ ]  
Sole Agent [ ]  
Supplier [ ]  
Other [ ] (please explain)

13. Type of Business/Services/Work:  
Engineering [ ]  
Civil Work [ ]  
Governmental Institution [ ]  
Other [ ] (please explain)

14. References (your main customers, country, year and technical field of products, services or work): **

15. Previous Supply Contracts with United Nations Organizations (over the last 3 years)**

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<thead>
<tr>
<th>Organization</th>
<th>Value in US$ Equivalent</th>
<th>Year</th>
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16. Summary of any changes in your company’s ownership during the last 5 years:

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
** Please provide supplementary documentation on these items.
17. List of Products/Services/Work offered:

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<th>Product/Service/Work #</th>
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18. This section shall be **signed and stamped** by an official legally authorized to enter into contracts on behalf of your organization:

Name:                                 Title:                                             Signature:                  Date:

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<th>Bank Details</th>
<th>Beneficiary Details</th>
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<td>Bank Name:</td>
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<td>Bank Address:</td>
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**Additional Details** (if applicable)

Correspondent bank:

Correspondent account number:

Correspondent SWIFT/BIC:

Tax Identification Number:

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* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.

** Please provide supplementary documentation on these items.